Canon

# imageRUNNER ADVANCE 8205 PRO / 8295 PRO / 8285 PRO Series

## Service Manual

REVISION 0

Product Overview
Technology
Periodic Service
Parts Replacement and Clearning
Adjustment
Troubleshooting
Error Code
Service Mode
Installation
Appendix


1 2 3 4 5 6 7 8 9

## Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

## Corrections

This manual may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period, Canon will issue a new edition of this manual.

The following paragraph does not apply to any countries where such provisions are inconsistent with local law.

## Trademarks

The product names and company names used in this manual are the registered trademarks of the individual companies.

## Copyright

This manual is copyrighted with all rights reserved. Under the copyright laws, this manual may not be copied, reproduced or translated into another language, in whole or in part, without the consent of Canon Inc.

© CANON INC. 2011

## Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

## Explanation of Symbols

The following symbols are used throughout this Service Manual.

| Symbols | Explanation |
|---|---|
| | Check. |
| | Check visually. |
| | Check the noise. |
| | Disconnect the connector. |
| | Connect the connector. |
| | Remove the cable/wire from the cable guide or wire saddle. |
| | Set the cable/wire to the cable guide or wire saddle. |
| | Remove the screw. |
| | Tighten the screw. |

| Symbols | Explanation |
|---|---|
| | Remove the claw. |
| | Insert the claw. |
| | Use the bundled part. |
| | Push the part. |
| | Plug the power cable. |
| | Turn on the power. |

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

   In the diagrams, ▮▮▮▮ represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow ⟶ indicates the direction of the electric signal.
   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.

   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.
All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine.

Blank Page

# Contents


## 0 Safety Precautions

CDRH Act ---- 0-2
Laser Safety ---- 0-2
Handling of Laser System ---- 0-2
Turn power switch ON ---- 0-3
Safety of Toner ---- 0-3
About Toner ---- 0-3
Toner on Clothing or Skin ---- 0-3
Notes When Handling a Lithium Battery ---- 0-3
Notes Before it Works Serving ---- 0-3
Points to Note at Cleaning ---- 0-4

## 1 Product Overview

Product Lineup ---- 1-2
Main Body ---- 1-2
Pickup/Delivery System Option ---- 1-2
Applicable Option for Each Model ---- 1-2
Required Options/Conditions ---- 1-3
Scanning System Options ---- 1-4
Required Options and Conditions ---- 1-4
Function Expansion System Options ---- 1-5
Required Options and Conditions ---- 1-5
Features ---- 1-7
Product Features ---- 1-7
Service Features ---- 1-7
Improved Service Operability ---- 1-7
New Service Mode ---- 1-8
Improved Upgrading Operability ---- 1-8
Jam/Error Code Display Specifications ---- 1-9
Applying New Connectors ---- 1-10
Specifications ---- 1-11
Product Specifications ---- 1-11
Power Supply Specifications: ---- 1-12
Weight and Size ---- 1-12
Productivity (Print Speed) ---- 1-13
Paper Type ---- 1-14
External View/Internal View ---- 1-25
External View ---- 1-25
External Cover ---- 1-25
Switches, I/F, Others ---- 1-26
Cross-Section View ---- 1-26
Operation ---- 1-27
Power Switch ---- 1-27
Types of Power Switches ---- 1-27
Points to Note on Turning ON/OFF the Power Switch ---- 1-27
Control Panel ---- 1-27
Control Panel ---- 1-27
Main Menu ---- 1-28
Differences in Main Menu ---- 1-28
Settings/Registration Menu ---- 1-29
Differences in Settings/Registration Menu ---- 1-29

## 2 Technology

Basic Configuration ---- 2-2
Functional Configuration ---- 2-2
Basic Sequence ---- 2-3
Basic sequence at power ON ---- 2-3
Basic sequence at printing <Condition: A4 1-sided (2 sheets), Right deck, Reverse delivery> ---- 2-4
Basic sequence at printing <Condition: A4 2-sided (2 sheets), Right deck, Reverse delivery> ---- 2-5
Main Controller ---- 2-6
Overview ---- 2-6
Features ---- 2-6
Specifications/configuration ---- 2-7

Boot/Shutdown sequence ---------- 2-11
Controls ---------- 2-12
Flow of Image Data ---------- 2-12
Security features (encryption key and certificate, password protection) ---------- 2-13
Option HDD ---------- 2-22
HDD mirroring feature (option) ---------- 2-23
Removable HDD (option) ---------- 2-28
HDD Encryption/ Mirroring Kit (optional) ---------- 2-28
Service Operations ---------- 2-31
HDD ---------- 2-31
Main Controller PCB 1 ---------- 2-32
Main Controller PCB 2 ---------- 2-33
TPM PCB ---------- 2-35
Laser Exposure System ---------- 2-36
Overview ---------- 2-36
Overview ---------- 2-36
Specifications ---------- 2-37
Parts Configuration ---------- 2-37
Controls ---------- 2-38
Overview ---------- 2-38
Laser ON Timing Control ---------- 2-38
Laser Beam Intensity Control ---------- 2-40
Duplex print magnification correction ---------- 2-41
Polygon Motor Control ---------- 2-42
Laser Shutter Control ---------- 2-43
Servicing ---------- 2-44
Periodically Replaced Parts ---------- 2-44
Consumable Parts ---------- 2-44
Periodical Servicing List ---------- 2-44
When Replacing Parts ---------- 2-44
Major Adjustments ---------- 2-44
Image Formation System ---------- 2-45
Overview ---------- 2-45
Overview ---------- 2-45
Specifications ---------- 2-46
Parts Configuration ---------- 2-47
Drive Configuration ---------- 2-49
Print Process ---------- 2-52
Controls ---------- 2-53
Exposure ---------- 2-54
Primary Charging ---------- 2-55
Developing ---------- 2-57
Transfer ---------- 2-59
Separation ---------- 2-63
Drum Cleaning ---------- 2-65
Drum-related Issues ---------- 2-66
Toner Supply Area ---------- 2-69
Waste Toner Feeding Area ---------- 2-71
Image Stabilization Control ---------- 2-73
Auxiliary Control ---------- 2-82
Servicing ---------- 2-87
Periodically Replaced Parts ---------- 2-87
Consumable Parts ---------- 2-87
Periodical Servicing List ---------- 2-87
When Replacing Parts ---------- 2-88
Major Adjustments ---------- 2-92
Troubleshooting ---------- 2-93
Fixing ---------- 2-103
Overview ---------- 2-103
Characteristics ---------- 2-103
Specifications ---------- 2-104
Parts configuration ---------- 2-105
Drive configuration ---------- 2-106
Controls ---------- 2-107
Overview ---------- 2-107
Fixing temperature control ---------- 2-107
Down sequence control ---------- 2-112
Paper Anti-wrapping Control ---------- 2-114
Thermistor reciprocating control ---------- 2-115
Upper separation claw reciprocating control ---------- 2-115
Cleaning web drive control ---------- 2-116
Cleaning web length detection ---------- 2-117
Protective function ---------- 2-117
Servicing ---------- 2-118
Periodically Replaced Parts ---------- 2-118
Consumable Parts ---------- 2-118

Periodical Servicing List 2-118
When Replacing Parts 2-119
Troubleshooting 2-120
Pickup / Feed System 2-123
Overview 2-123
Overview 2-123
Specifications 2-124
Parts configuration 2-125
Drive Configuration 2-127
Paper path 2-128
Interval speed 2-129
Various types of control 2-130
Deck/Cassette Pickup Unit 2-131
Basic Movement 2-131
Deck/Cassette detection 2-132
Paper Size Detection 2-133
Paper Level Detection 2-135
Paper Detection 2-137
Lifter Control 2-138
Pickup Retry Control 2-139
Multi-purpose Tray Pickup Unit 2-140
Basic Movement 2-140
Paper Size Detection 2-141
Paper Detection 2-141
Registration Unit 2-142
Pre-registration Control 2-142
Registration Control 2-143
Registration Deceleration Control 2-143
Registration Acceleration Control 2-144
Transfer 2-144
Post-transfer Guide Attraction Control 2-144
Delivery/Reverse Unit 2-145
Basic Operation 2-145
Duplex Unit 2-147
Basic Operation 2-147
Side Registration Control 2-148
Circulation quantity and limit 2-149
Jam Detection 2-153
Jam Code List 2-153
Forced Paper Feed Control 2-155
Servicing 2-156
Periodically Replaced Parts 2-156
Consumable Parts 2-156
Periodical Servicing List 2-156
When Replacing Parts 2-156
Major Adjustments 2-156
Troubleshooting 2-156
External Auxiliary System 2-157
Overview 2-157
Power Supply Configuration 2-157
Controls 2-158
Power supply control 2-158
Quick Startup 2-162
Fan Control 2-164
Counter control 2-165
Servicing 2-167
Periodically Replaced Parts 2-167
Consumable Parts 2-167
Periodical Servicing 2-167
When Replacing Parts 2-167
Troubleshooting 2-168
MEAP 2-170
Changes 2-170
LDAP Authentication (SSO-H Server Authentication) 2-170
Integrated Authentication Disabling Setting Screen 2-171
Preparation for Using SSO-H 2-171
Outline 2-171
Server authentication management 2-171
PC Environment of Administrator Users and General Users 2-172
Preparation for Using SMS 2-173
Preparation of PC for Accessing SMS 2-173
Settings on the Device Side 2-174
How to Check the Serial Number 2-181
Login to SMS 2-181
Outline 2-181
When SMS Cannot Be Accessed 2-182

How to Deal with a Message "Certificate Error" That Appears at the Time of Access ---- 2-183
Installing an MEAP Application ---- 2-183
Outline ---- 2-183
Procedure to install applications ---- 2-184
Resource Information ---- 2-186
MEAP Specifications ---- 2-187
What is MEAP Specifications (MEAP Spec Version)? ---- 2-187
MEAP Application Management ---- 2-190
Outline ---- 2-190
Starting, Stopping, or Uninstalling the MEAP Application ---- 2-190
Managing the License File ---- 2-192
Other License File Management Functions ---- 2-197
Enhanced System Application Management ---- 2-199
Outline ---- 2-199
About Login Service ---- 2-199
Default Authentication overview ---- 2-199
SSO-H (Single Sign-On-H) overview ---- 2-199
Local device authentication ---- 2-204
Server authentication (Active Directory authentication) ---- 2-205
Server Authentication (LDAP Authentication) ---- 2-207
Server authentication and local device authentication ---- 2-208
Steps to Change Login Services ---- 2-208
Login Service Installation Procedure ---- 2-209
Login Service Uninstallation Procedure ---- 2-210
System Application Management ---- 2-211
Password authentication ---- 2-211
RLS Authentication ---- 2-212
Setting the method to login to SMS ---- 2-214
Outline ---- 2-214
Initial Display Languages of SMS ---- 2-217
MEAP Application System Information ---- 2-217
Outline ---- 2-217
Checking the System Information ---- 2-217
Display of System Information Details ---- 2-218
Printing the System Information of a MEAP Application ---- 2-218
Content of MEAP system information ---- 2-219
MEAP Application Information ---- 2-219
Outline ---- 2-219
Procedure to Check MEAP Application Information ---- 2-219
Check License ---- 2-220
Outline ---- 2-220
Procedure to Check the License File ---- 2-220
Changing SMS Login Password ---- 2-221
Outline ---- 2-221
Procedure to Change the SMS Login Password ---- 2-221
MEAP Application Setting Information Management and Log Management ---- 2-221
Outline ---- 2-221
Advantages Obtained When Using the Services ---- 2-222
MEAP Application Setting Information Management ---- 2-222
MEAP Application Log Management ---- 2-223
Maintenance ---- 2-224
Backup of the MEAP Application Area and Recovery of the Backup Data Using SST ---- 2-224
Procedure for backing up the MEAP application area using SST ---- 2-225
Procedures to Restore Backup Data ---- 2-227
Formatting and Replacing the HDD ---- 2-228
MEAP Safe Mode (level 2) ---- 2-230
Collection of MEAP Console Logs ---- 2-232
Using USB Devices ---- 2-237
Integrated Authentication Function ---- 2-242
Points to Note When Enabling the [Quick Startup Settings for Main Power] Setting ---- 2-244
Remedy to Be Performed When the Device Has Become Unable to Be Logged in ---- 2-245
Reference material ---- 2-248
Option for exclusive individual measure ---- 2-250
Embedded RDS ---- 2-252
Product Overview ---- 2-252
Overview ---- 2-252
Features and benefits ---- 2-252
Major Functions ---- 2-252
Limitations ---- 2-253
Service Mode Menu Transmission Function ---- 2-253
Service cautions ---- 2-254

E-RDS Setup 2-255
Confirmation and preparation in advance 2-255
Steps to E-RDS settings 2-256
Steps to Service Call button settings 2-258
Steps to Service Browser settings 2-262
Initializing E-RDS settings 2-263
FAQ 2-263
Troubleshooting 2-265
Error code and strings 2-269
Updater 2-272
Overview 2-272
Installing Firmware 2-272
Installing MEAP Application/System Option 2-273
System Configuration 2-274
List of Functions 2-275
Distribution Flow 2-275
Firmware Installation Flow 2-275
MEAP Application/System Option Installation Flow 2-276
Limitations and Cautions 2-276
Limitations 2-276
Cautions 2-276
Overview of Preparation 2-278
Setting Sales Company's HQ 2-278
Network Settings 2-279
Connecting to External Network 2-279
Confirming URL Setting of Distribution Server 2-279
Communication Test 2-281
Enabling UGW Link 2-282
Enabling [Update Firmware] Button of User Mode 2-283
Enabling [Install Application/Options] Button of User Mode 2-283
Enabling [Manual Update] Button of User Mode (Remote UI) 2-284
System Management Operations 2-285
Various Setting 2-285
Setting URL of Distribution Server 2-285
Setting Log Level 2-286
Displaying Logs 2-287
Update Logs 2-287
System Logs 2-288
Communication Test 2-290
Upgrading Updater 2-292
Formatting Hard Disk 2-292
How to Replace Controller Boards 2-293
How to Replace Devices 2-293
FAQ on Installing Firmware 2-294
FAQ on Installing MEAP Application/System Option 2-295
FAQ on General Matters of Updater 2-296
DCM 2-297
DCM 2-297
Overview 2-297
Service mode setting values that can be backed up by DCM 2-303
Import/export by service mode (external) 2-310
Import/export by service mode (internal) 2-316

## 3 Periodic Service

Periodical Service Operation Item 3-2

## 4 Parts Replacement and Clearning

List of Parts 4-2
List of External / Internal Cover 4-2
List of Main Unit 4-4
Periodic Replacing Parts,Durable Parts,Cleaning Parts 4-10
Periodic Replacing Parts,Durable Parts 4-10
List of Cleaning Parts 4-20
List of Fan 4-34
List of Clutch / Solenoid 4-36
List of Motor 4-40
List of Sensor 4-46
List of Switch 4-52
List of PCB 4-54
Heater,others 4-58
Connector List 4-60
Main Controller 4-80
Removing Main Controller PCB 1 4-80

Removing Main Controller PCB 2 ----------4-82
Laser Exposure System ---------- 4-85
Removing the Laser Scanner Unit----------4-85
Cleaning the Dust Collecting Glass ----------4-88
Image Formation System ---------- 4-89
Removing the Primary Charging Assembly ----------4-89
Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/ Left)----------4-90
Replacing the Primary Charging Assembly Grid Wire----------4-93
Replacing the Primary Charging Wire ----------4-96
Cleaning the Primary Charging Assembly Grid Wire ----------4-99
Removing the Pre-transfer Charging Assembly---------- 4-100
Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder---------- 4-101
Replacing the Pre-transfer Charging Wire---------- 4-104
Cleaning the Pre-transfer Charging Wire ---------- 4-106
Removing the Process Unit ---------- 4-107
Cleaning the Process Unit---------- 4-109
Removing the Drum Cleaning Unit ---------- 4-110
Removing the Drum Cleaning Blade----------4-111
Cleaning the Drum Cleaning Unit---------- 4-113
Replacing the Pre-exposure Plastic Film ---------- 4-114
Removing the Drum Unit---------- 4-115
Removing the Photosensitive Drum---------- 4-116
Cleaning Photosensitive Drum ---------- 4-119
Cleaning the Drum edges---------- 4-120
Removing the Cleaner Separation Claw---------- 4-121
Removing the Side Seal ---------- 4-121
Removing the Developing Assembly---------- 4-122
Cleaning the Developing Assembly ---------- 4-125
Removing the ETB Unit ---------- 4-127
Removing the ETB ---------- 4-129
Cleaning the ETB ---------- 4-130
Removing the Transfer Roller---------- 4-131
Removing the ETB Cleaning Blade ---------- 4-132
Removing the ETB Brush Roller ---------- 4-132
Removing the Waste Toner Container---------- 4-135
Removing the Drum Heater ---------- 4-136
Removing the Primary Charging Shutter Unit ---------- 4-137
Removing the Pre-transfer Charging Assembly Shutter Unit -------- 4-140
Removing the Patch Sensor ---------- 4-143
Removing the Drum Brush Roller---------- 4-144
Removing the ETB Drive Unit ---------- 4-145
Removing the Transfer Cleaning Unit ---------- 4-147
Removing the Post-transfer Static Eliminator---------- 4-148
Removing the Toner Receptacle Tray ---------- 4-149
Removing the Hopper Unit ---------- 4-150
Removing the Buffer Unit ---------- 4-154
Removing the Potential Control PCB Unit---------- 4-157
Removing the Waste Toner Feed Unit---------- 4-159
Removing the Drum Drive Unit---------- 4-163
Removing the Developing Drive Unit ---------- 4-165
Fixing---------- 4-168
Removing the Fixing Assembly---------- 4-168
Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder ---------- 4-170
Cleaning the Inner Delivery Roller---------- 4-171
Cleaning the Fixing Oil Pan ---------- 4-172
Removing the Fixing Cleaning Web---------- 4-172
Cleaning the Fixing Roller Static Eliminator---------- 4-174
Separating the Fixing Upper Unit from the Fixing Lower Unit ------- 4-175
Removing the Fixing Roller, Insulating Bush and Thrust Stopper -- 4-177
Removing the Pressure Roller---------- 4-179
Removing the Pressure Roller Static Eliminator ---------- 4-180
Removing the Main Thermistor---------- 4-181
Removing the Sub Thermistor 1 ---------- 4-183
Removing the Sub Thermistor 2 ---------- 4-184
Removing the Upper Separation Claw ---------- 4-185
Cleaning the Upper Separation Claw---------- 4-185
Removing the Thermoswitch 2 ---------- 4-187
Pickup/Feed System ---------- 4-189
Removing the Left Pickup Deck---------- 4-189

Removing the Left Deck Pickup Roller ---------- 4-189
Removing the Left Deck Feed Roller ---------- 4-190
Removing the Right Pickup Deck ---------- 4-190
Removing the Left Deck Separation Roller
/Cleaning the Left Deck Pickup Sensor 2 (PS20) ---------- 4-191
Removing the Right Deck Pickup Roller ---------- 4-191
Removing the Right Deck Feed Roller ---------- 4-192
Removing the Right Deck Separation Roller
/Cleaning the Right Deck Pickup Sensor 2 (PS19) ---------- 4-192
Removing the Upper Cassette ---------- 4-193
Removing the Upper Cassette Pickup Roller ---------- 4-194
Removing the Upper Cassette Feed Roller ---------- 4-194
Removing the Upper Cassette Separation Roller
/Cleaning the Cassette 3 Pickup Sensor 2 (PS21) ---------- 4-195
Removing the Lower Cassette ---------- 4-196
Removing the Lower Cassette Pickup Roller ---------- 4-196
Removing the Lower Cassette Feed Roller ---------- 4-197
Removing the Lower Cassette Separation Roller
/Cleaning the Cassette 4 Pickup Sensor 1 (PS22) ---------- 4-197
Removing the Multi-purpose Tray Feed Roller ---------- 4-198
Removing the Multi-purpose Tray Separation Roller ---------- 4-200
Cleaning the Pickup and Fixing Feed Assembly ---------- 4-201
Removing the Left Deck Pickup Unit ---------- 4-210
Removing the Right Deck Pickup Unit ---------- 4-211
Removing the Cassettes 3 and 4 Pickup Unit ---------- 4-212
Removing the Vertical Path Cassette Pickup Drive Unit ---------- 4-213
Removing the Registration Unit ---------- 4-216
Removing the Left Deck Pickup Drive Unit ---------- 4-219
Removing the Main Drive Unit ---------- 4-220
External Auxiliary System ---------- 4-225
Removing the Filter (for primary charging) ---------- 4-225
Removing the Ozone Filter ---------- 4-225
Removing the DC Controller PCB ---------- 4-226
Removing the Power Supply Assembly ---------- 4-229
Removing the Fixing Power Unit ---------- 4-230
Removing the Feed Driver PCB ---------- 4-231
Removing the ARCNET PCB ---------- 4-232
Removing the Upper High Voltage Unit ---------- 4-233
Removing the Upright Control Panel ---------- 4-234

## 5 Adjustment

Overview ---------- 5-2
When replacing parts ---------- 5-2
Controller System ---------- 5-2
HDD ---------- 5-2
Main Controller PCB 1 ---------- 5-4
Main Controller PCB 2 ---------- 5-5
TPM PCB ---------- 5-7
Image Formation System ---------- 5-7
Primary Charging Wire ---------- 5-7
Primary Charging Assembly ---------- 5-7
Pre-transfer Charging Assembly ---------- 5-9
Pre-transfer Charging Wire ---------- 5-9
Photosensitive Drum ---------- 5-10
Drum Side Seals (Front and Rear) ---------- 5-11
Developing Assembly ---------- 5-11
Potential Sensor / Potential Control PCB ---------- 5-11
ETB Unit / ETB ---------- 5-11
Patch Sensor ---------- 5-11
Waste Toner Container ---------- 5-11
Fixing System ---------- 5-12
Fixing Roller ---------- 5-12
External Auxiliary System ---------- 5-12
DC Controller PCB ---------- 5-12

## 6 Troubleshooting

Test Print ---------- 6-2
Overview ---------- 6-2
How to View the Test Print ---------- 6-3
Grid (TYPE=1) ---------- 6-3
17 gradations (TYPE=2/3) ---------- 6-3
Solid white (TYPE=4) ---------- 6-4
Halftone (TYPE=5/6/11/12/13/14) ---------- 6-4

Solid black (TYPE=7) ---- 6-5
Horizontal line (TYPE=8/9/10) ---- 6-5
Image Faults ---- 6-6
Trailing Edge Shock Imaget ---- 6-6
Uneven density correction by 2D shading ---- 6-7
ADF black line ---- 6-11
Bleed-thru/Soil appeared on the back of the paper (Staple Finisher D1/ Booklet Finisher D1) ---- 6-12
White line (foreign matter between Developing Sleeves) ---- 6-13
Separation Failure Jam due to Deformation of Separation Claw ---- 6-15
Image error due to soil attached to the Cleaning Brushes for the Duplex Right Roller and the Duplex Outlet Roller ---- 6-16
Uneven density ---- 6-23
Smeared image ---- 6-24
Adjusting the Edge Emphasis Level ---- 6-25
Soiling at an interval equal to the circumference of the Developing Sleeve ---- 6-26
Image failure due to the temperature rising at the edge of the Fixing Roller (crepe mark) ---- 6-28
MTF Adjustment ---- 6-29
Adjustment Procedure ---- 6-29
When Making Fine Adjustment After Sampling the MTF Value ---- 6-30
When Disabling the MTF Adjustment ---- 6-30
Feed Faults ---- 6-31
Paper wrinkle ---- 6-31
Other ---- 6-32
Adjusting rotation of the Upright Control Panel Arm ---- 6-32
Remedy to be implemented when the ETB Disengage Member (Transfer Frame Stopper) is left unremoved ---- 6-33
Checking nip width ---- 6-35
Controller Self Diagnosis ---- 6-36
Introduction ---- 6-36
Boot System Error Diagnosis Tool ---- 6-36
Controller System Error Diagnosis Tool ---- 6-36
Overview ---- 6-36
Boot System Error Diagnosis Tool ---- 6-36
Controller System Error Diagnosis Tool ---- 6-37
Layout Drawing ---- 6-37
Basic Flowchart ---- 6-38
Basic Check Items ---- 6-39
Operation ---- 6-39
Diagnosis Time ---- 6-40
Error Diagnosis ---- 6-41
Controller System Error Diagnosis ---- 6-41
Boot Method ---- 6-41
Diagnosis Time ---- 6-42
Restrictions ---- 6-44
Version upgrade ---- 6-45
Overview ---- 6-45
Overview of Version Upgrade ---- 6-45
Writing System Software ---- 6-46
Download Mode ---- 6-46
System Software Components ---- 6-47
Note on Download Process ---- 6-48
Version Upgrade via SST ---- 6-48
Overview ---- 6-48
Copying System Software ---- 6-49
Connection ---- 6-51
Downloading System Software (Assist mode) ---- 6-52
Downloading System Software (Single mode) ---- 6-54
Formatting HDD ---- 6-56
Backup ---- 6-61
Version Upgrade using USB memory Storage Device ---- 6-64
Relation between SST and USB memory Storage Device ---- 6-64
Copying System Software ---- 6-65
Connection ---- 6-69
Upgrading System Software ---- 6-70
Downloading/Writing System Software (Automatic) ---- 6-71
Downloading System Software (Confirmation) ---- 6-73
Downloading System Software (Overwriting) ---- 6-74
Formatting HDD ---- 6-75
Backup ---- 6-77
Clearing Download File ---- 6-77
Download Menu 2 ---- 6-78

Other Menu----------6-78
Troubleshooting ----------6-79
Error Code: E753-0001 ----------6-79
Making Initial Checks ---------- 6-80
List of Initial Check Items ----------6-80
Version Upgrade via CDS ----------6-81
Overview----------6-81
Preparation ----------6-81
Overview of Preparation ----------6-81
Setting Sales Company's HQ----------6-82
Network Settings----------6-82
Enabling UGW Link ----------6-85
a. UGW-linked Download and Update (Full-remote Update) ----------6-86
b. UGW-linked Download (Remote Distribution Update) ----------6-86
c. Manual Download and Update (On-site Update from Service Mode) --
6-88
Deleting Firmware Distribution Schedule ----------6-94
Updating Downloaded Firmware (Applying Firmware) ----------6-95
Deleting Downloaded Firmware----------6-96
Troubleshooting on Firmware Installation ----------6-97
Information required for Reports ----------6-99
Information required for Service Technicians to Obtain on Site----------6-99
Information to Report ----------6-99
Debug Logs ----------6-99
Obtaining Log Files----------6-99
Error Messages---------- 6-101
Error Codes---------- 6-107
How to read an error code---------- 6-107
Error Code ---------- 6-108
Debug log ----------6-112
Scope of Application ---------- 6-112
Purpose ---------- 6-112
Overview ---------- 6-112
Function Overview ---------- 6-112
Collecting System Information---------- 6-113
Collection Destination ---------- 6-113
Collecting Debug Log (USB memory device) ---------- 6-113
Uploading Data by SST ---------- 6-114
Preconditions: ---------- 6-114
Operation Check of the Main Controller LEDs ---------- 6-117
Location of LEDs---------- 6-117
Preconditions ---------- 6-117
Checking the lighting of the LED4, LED5 on the Main Controller 2 -------- 6-117
Check the lighting of the LDEs on the Main Controller PCB 1 ---------- 6-118

# 7 Error Code

Overview ----------7-2
Outline ---------- 7-2
Location code---------- 7-2
Pickup position code---------- 7-2
Points to Note When Clearing MN-CON---------- 7-2
Points to Note When Clearing HDD---------- 7-2
Error Code ----------7-3
Error Code Details ---------- 7-3
E000 to E069 ---------- 7-3
E100 to E199 ----------7-14
E202 to E280 ----------7-17
E301 to E355 ----------7-20
E400 to E490 ----------7-22
E500 to E5FE----------7-24
E602 ----------7-53
E604 to E677 ----------7-70
E710 to E760 ----------7-72
E804 to E996 ----------7-79
Jam Code ---------- 7-83
Jam Type----------7-83
Main Unit----------7-84
Duplex Color Image Reader-G1 ----------7-86
Paper Deck Unit-C1----------7-87
POD Deck Light-A1 ----------7-87
Inserter-K1----------7-88
ARCNET Connection ----------7-88
IPC Connection ----------7-89
Professional Puncher-C1/Integration Unit-B1 ----------7-90

ARCNET Connection ----------7-91
IPC Connection ----------7-91
Paper Folding Unit-H1 ----------7-92
ARCNET Connection ----------7-92
IPC Connection ----------7-93
Staple Finisher-Q1/Booklet Finisher-Q1 ----------7-94
Staple Finisher-N1/Booklet Finisher-N1----------7-96
Booklet Trimmer-D1 ----------7-97
Alarm Code ---------- 7-98
List of Alarm Code ----------7-98

# 8 Service Mode

Overview ----------8-2
Entering Service Mode ---------- 8-2
Service Mode Menu ---------- 8-2
Service mode item explanations ---------- 8-2
I/O information enhancement ---------- 8-3
Display of Error Code/Alarm Code description ---------- 8-3
COPIER > OPTION > BODY, Item Segmentation ---------- 8-4
Security features ---------- 8-5
Related service modes ---------- 8-5
Switching Screen (Level 1 < - > 2) ---------- 8-6
Language switch ---------- 8-6
Back-up of service mode ---------- 8-7
COPIER ----------8-8
DISPLAY ---------- 8-8
VERSION ---------- 8-8
USER ----------8-34
ACC-STS ----------8-34
ANALOG ----------8-36
CST-STS ----------8-37
HV-STS ----------8-37
CCD ----------8-38
DPOT ----------8-41
DENS ----------8-42
SENSOR ----------8-43
MISC ----------8-44
ENVRNT ----------8-44
2D-SHADE ----------8-45
I/O (I/O display mode) ----------8-46
Host Machine_DC Controller (DC-CON>P001 to P030) ----------8-46
Host Machine_Main Controller (DC-CON>P001 to P005)) ----------8-56
Reader (R-CON>P001 to P005) ----------8-57
ADF (FEEDER>P001 to P007) ----------8-58
Paper Deck Unit - C1 (DC-CON>P048 to P050) ----------8-59
POD Deck Lite - A1 (DC-CON>P047 to P050) ----------8-60
Inserter - K1 : ARCNET Connection (SORTER > P425 to P451) ----------8-61
Inserter - K1 : IPC Connection (SORTER>P038 to P047) ----------8-64
Paper Folding Unit - H1 : ARCNET Connection
(SORTER > P029 to P038) ----------8-66
Paper Folding Unit - H1 : IPC Connection
(SORTER>P028 to P037) ----------8-69
Staple Finisher-F1 / Booklet Finisher-F1
(SORTER > P001 to P075) ----------8-71
Staple Finisher - D1 / Booklet Finisher -D1 (SORTER>P001 to P024) ------8-81
Inner Trimmer - A1 (SORTER>P024 to P028) ----------8-87
Professional Puncher-C1 / Integration Unit-B1 :
ARCNET Connection (SORTER > P369 to P380) ----------8-89
Professional Puncher-C1 / Integration Unit-B1 : IPC Connection (SORTER >
P047 to P059) ----------8-92
ADJUST ----------8-96
AE ----------8-96
ADJ-XY ----------8-96
CCD ----------8-98
LASER ---------- 8-108
IMG-REG ---------- 8-108
DEVELOP ---------- 8-109
DENS ---------- 8-109
BLANK ---------- 8-111
V-CONT ---------- 8-111
PASCAL ---------- 8-113
HV-PRI ---------- 8-113
HV-TR ---------- 8-114
FEED-ADJ ---------- 8-121
CST-ADJ ---------- 8-125

MISC 8-126
EXP-LED 8-129
FUNCTION 8-130
INSTALL 8-130
CCD 8-133
DENS 8-134
DPC 8-134
CST 8-135
CLEANING 8-136
FIXING 8-136
PANEL 8-137
PART-CHK 8-137
CLEAR 8-138
MISC-R 8-141
MISC-P 8-145
SENS-ADJ 8-147
SYSTEM 8-148
2D-SHADE 8-149
OPTION 8-151
CLEANING 8-151
CUSTOM 8-152
DSPLY-SW 8-155
ENV-SET 8-159
FEED-SW 8-159
FNC-SW 8-163
IMG-DEV 8-172
IMG-FIX 8-175
IMG-LSR 8-178
IMG-MCON 8-179
IMG-RDR 8-183
NETWORK 8-185
USER 8-192
CST 8-206
ACC 8-208
INT-FACE 8-210
TEMPO 8-211
LCNS-TR 8-212
ACCPST-D 8-222
TEST 8-224
PG 8-224
NETWORK 8-225
NET-CAP 8-226
COUNTER 8-228
TOTAL 8-228
PICKUP 8-229
FEEDER 8-229
JAM 8-230
MISC 8-230
JOB 8-231
PRDC-1 8-231
DRBL-1 8-232
DRBL-2 8-237
H-DBL-A1 8-254
SORTER 8-256
H-DBL-A2 8-261
H-DBL-A3 8-262
LF 8-264
FEEDER 8-265
DISPLAY 8-265
ADJUST 8-266
FUNCTION 8-267
OPTION 8-269
SORTER 8-270
ADJUST 8-270
FUNCTION 8-281
OPTION 8-284
BOARD 8-290
OPTION 8-290

## 9 Installation

Checking before Installation 9-2
Checking Power Supply 9-2
Checking the Installation Environment 9-2
Checking Installation Space 9-2
Points to Note at Installation Work 9-4

Table of Options Combination ----------9-5
Order to Install the Host machine and the Options---------- 9-5
Checking the Contents ----------9-6
Unpacking----------9-9
Installation ---------- 9-11
Installation of the Upright Control Panel ----------9-11
Installing the Developing Assembly ----------9-16
Installing the Pickup Assembly ----------9-20
Installing the Fixing Assembly ----------9-21
Installing the Toner Container----------9-23
Installing the Exhaust Filter----------9-24
Installing the Terminal Connector----------9-25
Installing the USB Device Port (only with the products designed for Europe) ----------9-25
Setting the Environment Heater Switch ----------9-27
Turning ON the Main Power----------9-27
Toner Stirring----------9-28
Installation of the Host Machine----------9-28
Other Installation Work ----------9-28
Setting the Deck----------9-29
Setting the Paper Cassette----------9-31
Auto Adjust Gradation ----------9-32
Image Position Adjustment ----------9-32
Left Edge Margin Adjustment (1st side)----------9-32
Left Edge Margin Adjustment (2nd side)----------9-34
Leading Edge Margin Adjustment (1st side)----------9-35
Leading Edge Margin Adjustment (2nd side)----------9-35
Adjusting margin of Multi-purpose Pickup Tray ----------9-36
Leading Edge Margin Adjustment (Multi-purpose Tray Pickup)----------9-37
Checking the Network Connection ----------9-37
Overview----------9-37
Checking the Network Connection ----------9-37
Operation Procedure Using Ping ----------9-38
Checking by the Remote Host Address----------9-38
Network Troubleshooting ----------9-38
Checking Connection of the Network Cable ----------9-38
Operation Procedure Using Ping ----------9-38
Checking the Network Setting of the Host Machine----------9-39
Checking Network Function on the Main Controller----------9-39
When Relocating the Machine---------- 9-40
Printer Cover -B1---------- 9-43
Points to Note at Installation ----------9-43
Checking the Contents ----------9-43
Check Items when Turning OFF the Main Power----------9-43
Installation Outline Drawing ----------9-43
Installation Procedure----------9-44
Operation Check ----------9-47
Auto Adjust Gradation ----------9-47
Reader Heater Unit ---------- 9-48
Checking the Contents (ASIA only) ----------9-48
Reader Heater Unit-G1----------9-48
Checking the Parts to be Installed (Europe only)----------9-48
Reader Heater Unit----------9-48
Check Items when Turning OFF the Main Power----------9-48
Installation Outline Drawing ----------9-48
Installation Procedure----------9-48
Paper Deck Heater Unit-A1 ---------- 9-53
Checking the Contents ----------9-53
Check Items when Turning OFF the Main Power----------9-53
Installation Procedure (Paper Deck Unit-C1) ----------9-54
Utility Tray-A2 ---------- 9-62
Points to Note at Installation ----------9-62
Checking the Contents ----------9-62
Checking the Contents ----------9-62
Installation Procedure----------9-65
When Installing the USB Keyboard ----------9-66
Card Reader-C1/Copy Card Reader-F1 ---------- 9-67
Points to Note at Installation ----------9-67
Checking the Contents ----------9-67
Contents of Card Reader-C1 ----------9-67
Contents of Copy Card Reader Attachment-A2----------9-68
Copy Card Reader-F1 ---------- 9-69
Points to Note at Installation ----------9-69

Checking the Contents ---------- 9-69
Copy Card Reader-F1 ---------- 9-69
Copy Card Reader Attachment-A2 ---------- 9-69
Check Items when Turning OFF the Main Power ---------- 9-70
Installation Outline Drawing ---------- 9-70
Installation Procedure ---------- 9-71
Setting After Installation ---------- 9-78
Voice Guidance Kit-F2 ---------- 9-79
Points to Note at Installation ---------- 9-79
Checking the Contents ---------- 9-79
Check Items when Turning OFF the Main Power ---------- 9-87
Installation Outline Drawing ---------- 9-87
Installation Procedure ---------- 9-87
Checking after Installation ---------- 9-93
Operation Check ---------- 9-93
Additional Memory Type B (512MB) ---------- 9-94
Checking the Contents ---------- 9-94
Checking before Installation ---------- 9-94
Check Items when Turning OFF the Main Power ---------- 9-94
Installation Outline Drawing ---------- 9-94
Installation Procedure ---------- 9-94
Checking after Installation ---------- 9-95
Combination of HDD Options ---------- 9-96
Points to Note Regarding Data Backup/Export ---------- 9-97
Making a Backup of the Data (reference only) ---------- 9-98
Procedure for Import/Export ALL of User Settings ---------- 9-98
Backup of MEAP Application ---------- 9-98
Stop of MEAP Applications, Disabling, Download of Disabled License Files and Uninstallation ---------- 9-98
User Authentication Information Registered by SSO-H (Single Sign-ON H) ---------- 9-99
Backup of User inbox and Advanced Box document data ---------- 9-99
Installation Outline Drawing ---------- 9-100
[TYPE-1] Option HDD (1TB) ---------- 9-101
Checking the Contents ---------- 9-101
Check Items when Turning OFF the Main Power ---------- 9-102
Assembling the Option HDD ---------- 9-102
Procedure to Replace with the HDD ---------- 9-103
Installing the System Software Using the SST ---------- 9-105
Execution of Auto Adjust Gradation ---------- 9-105
[TYPE-2] Removable HDD Kit ---------- 9-111
Checking the Contents ---------- 9-111
Check Items when Turning OFF the Main Power ---------- 9-112
Installation Procedure ---------- 9-112
Removing the HDD and HDD Case Unit ---------- 9-112
Disassembling and Assembling of the HDD Removed from the Host Machine ---------- 9-115
Changing Configuration inside of HDD Case Unit ---------- 9-118
Installing the HDD Case Unit ---------- 9-119
[TYPE-3] Option HDD (1TB) + Removable HDD Kit ---------- 9-124
Checking the Contents ---------- 9-124
Option HDD (1TB) ---------- 9-124
Removable HDD Kit ---------- 9-125
Check Items when Turning OFF the Main Power ---------- 9-126
Installation Procedure ---------- 9-126
Assembling the Option HDD ---------- 9-126
Removing the HDD and HDD Case Unit ---------- 9-129
Changing Configuration inside of HDD Case Unit ---------- 9-131
Installing the HDD Case Unit ---------- 9-133
Installing the System Software Using the SST ---------- 9-136
Execution of Auto Adjust Gradation ---------- 9-137
[TYPE-4] Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-142
Points to Note when Unpacking HDD Data Encryption & Mirroring Kit ---------- 9-142
Checking the Contents ---------- 9-142
Option HDD (160GB) ---------- 9-142
HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-143
Setting Before Turning OFF the Power ---------- 9-144
Check Items when Turning OFF the Main Power ---------- 9-144
Installation Procedure ---------- 9-144
Removing the Covers ---------- 9-144
Installing the Mirroring Board or Encryption Board ---------- 9-146

Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit) ---------- 9-155
Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-155
Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-155
Setting the Mirroring---------- 9-156
Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-157
Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-157
[TYPE-5] 2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit---------- 9-163
Points to Note when Unpacking HDD Data Encryption & Mirroring Kit ---------- 9-163
Checking the Contents ---------- 9-163
Option HDD (1TB)---------- 9-163
HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-164
Setting Before Turning OFF the Power---------- 9-165
Check Items when Turning OFF the Main Power---------- 9-165
Installation Procedure---------- 9-165
Assembling the Option HDD---------- 9-165
Removing the Covers---------- 9-166
Installing the Mirroring Board or Encryption Board---------- 9-168
Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit) ---------- 9-176
Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-176
Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-176
Setting the Mirroring---------- 9-177
Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-178
Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)---------- 9-178
[TYPE-6] HDD Data Encryption & Mirroring Kit ---------- 9-184
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed ---------- 9-184
Checking the Contents ---------- 9-184
Setting Before Turning OFF the Power---------- 9-185
Check Items when Turning OFF the Main Power---------- 9-185
Installation Procedure---------- 9-185
Removing the Covers---------- 9-185
Installing the Encryption Board---------- 9-187
Installing the System Software Using the SST ---------- 9-194
Checking the Security Version---------- 9-194
Checking the Security Mark ---------- 9-194
Checking after Installation ---------- 9-195
Reporting to the System Administrator at the End of the Work ----- 9-195
Execution of Auto Gradation Adjustment---------- 9-195
[TYPE-7] Option HDD (1TB) + HDD Data Encryption & Mirroring Kit---------- 9-201
Points to Note when Unpacking HDD Data Encryption & Mirroring Kit ---------- 9-201
Checking the Contents ---------- 9-201
Option HDD (1TB)---------- 9-201
HDD Data Encryption & Mirroring Kit---------- 9-202
Setting Before Turning OFF the Power---------- 9-203
Check Items when Turning OFF the Main Power---------- 9-203
Installation Procedure---------- 9-203
Assembling the Option HDD---------- 9-203
Removing the Covers---------- 9-204
Installing the Encryption Board---------- 9-206
Installing the System Software Using the SST ---------- 9-213
Checking the Security Version---------- 9-213
Checking the Security Mark ---------- 9-213
Checking after Installation ---------- 9-214
Reporting to the System Administrator at the End of the Work ----- 9-214
Execution of Auto Gradation Adjustment---------- 9-214
[TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit---------- 9-221
Points to Note when Unpacking HDD Data Encryption & Mirroring

Kit ---------- 9-221
Checking the Contents ---------- 9-221
Option HDD (160GB) ---------- 9-221
Removable HDD Kit ---------- 9-222
HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-223
Setting Before Turning OFF the Power ---------- 9-224
Check Items when Turning OFF the Main Power ---------- 9-224
Installation Procedure ---------- 9-224
Removing the HDD and HDD Case Unit ---------- 9-224
Disassembling and Assembling of the HDD Removed from the Host Machine (the First HDD) ---------- 9-227
Assembling the Option HDD (the Second HDD) ---------- 9-230
Changing Configuration inside of HDD Case Unit ---------- 9-233
Installing the Mirroring Board or Encryption Board and HDD Case Unit -- 9-235
After Installing HDD Data Encryption & Mirroring Kit ---------- 9-241
Installing the System Software Using the SST ---------- 9-241
Checking the Security Version ---------- 9-242
Checking the Security Mark ---------- 9-242
Setting for Mirroring ---------- 9-242
After Installing HDD Data Encryption & Mirroring Kit ---------- 9-243
Reporting to the System Administrator at the End of the Work ---------- 9-243
Execution of Auto Gradation Adjustment ---------- 9-243
[TYPE-9] 2 Option HDDs (1TB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-248
Points to Note when HDD Data Encryption & Mirroring Kit has been Installed ---------- 9-248
Checking the Contents ---------- 9-248
Option HDD (1TB) ---------- 9-248
Removable HDD Kit ---------- 9-249
HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit ---------- 9-250
Setting Before Turning OFF the Power ---------- 9-251
Check Items when Turning OFF the Main Power ---------- 9-251
Installation Procedure ---------- 9-251
Assembling the Option HDD ---------- 9-251
Removing the HDD and HDD Case Unit ---------- 9-255
Changing Configuration inside of HDD Case Unit ---------- 9-258
Installing the Mirroring Board or Encryption Board and HDD Case Unit -- 9-260
Installing the System Software Using the SST ---------- 9-266
After Installing HDD Data Encryption & Mirroring Kit ---------- 9-266
Checking the Security Version ---------- 9-266
Checking the Security Mark ---------- 9-266
Setting for Mirroring ---------- 9-267
Reporting to the System Administrator at the End of the Work (Only When HDD Data Encryption & Mirroring Kit has been Installed) --- 9-268
Execution of Auto Gradation Adjustment ---------- 9-268
[TYPE-10] Removable HDD Kit + HDD Data Encryption & Mirroring Kit ---------- 9-273
Points to Note when Unpacking HDD Data Encryption & Mirroring Kit ---------- 9-273
Checking the Contents ---------- 9-273
Removable HDD Kit ---------- 9-273
HDD Data Encryption & Mirroring Kit ---------- 9-274
Setting Before Turning OFF the Power ---------- 9-275
Check Items when Turning OFF the Main Power ---------- 9-275
Installation Procedure ---------- 9-275
Removing the HDD and HDD Case Unit ---------- 9-275
Disassembling and Assembling of the HDD Removed from the Host Machine ---------- 9-278
Changing Configuration inside of HDD Case Unit ---------- 9-281
Installing the Encryption Board and HDD Case Unit ---------- 9-283
Installing the System Software Using the SST ---------- 9-289
Checking the Security Version ---------- 9-289
Checking the Security Mark ---------- 9-289
Checking after Installation ---------- 9-290
Reporting to the System Administrator at the End of the Work ----- 9-290
Execution of Auto Gradation Adjustment ---------- 9-290
TYPE-11] Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit ---------- 9-296
Points to Note when Unpacking HDD Data Encryption & Mirroring Kit ---------- 9-296
Checking the Contents ---------- 9-296
Option HDD (1TB) ---------- 9-296
Removable HDD Kit ---------- 9-297
HDD Data Encryption & Mirroring Kit ---------- 9-298

Setting Before Turning OFF the Power ---------- 9-299
Check Items when Turning OFF the Main Power ---------- 9-299
Installation Procedure ---------- 9-299
Assembling the Option HDD ---------- 9-299
Removing the HDD and HDD Case Unit ---------- 9-302
Changing Configuration inside of HDD Case Unit ---------- 9-305
Installing the Encryption Board and HDD Case Unit ---------- 9-307
Installing the System Software Using the SST ---------- 9-313
Checking the Security Version ---------- 9-313
Checking the Security Mark ---------- 9-313
Checking after Installation ---------- 9-314
Reporting to the System Administrator at the End of the Work ---------- 9-314
Execution of Auto Gradation Adjustment ---------- 9-314
Document Scan Lock Kit-B1 ---------- 9-320
Points to Note Before Installation ---------- 9-320
Checking the Contents ---------- 9-320
Check Items when Turning OFF the Main Power ---------- 9-320
Installation Outline Drawing ---------- 9-320
Installation Procedure ---------- 9-321
Checking after Installation ---------- 9-322
USB Device Port-A2/Multimedia Reader/Writer-A2 ---------- 9-323
Points to Note before Installation ---------- 9-323
Installation Outline Drawing ---------- 9-323
Checking the Contents ---------- 9-323
USB Device Port-A2 ---------- 9-323
Multimedia Reader/Writer-A2 ---------- 9-324
Check Items when Turning OFF the Main Power ---------- 9-324
Installing the USB Device Port ---------- 9-324
<For Upper Middle Cover> ---------- 9-325
<For Control Panel> ---------- 9-327
Installing the Card Reader ---------- 9-329
Installing the Multimedia Reader/Writer ---------- 9-331
Operation Check [Multimedia Reader/Writer-A2] ---------- 9-334
Writing Check ---------- 9-334
Reading Check ---------- 9-335
Memory Media Removal ---------- 9-337
Points to Note at Installation ---------- 9-338
Installation Outline Drawing ---------- 9-338
Checking the Contents ---------- 9-338
Serial Intreface KIT-K1 ---------- 9-338
Copy Control Interface KIT-A1 ---------- 9-338
Check Items when Turning OFF the Main Power ---------- 9-338
Installation Outline Drawing ---------- 9-339
Installation Procedure ---------- 9-339
Removing the Main Controller PCB 1 ---------- 9-339
Installing the Serial Interface Kit-K1 ---------- 9-340
Installing the Copy Control Interface Kit-A1 ---------- 9-341
Voice Operation Kit-C2 ---------- 9-343
Points to Note at Installation ---------- 9-343
Checking the Contents ---------- 9-343
Check Items when Turning OFF the Main Power ---------- 9-352
Installation Outline Drawing ---------- 9-352
Installation Procedure ---------- 9-353
Checking after Installation ---------- 9-359
Operation Check ---------- 9-359
When Starting to Use ---------- 9-359
When Stopping to Use ---------- 9-359

## Appendix

Service Tools ---------- II
Special Tools ---------- II
Solvents and Oils ---------- V
General Timing Chart ---------- VI
Basic sequence at power ON ---------- VI
Basic sequence at printing <Condition: A4 1-sided (2 sheets), Right deck, Reverse delivery> ---------- VII
Basic sequence at printing <Condition: A4 2-sided (2 sheets), Right deck, Reverse delivery> ---------- VIII
General Circuit Diagram ---------- IX
Signal Input/Output List ---------- IX
General Circuit Diagram ---------- XII
General Circuit Diagram (1/24) ---------- XII
General Circuit Diagram (2/24) ---------- XIII

General Circuit Diagram (3/24) XIV
General Circuit Diagram (4/24) XV
General Circuit Diagram (5/24) XVI
General Circuit Diagram (6/24) XVII
General Circuit Diagram (7/24) XVIII
General Circuit Diagram (8/24) XIX
General Circuit Diagram (9/24) XX
General Circuit Diagram (10/24) XXI
General Circuit Diagram (11/24) XXII
General Circuit Diagram (12/24) W
General Circuit Diagram (13/24) XXIV
General Circuit Diagram (14/24) XXV
General Circuit Diagram (15/24) XXVI
General Circuit Diagram (16/24) XXVII
General Circuit Diagram (17/24) XXVIII
General Circuit Diagram (18/24) XXIX
General Circuit Diagram (19/24) XXX
General Circuit Diagram (20/24) XXXI
General Circuit Diagram (21/24) XXXII
General Circuit Diagram (22/24) XXXIII
General Circuit Diagram (23/24) XXXIV
General Circuit Diagram (24/24) XXXV
List of User Mode XXXVI
Device Information Delivery Settings XXXVI
Environment Settings XXXVII
Paper Settings XXXVII
Display Settings XXXVIII
Timer/Energy Settings XXXIX
Network XL
External Interface XLVI
Accessibility XLVI
Adjustment/Maintenance XLVII
Adjust Image Quality*1 XLVII
Adjust Action*1 XLVII
Maintenance XLVII
Function Settings XLVIII
Common XLVIII
Copy*1 LI
Printer LI
Send LII
Receive/Forward LV
Store/Access Files LVI
Encrypted Secure Print LVI
Set Destination LVII
Set Destination LVII
Management Settings LVIII
User Management LVIII
Device Management LVIII
License/Other LX
Data Management LXI
Backup Data LXII
Detail of HDD partition LXVII
Soft Counter List LXVIII
Soft counter specifications LXVIII
Soft Counter List LXVIII
000 to 099 LXVIII
100 to 199 LXIX
200 to 299 LXX
300 to 399 LXXI
400 to 499 LXXII
500 to 599 LXXIII
600 to 699 LXXIII
700 to 799 LXXIII
800 to 899 LXXIV
900 to 999 LXXV
Removal LXXVII
Removal LXXVII
Overview LXXVII
Work Procedure LXXVII

# Safety Precautions

- CDRH Act
- Laser Safety
- Handling of Laser System
- Turn power switch ON
- Safety of Toner
- Notes When Handling a Lithium Battery
- Notes Before it Works Serving
- Points to Note at Cleaning

imageRUNNER ADVANCE

8105 PRO/8095 PRO/8085

PRO Series

## CDRH Act

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are soled in the United States.

CANON INC.
30-2,SHIMOMARUKO,3-CHOME,OHTA-KU,TOKYO,
146.JAPAN

MANUFACTURED :

THIS PRODUCT CONFORMS WITH DHHS RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER1
SUBCHAPTER J.

F-0-1

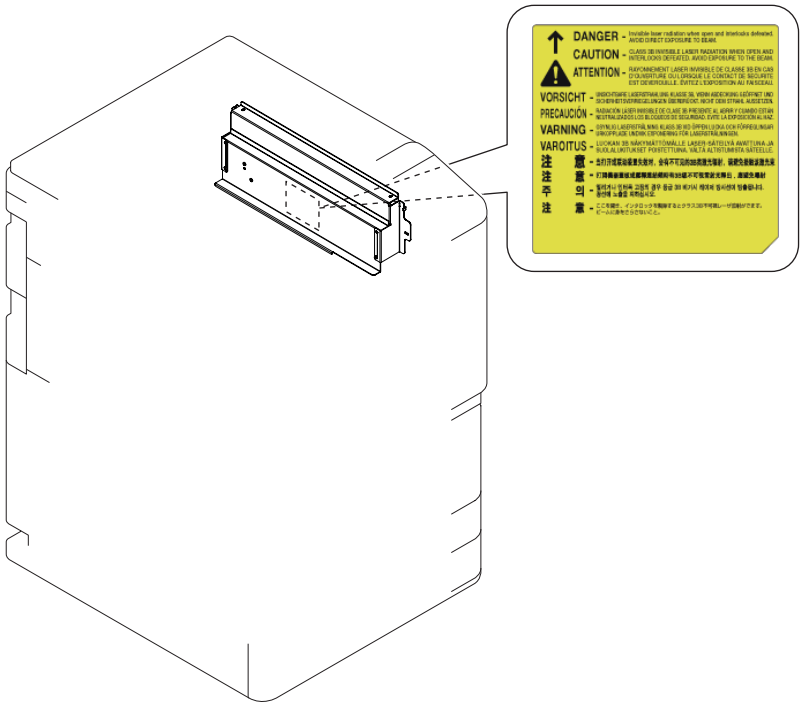
A different description may be used for a different product.

## Laser Safety

Laser beam radiation may pose a danger to the human body. A laser scanner mounted on the machine is sealed with the protection housing and external cover to prevent the laser beam from leaking to the outside. The laser beam never leaks out of the scanner as far as users operate the machine normally.
This product is certificated as a Class 1 laser product under IEC60825-1:2007.

## Handling of Laser System

When servicing the area around the laser assembly, be sure to turn off the main power.
The machine's covers that can reflect laser light are identified by means of a warning label (Figure). If you must detach a cover showing the label, be sure to take extra caution during the work.




F-0-2

## Turn power switch ON

The machine is equipped with 2 power switches: main power switch and control panel power switch.
The machine goes on when the main power switch is turned on (i.e., other than in low power mode, sleep mode).

Do not turn off the main power switch while the progress bar is indicated, during which access is made to the HDD. If deprived of power, the HDD can suffer a fault (E602).

F-0-3

## Safety of Toner

### About Toner

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

Do not throw toner into fire. It may cause explosion.

### Toner on Clothing or Skin

- If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
- Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
- Tonner is easy to react with plastic material, avoid contact with plastic.

## Notes When Handling a Lithium Battery

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

## Notes Before it Works Serving

At servicing, be sure to turn OFF the power source according to the specified steps and disconnect the power plug.

# Points to Note at Cleaning

When performing cleaning using organic solvent such as alcohol, be sure to check that the component of solvent is vaporized completely before assembling.

# 1 Product Overview

- Product Lineup
- Features
- Specifications
- External View/Internal View
- Operation

# Product Lineup

## Main Body

imageRUNNER ADVANCE 8205 / 8295 / 8285

*The underlined numerical value indicates the print speed (ppm: print per minute).

F-1-1

| | imageRUNNER ADVANCE 8205 | imageRUNNER ADVANCE 8295 | imageRUNNER ADVANCE 8285 |
|---|---|---|---|
| Print speed | 105 ppm | 95 ppm | 85 ppm |
| Positioning | Target machine: iR7105 | | |
| Control Panel | Upright Control Panel | | |
| HDD | Standard: 160 GB, Maximum: 1 TB | | |
| Communication method with pickup/delivery option Pickup/delivery option | ARCNET (*) / IPC (**) | | |
| Pickup and delivery options | The equipments that can be connected vary according to the communication method. | | |

T-1-1

* ARCNET: Communication system used in the iR7105 series. Features are as follows.
Enables real time communication among multiple connected devices.
Devices can be easily added (high extensibility)

** IPC: Communication system used in current low and mid speed models, for communication with paper deck and finisher.

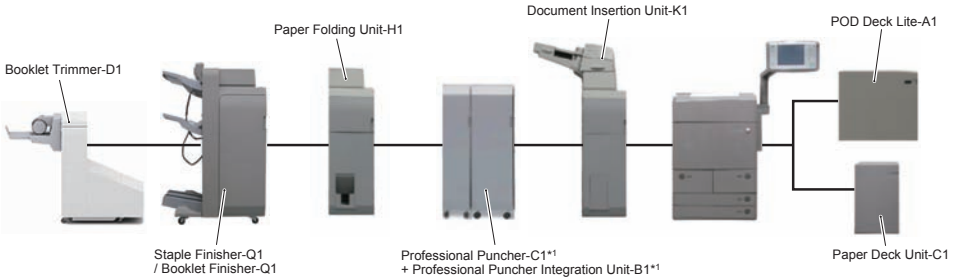
## Pickup/Delivery System Option

### Applicable Option for Each Model

There are two main groups of pickup and delivery options, depending on the communication I/F used.

#### Combinations

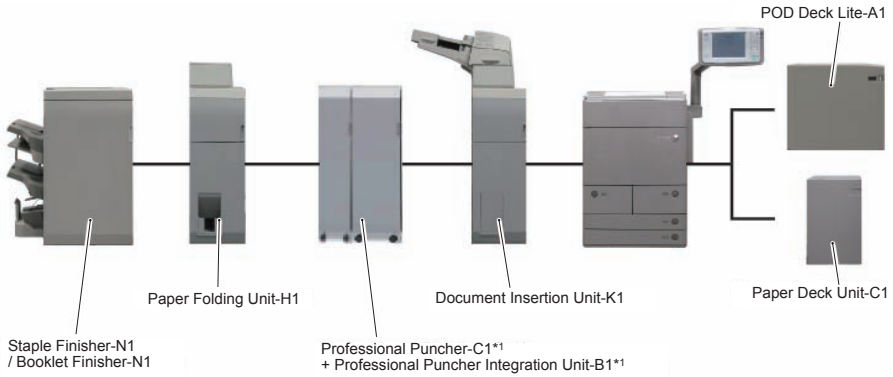
A. imageRUNNER ADVANCE 8105PRO/8095PRO/8085PRO ARCNET Communication Option




F-1-2

*1: Other than CMJ, CCN, TAIWAN
Puncher Unit- BS1/BT1/BU1 is available as an option.

B. imageRUNNER ADVANCE 8085PRO IPC Communication Option




F-1-3

*1: Other than CMJ, CCN, TAIWAN
Puncher Unit- BE1/BF1/BG1/BH1 and Inner Trimmer-A1 are available as an option.

## Required Options/Conditions

### Pickup System Options

| Product name | Required options, conditions, etc. |
|---|---|
| Paper Deck Unit-C1 | Pickup method: retard method<br>Pickup capacity: 3,500 sheets (80 g/m$^2$)<br>Paper type: thin paper, plain paper, heavy paper, color paper, recycled paper, pre-punched paper<br>Paper size: A4, B5, LTR<br>Paper weight: 52 to 220 g/m$^2$<br>Double feed detection: not available |
| POD Deck Light-A1 | Pickup method: air separation method<br>Pickup capacity: 3,500 sheets (80g/m$^2$)<br>Paper type: thin paper, plain paper, heavy paper, color paper, recycled paper, pre-punched paper<br>Paper size: B5 to 13” x 19.2”<br>Paper weight: 52 to 256 g/m$^2$<br>Double feed detection: not available |
| Cassette Heater Unit-38 | For cassette of main body<br>CLA, CAUS, CSPL, CHK, CCN, CKBS, TAIWAN only |
| Paper Deck Heater Unit-A1 | Option for Paper Deck Unit-C1<br>CMJ, CLA, CSPL, CHK, CKBS, TAIWAN only<br>In the 230V areas other than the areas above, this is set as a service part. |

T-1-2

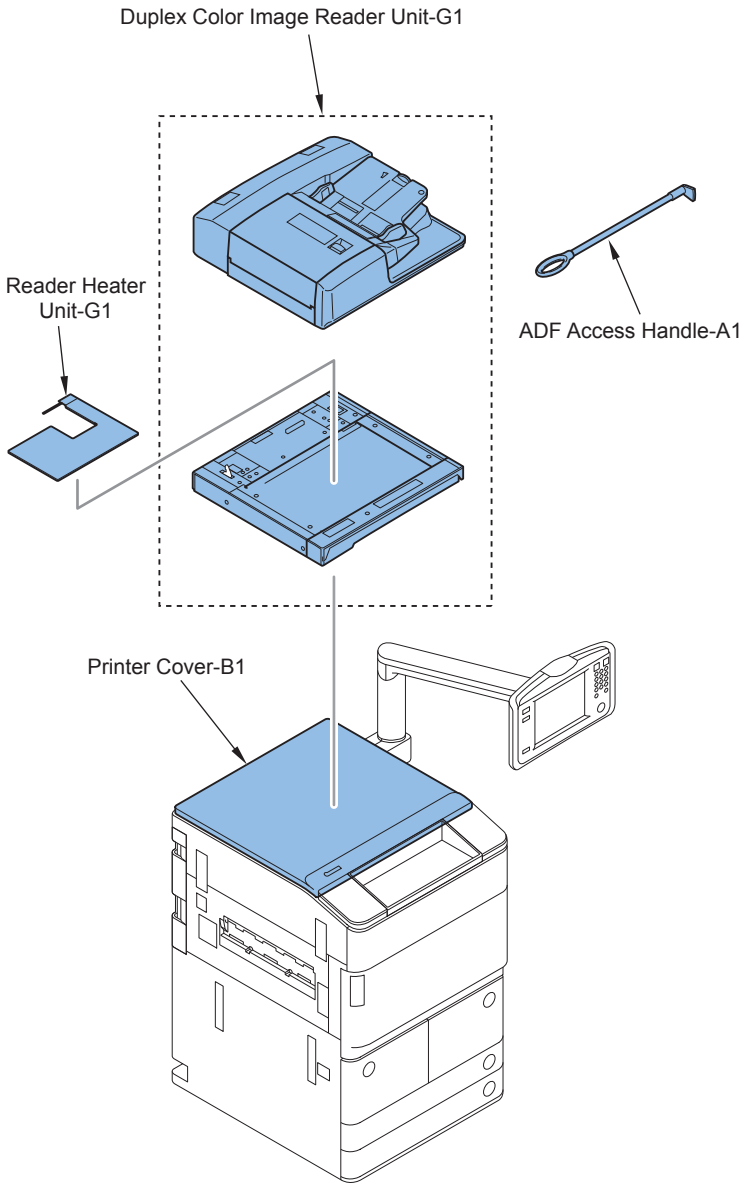
### Delivery System Options

| Product name (Japan) | Required options, conditions, etc. |
|---|---|
| Insertion Unit-K1 | Staple Finisher/Booklet Finisher is required at the downstream side.<br>Pickup capacity: Max. 400 sheets (200 sheets each for Upper Tray and Lower Tray)<br>Paper type: thin paper, plain paper, heavy paper, color paper, recycled paper, pre-punched paper, Index paper, Tracing paper, coated paper<br>Paper size: B5 to 13” x 19.2”<br>Paper weight: 52 to 256 g/m$^2$ |
| Professional Puncher-C1 | Professional Puncher Integration Unit-B1 is required.<br>Staple Finisher/Booklet Finisher is required at the downstream side.<br>Other than CMJ, CCN, TAIWAN |
| Professional Puncher Integration Unit-B1 | A pair with Professional Puncher-C1<br>Staple Finisher/Booklet Finisher is required at the downstream side.<br>Other than CMJ, CCN, TAIWAN |
| Paper Folding Unit-H1 | Staple Finisher/Booklet Finisher is required at the downstream side.<br>Folding type: Z-Fold, C-Fold, Half-Fold, Accordion Z-Fold, Double Parallel Fold<br>Paper size: A4R, LTRR (Z-Fold: A3, B4, A4R, LTRR, LGL, 11” x 17”)<br>Paper weight: 52 to 105 g/m$^2$ (Double Parallel Fold: 52 to 90 g/m$^2$) |
| Booklet Finisher-Q1 PRO | Paper weight: 52 to 300g/m$^2$<br>Maximum stacking capacity: 5,000 sheets (A4, B5, LTR)<br>The number of sheets to be stitched:<br>Staple:100 sheets (A4, B5, LTR)<br>Saddle: 25-sheet saddle stitching |
| Staple Finisher-Q1 PRO | Paper weight: 52 to 300g/m$^2$<br>Maximum stacking capacity: 5,000 sheets (A4, B5, LTR)<br>The number of sheets to be stitched:<br>Staple:100 sheets (A4, B5, LTR) |
| Staple Finisher-N1 | Paper weight: 52 to 256 g/m$^2$<br>Maximum stacking capacity: 4250 sheets (A4, B5, LTR)<br>The number of sheets to be stitched: 100 sheets (A4, B5, LTR) |
| Booklet Finisher-N1 | Paper weight: 52 to 256 g/m$^2$<br>Maximum stacking capacity: 4250 sheets (A4, B5, LTR)<br>Staple: 100 sheets (A4, B5, LTR)<br>Saddle: 20-sheet saddle stitching |
| Puncher Unit-BE1 | Option for Staple Finisher-N1/Booklet Finisher-N1. AB, 2 holes<br>Paper size : A3, A4, A4R<br>Paper weight: 52 to 256 g/m$^2$<br>CMJ only |
| Puncher Unit-BF1 | Option for Staple Finisher-N1/Booklet Finisher-N1. Inch, 2 holes / 3 holes<br>Paper size : 11” x 17”, LGL, LTR, A3, A4<br>Paper weight: 52 to 256 g/m$^2$<br>CUSA, CCI, CLA, CAUS, CKBS only |
| Puncher Unit-BG1 | Option for Staple Finisher-N1/Booklet Finisher-N1. FRN, 2 holes / 4 holes<br>Paper size : A3 to A4<br>Paper weight: 52 to 256 g/m$^2$<br>Other than CMJ, CUSA, CCI |
| Puncher Unit-BH1 | Option for Staple Finisher-N1/Booklet Finisher-N1. SWE, 4 holes<br>Paper size : A3 to A4<br>Paper weight: 52 to 256 g/m$^2$<br>CEL only |
| Punch Unit-BS1/BT1/BU1 | Booklet Finisher-Q1 PRO/Staple Finisher-Q1 PRO options<br>BB1: inch, 2/ 3 holes<br>BC1: 2/ 4 holes<br>BD1: four holes |
| Staple-N1 | Plain Staple Cartridge. Option for Booklet Finisher-Q1 PRO/Staple Finisher-Q1 PRO |
| Staple-P1 | Saddle Staple Cartridge. Option for Booklet Finisher-N1. |
| Booklet Trimmer-D1 | Upstream requires Booklet Finisher-Q1 PRO |

T-1-3

# Scanning System Options

## Required Options and Conditions



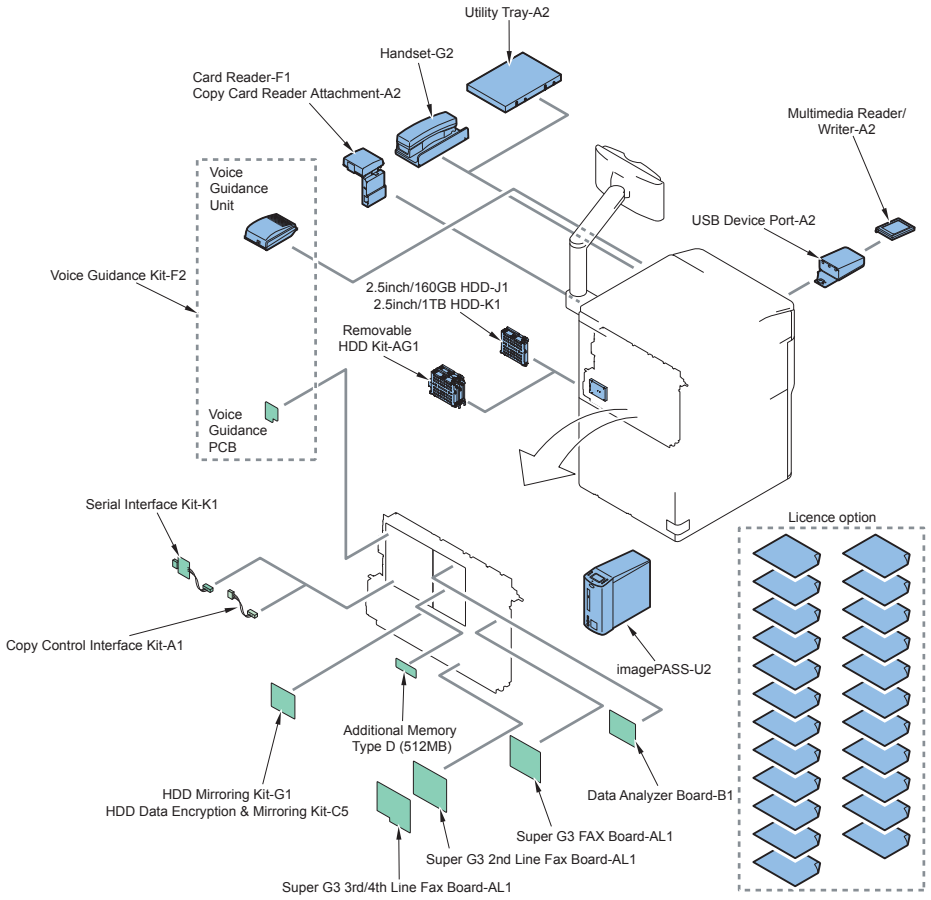

F-1-4

| Product name | Required options, conditions, etc. |
|---|---|
| Duplex Color Image Reader Unit-G1 | Reverse 2-sided scanning<br>B/W (1-sided/2-sided): 600 dpi=85/40 ipm, 300 dpi: 85/40 ipm<br>Color (1-sided/2-sided): 600 dpi=51/20 ipm, 300 dpi:85/40 ipm<br>Paper weight:<br><1-sided> AB configuration: 38 to 220 g/m$^2$, Inch configuration: 50 to 220 g/m$^2$<br><2-sided> 50 to 220 g/m$^2$<br>Color original, or color-mixed original: 64 to 220 g/m$^2$<br>Stacking capacity: Max. 300 sheets<br>Other than CEL |
| Reader Heater Unit-G1 | Option for Duplex Color Image Reader Unit-G1<br>CMJ, CLA, CSPL, CHK, CCN, CKBS, TAIWAN only |
| ADF Access Handle-A1 | It is the cover to be installed at the top of the host machine when using this equipment as a printer model. |
| Printer Cover-B1 | It is the handle to support opening and closing the Feeder. |

T-1-4

# Function Expansion System Options

## Required Options and Conditions




F-1-5

## Hardware Products

| Product name | Required options, conditions, etc. |
|---|---|
| Utility Tray-A2 | Using with Handset-G2 is not available.<br>No particular options and conditions are required. |
| Card Reader-F1 | Copy Card Reader Installation Kit-A2 is required.<br>Using with Serial Interface Kit-K1 and Control Interface Kit-A1 is not available. |
| Copy Card Reader Installation Kit-A2 | Required when Card Reader-F1 is installed. |
| Super G3 FAX Board-AL1 | No particular options and conditions are required. |
| Super G3 2nd Line Fax Board-AL1 | Super G3 FAX Board-AL1 is required. |
| Super G3 3rd/4th Line Fax Board-AL1 | Super G3 FAX Board-AL1 is required.<br>Other than CEL, CCN |
| Handset-G2 | Super G3 FAX Board-AL1 and Super G3 2nd Line Fax Board-AL1 is required.<br>Using with Utility Tray-A2 is not available.<br>CMJ only |
| imagePASS-U2 | No particular options and conditions are required.<br>Other than CMJ, CCN |
| Voice Guidance Kit-F2 | Product configuration consists of Voice Guidance PCB and Voice Guidance Unit.<br>No particular options and conditions are required.<br>Other than CMJ, CCN, CKBS |
| HDD Data Encryption/Mirroring Kit-C5 | Not available for China models. |
| USB Device Port-A2 | The product consists of USB 2 Port HUB PCB only.<br>No particular options and conditions are required.<br>CEL is standard |
| Expansion Memory Type D (512 MB) | Required when 600dpi color scanning (mode) is used. |
| Option HDD (2.5 inch/160GB)-J1 | This is used when the mirroring function is used with HDD Mirroring Kit-G1 or HDD Data Encryption & Mirroring Kit-C5.<br>No particular options and conditions are required. |
| Option HDD (2.5 inch/1TB)-K1 | This is used when the mirroring function is used with HDD Mirroring Kit-G1 or HDD Data Encryption & Mirroring Kit-C5.<br>No particular options and conditions are required. |
| HDD Mirroring Kit-G1 | Option HDD (2.5 inch/160 GB)-J1 or Option HDD (2.5 inch/1TB)-K1 are required. |
| HDD Data Encryption/Mirroring Kit-C5 | When performing mirroring, either the Option HDD (160 GB) or the Option HDD (1 TB) is required.<br>Other than CCN |
| Removable HDD Kit-AG1 | No particular options and conditions are required. |
| Document Scan Lock Kit-B1 | No particular options and conditions are required.<br>CMJ only |
| Multimedia Reader/Writer-A2 | USB Device Port-A2 is required.<br>To support the CF, the SD memory and the memory stick. |
| SC Kit | CMJ only |

| Product name | Required options, conditions, etc. |
|---|---|
| Serial Interface Kit-K1 | Required when the coin manager is connected.<br>Using with Card Reader-C1 and Control Interface Kit-A1 is not available. |
| Control Interface Kit-A1 | Required when the coin manager is connected.<br>Using with Card Reader-C1 and Serial Interface Kit-K1 is not available. |

T-1-5

## License Products

At the time of installation, obtain the license number according to the license certificate included. Then, enter the obtained license number from the Control Panel of the machine, so that the applicable functions are enabled.

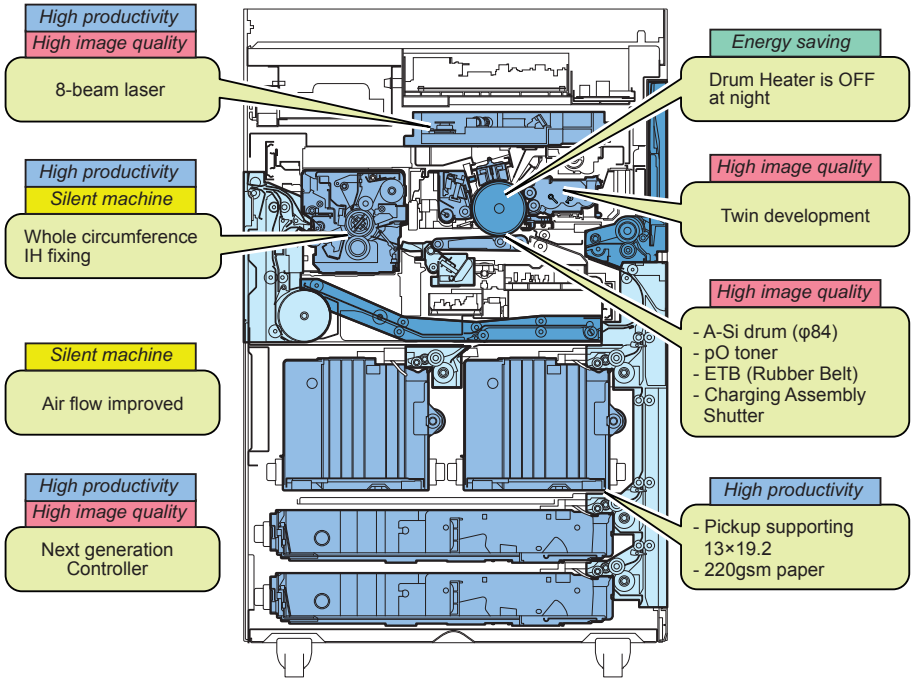
There is no physical installation work at the time of installation.

| Product name | Required options, conditions, etc. |
|---|---|
| PCL Printer Kit-AU1 | No particular options and conditions are required.<br>Other than CMJ |
| PS Printer Kit-AU1 | No particular options and conditions are required.<br>Other than CMJ |
| Universal Send Advanced Feature Set-D1 | No particular options and conditions are required.<br>Other than CMJ |
| Universal Send Advanced Feature Set-E1 | No particular options and conditions are required.<br>CEL only |
| Universal Send Advanced Feature Set-F1 | No particular options and conditions are required.<br>CUSA only |
| Scan Solution Security Function Expansion Kit-A1 | No particular options and conditions are required.<br>CMJ only |
| Universal Send Security Feature Set-D1 | No particular options and conditions are required.<br>Other than CMJ, CCN |
| Direct Print Expansion Kit (for PDF/XPS)-H1 | No particular options and conditions are required.<br>CMJ, CUSA, CLA, CEL, CAUS only |
| Direct Print Kit (for PDF)-H1 | No particular options and conditions are required.<br>CLA, CSPL, CHK, CCN, CKBS, TAIWAN , CAUS, CIPL only |
| Direct Print Kit (for XPS)-H1 | No particular options and conditions are required.<br>CLA, CSPL, CHK, CCN, CKBS, TAIWAN , CAUS, CIPL only |
| Universal Send Digital User Signature Kit-C1 | No particular options and conditions are required.<br>CUSA, CEL, CAUS only |
| Remote Operation Kit-B1 | No particular options and conditions are required.<br>Other than CMJ |
| Data Erase Kit-C1 | No particular options and conditions are required. |
| Encrypted Secure Print Software-D1 | No particular options and conditions are required.<br>CUSA, CLA only |
| Encrypted Printing Software-D1 | No particular options and conditions are required.<br>CEL, CAUS, CSPL, CHK, TAIWAN only |
| Barcode Printing Kit-D1 | Other than CMJ |
| Secure Watermark-B1 | No particular options and conditions are required. |
| Document Scan Lock Kit-B1 | No particular options and conditions are required. |
| ACCESS MANAGEMENT SYSTEM KIT-B1 | No particular options and conditions are required.<br>Other than CKBS, TAIWAN |
| Web Access Software-H1 | No particular options and conditions are required.<br>Other than CKBS |
| iR-ADV Security Kit-G1 for IEEE 2600.1 Common Criteria Certification | - |
| Remote Fax Kit-A1 | No particular options and conditions are required. |

T-1-6

# Features

## Product Features




F-1-6

## Service Features

### Improved Service Operability

#### Removing of the Process Unit becomes easy.

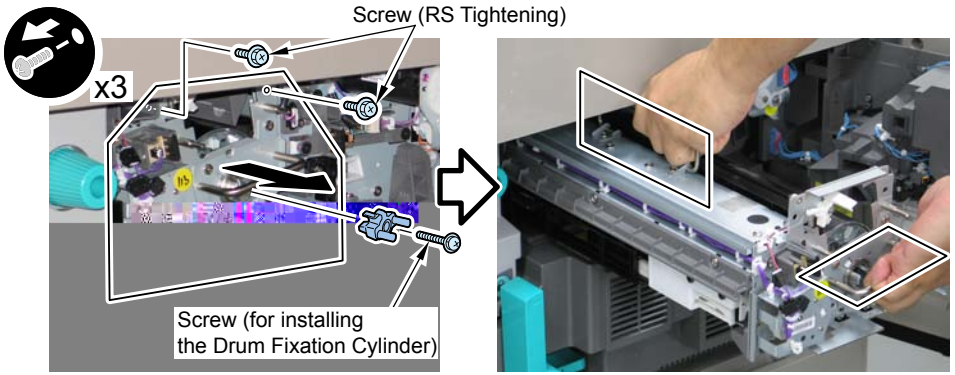
The Process Unit can be removed by accessing only from the front side.

<Preparation>

1) Open the Inner Cover.
2) Remove the Primary Charging Assembly.
3) Remove the Pre-transfer Charging Assembly.

<Procedure>

1) Remove the 2 screws.
2) Remove the Drum Fixation Cylinder by removing the screw for installing the Drum Fixation Cylinder, and remove the Process Unit.



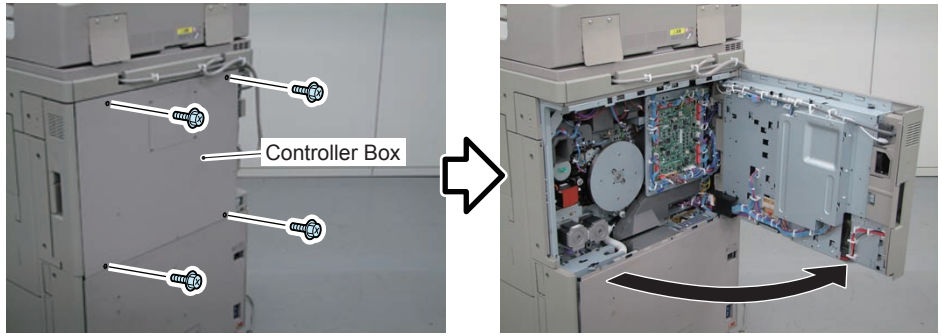

F-1-7

## Easy access to the parts at rear side.

Since the Rear Cover Unit becomes a retractable unit, access to the parts at rear side becomes easy.

<Procedure>

1) Remove the Reader Communication Cable.
2) Remove the 4 screws, and open the Controller Box in the direction of the arrow.




F-1-8

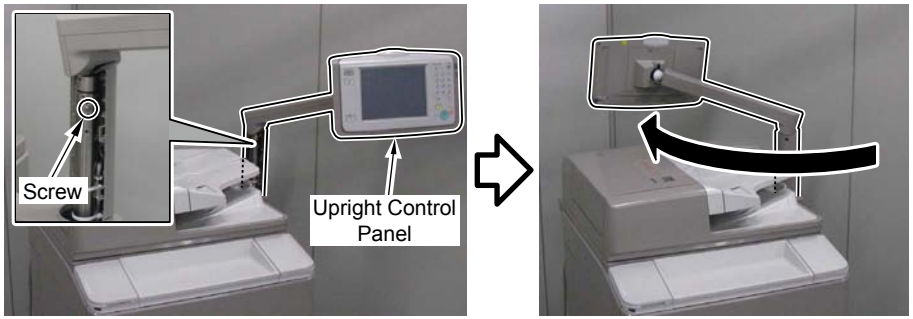
## Performing the rear side work while checking the Control Panel is possible.

By removing the Rotation Control Screw, the Upright Control Panel can be turned to face the rear side.

As a result, service modes can be executed even when working at rear side of the host machine.

<Procedure>

1) Remove the Shaft Support Cover Left.
2) Remove the screw on the arm, and turn the Upright Control Panel.




F-1-9

## New Service Mode

The description of each service mode item is displayed as well.

F-1-10

## Features

- Display in natural language
- Items in the following are newly classified: COPIER > OPTION > BODY
- Enhanced I/O information
- The description of error code/alarm code is displayed.
- Easy switching of screens between Level 1 and Level 2

## Improved Upgrading Operability

Almost all of the options (*) can be upgraded through the host machine.

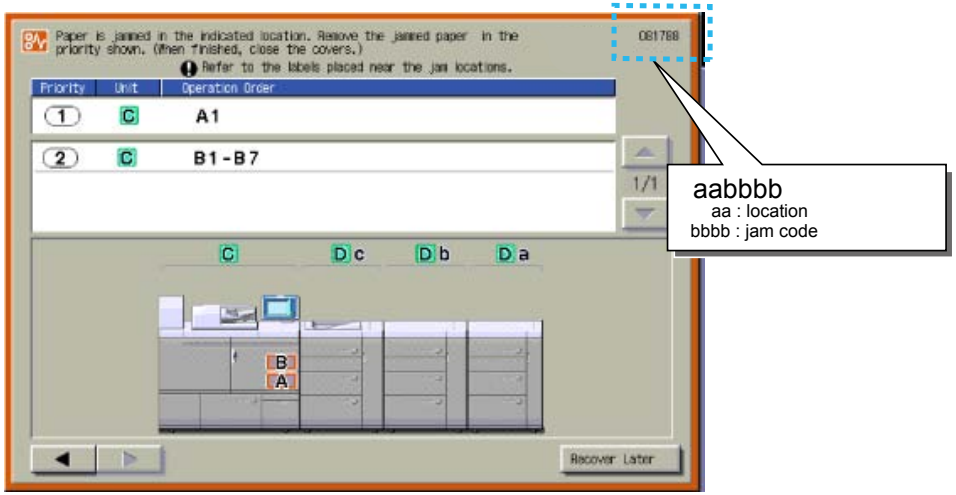
SST (Service Support Tool) is used for upgrading as usual.

* Excluding Document Insertion Unit-K1, Paper Folding Unit-H1 and Professional Puncher-C1.
  To upgrade the Professional Puncher-C1, connect the Professional Puncher with the PC which the firmware (built-in downloader) was installed.

## Jam/Error Code Display Specifications

### Jam Code

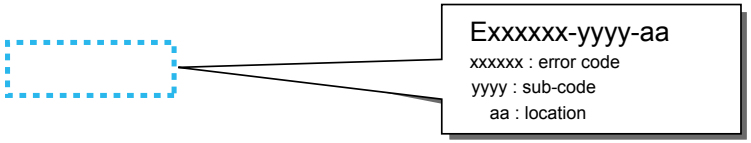
"Jam Code" and "Location Code" are displayed on the screen (*) when a paper jam occurs.




F-1-11

### Error Code

In addition to "Error Code", "Location Code" is displayed on the screen when an error occurs.




F-1-12

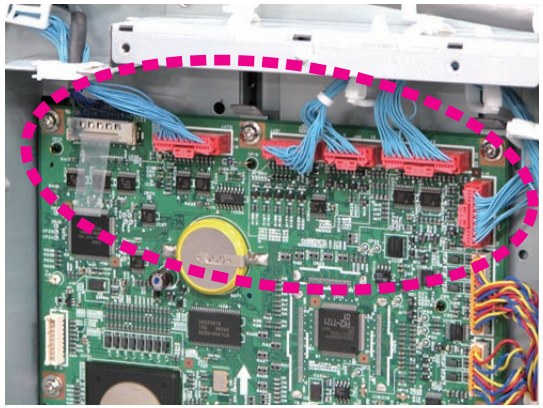
### Service Advantage

When a paper jam/error is reported from the user:

- The location (device) causing the paper jam/error can be recognized before the service technician is sent to the user site.
- The cause of trouble and the remedy can be assumed before the service technician is sent to the user site.
- Depending on the cause of the paper jam (e.g.: paper jam caused by wrong operation by the user), support can be completed by the phone or e-mail. (Visiting to the user site is not necessary.)

## Applying New Connectors

Newly-configured connectors are used as some connectors on each controller PCB.



F-1-13

### Purpose

To prevent the communication error caused by the following:

- Loose/removed connector due to vibration during transportation
- Half-inserted connector at the time of servicing

### Features

- Easy to hold because the overall height of the housing is high
- Connector can be inserted with less force.
- Lever lock mechanism is available. Proper insertion can be determined by the sound (“snap”) or clicky feeling

Points to Caution when Inserting/Removing the Connector:

Be sure to keep the following in mind during work:

- While releasing the lever lock of the housing, hold the housing to remove. Do not hold and pull the harness.
- Be sure to insert the connector while the housing is positioned straight to the socket. Do not tilt the housing to insert the connector.

# Specifications

## Product Specifications

| | | |
|---|---|---|
| Installation type of main body | | Console type |
| Photoreceptor | | 84mm diameter amorphous silicon drum |
| Exposure method | | Laser exposure method |
| Charging method | | Corona + Grid charging method |
| Developing method | | Dry, 1-component toner projection |
| Transfer method | | Transfer Roller method |
| Separation method | | Transfer Belt |
| Transfer Belt | Right/Left Deck | Separation retard method |
| | Upper/Lower Cassette | Separation retard method |
| | Multi-purpose Tray | Simple retard method |
| Cleaning method | Drum | Cleaning Blade |
| | ETB | Cleaning Blade + Brush Roller |
| Fixing method | | Heat Roller method |
| Delivery method | | Face-up/face-down |
| Type of toner | | Magnetic negative toner |
| Toner supplying method | | Set-on |
| Toner level detection function | | Yes |
| Leading edge image margin | | 2.5 mm +/- 1.5 mm |
| Left image margin | | 2.5 mm +/- 1.5 mm |
| Warm-up time | At power-on | 60 sec. or less |
| | At recovery from sleep mode | 60 sec. or less |
| First copy time | | 2.7 sec. or less |
| Image gradations | | 256 gradations |
| Print resolution | | Max. 1,200 dpi x 1,200 dpi |
| Maximum image guaranteed area | | 305 x 482.7 mm |
| Maximum printable area | | 310 x 625 mm |
| Paper Type | Deck | 52 to 220 g/m$^2$<br>thin paper, plain paper, heavy paper, color paper, recycled paper, pre-punched paper, letterhead bond paper |
| | Cassette | 52 to 220 g/m$^2$<br>Deck feedable type, index paper, tab paper |
| | Multi-purpose Tray | 52 to 256 g/m$^2$<br>Deck feedable type, transparency, labels, tracing paper, postcard |
| Paper size | Deck | A4, B5, LTR |
| | Cassette | A3, B4, A4, A4R, B5, B5R, K8, K16, K16R, LDR, LGL, LTR, LTRR, STMTR, EXEC, 11” × 17”(279.4 × 431.8 mm), 12” × 18” (304.8 × 487.7 mm), SRA3 (320 × 450 mm), 13” × 19”(330.2 × 482.6 mm), Custom paper size (139.7 x 182 mm to 330.2 x 487.7 mm) |
| | Multi-purpose Tray | Cassette feedable size, A5R, Postcard, Custom paper size (100 × 139.7 mm to 330.2 × 487.7 mm), Long length paper (487.8 mm to 630 mm) |
| Pickup capacity | Right/Left Deck | 1,500 sheets each (80 g/m$^2$) |
| | Upper/Lower Cassette | 550 sheets each (80 g/m$^2$) |
| | Multi-purpose Tray | 100 sheets (80 g/m$^2$) |
| Duplex method | | Through pass |
| Memory capacity | | For Main Controller 1: 1GB (standard) |
| | | For Main Controller 2: Max. 1GB (standard: 512MB, option: 512MB) |
| HDD capacity | | Standard: 160 GB, Maximum: 1 TB |
| Environment temperature range | | 2.5 to 37.5 deg C |
| Environment humidity range | | 5 to 80 %RH |
| Environment atmosphere range | | 610 to 1013 hpa (0.6 to 1.0 atmospheric pressure) |
| Noise | At the time of printing | 75 dB or less |
| Rated power supply | | See “Power Supply Specifications”. |
| Maximum power consumption | At the time of printing | 2.0 kW or less (100 V)<br>1.92 kW or less (120-127 V)<br>2.2 kW or less (220-240 V) |
| | At the time of sleep | 1.0 W or less (100 V, 120-127 V)<br>1.5 W or less (220-240 V) |
| | At the time of save mode | 240 Wh or less |
| Dimension | with the Upright Control Panel | 645 (W) x 770 (D) x 1,220 (H) mm (including ADF) |
| | without the Upright Control Panel | 1481 (W) x 770 (D) x 1,252 (H) mm |
| Weight | | 242 kg (including Reader + ADF) |

T-1-7

## Power Supply Specifications:

| Product name | Power supply source (number of cables) | Japan | | North America | | Europe | | Asia | | Australia | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | V (V) | I (A) | V (V) | I (A) | V (V) | I (A) | V (V) | I (A) | V (V) | I (A) |
| imageRUNNER ADVANCE 8205 / 8295 / 8285 PRO | Power outlet (1) | 100 | 20 | 120 -127 | 16 | 220 -240 | 10 | 220 -240 | 10 | 220 -240 | 10 |
| POD Deck Lite-A1 | Power outlet (1) | 100 | 2.4 | 120 -127 | 5 | 220 -240 | 1.2 | 220 -240 | 1.2 | 220 -240 | 1.2 |
| Paper Deck Unit-C1 | Main body | - | - | - | - | - | - | - | - | - | - |
| Insertion Unit-K1 | Power outlet (1) | 100 -240 | 1.0 | 100 -240 | 1.0 | 100 -240 | 1.0 | 100 -240 | 1.0 | 100 -240 | 1.0 |
| Paper Folding Unit-H1 | Finisher | - | - | - | - | - | - | - | - | - | - |
| Professional Puncher-C1 | Integration Unit-B1 | - | - | - | - | - | - | - | - | - | - |
| Professional Puncher Integration Unit-B1 | Power outlet (1) | - | - | 120 -127 | 5.5 | 120 -127 | 5.5 | 120 -127 | 5.5 | 120 -127 | 5.5 |
| Booklet Finisher-Q1 PRO | Power outlet (1) | 100 | 10 | 120- 127 | 8 | 220- 240 | 8 | 220- 240 | 8 | 220- 240 | 8 |
| Staple Finisher-Q1 PRO | Power outlet (1) | 100 | 10 | 120- 127 | 8 | 220- 240 | 8 | 220- 240 | 8 | 220- 240 | 8 |
| Staple Finisher-N1 | Power outlet (1) | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 |
| Booklet Finisher-N1 | Power outlet (1) | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 | 100 -240 | 2.8 |
| Booklet Trimmer-D1 | Finisher | - | - | - | - | - | - | - | - | - | - |
| Punch Unit- BT / BS / BU | Booklet Finisher-F1 PRO | - | - | - | - | - | - | - | - | - | - |
| Puncher Unit-BE1 | Finisher | - | - | - | - | - | - | - | - | - | - |
| Inner Trimmer-A1 | Finisher | - | - | - | - | - | - | - | - | - | - |
| Duplex Color Image Reader Unit-C1 | Main body | - | - | - | - | - | - | - | - | - | - |

T-1-8

## Weight and Size

| Product name | Width (mm) | Depth (mm) | Height (mm) | Weight (kg) |
|---|---|---|---|---|
| imageRUNNER ADVANCE 8205 / 8295 / 8285 PRO | 645 | 770 | 1220 | 242 |
| POD Deck Lite-A1 | 601 | 621 | 570 | 50 |
| Paper Deck Unit-C1 | 323 | 583 | 570 | 37 |
| Insertion Unit-K1 | 746 | 793 | 1407 | 61 |
| Paper Folding Unit-H1 | 336 | 793 | 1190 | 71 |
| Professional Puncher Integration Unit-B1 | 250 | 792 | 1040 | 40 |
| Professional Puncher Unit-C1 | 305 | 792 | 1040 | 80 |
| Booklet Finisher-F1 PRO | 800 | 792 | 1239 | 181 |
| Staple Finisher-F1 PRO | 800 | 792 | 1180 | 129 |
| Staple Finisher-D1 | 654 | 765 | 1040 | 61 |
| Booklet Finisher-D1 | 767 | 765 | 1040 | 108 |
| Booklet Trimmer-D1 | 1575 | 770 | 1040 | 152 |
| Punch Unit-BB1/BC1/BD1 | 78 | 655 | 131 | 3 |
| Puncher Unit-BE1/BF1/BG1/BH1 | 95 | 715 | 392 | 3.7 |
| Inner Trimmer-A1 | 251 | 625 | 403 | 32 |
| Duplex Color Image Reader Unit-G1 | 635 | 605 | 262 | 39.4 |

T-1-9

# Productivity (Print Speed)

Unit: sheets / minute

| Paper type | Size | Feeding direction (mm) | Width direction (mm) | imageRUNNER ADVANCE 8205 | | | | imageRUNNER ADVANCE 8295 | | | | imageRUNNER ADVANCE 8285 PRO | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Deck / Cassette | | Multi-purpose Tray | | Deck / Cassette | | Multi-purpose Tray | | Deck / Cassette | | Multi-purpose Tray | |
| | | | | 1-sided | 2-sided | 1-sided | 2-sided | 1-sided | 2-sided | 1-sided | 2-sided | 1-sided | 2-sided | 1-sided | 2-sided |
| Plain paper (64 to 90 g/m$^2$) Thin paper (52 to 63 g/m$^2$) Heavy 1 (91 to 180 g/m$^2$) Heavy 2 (181 to 220 g/m$^2$) Heavy 3 (221 to 256 g/m$^2$) | A5R | 210.0 | 148.5 | 105.0 | 52.5 | 80.0 | 40.0 | 95.0 | 47.5 | 80.0 | 40.0 | 85.0 | 42.5 | 80.0 | 40.0 |
| | STMTR | 215.9 | 139.7 | 105.0 | 52.5 | 80.0 | 40.0 | 95.0 | 47.5 | 80.0 | 40.0 | 85.0 | 42.5 | 80.0 | 40.0 |
| | B5 | 182.0 | 257.0 | 105.0 | 52.5 | 80.0 | 40.0 | 95.0 | 47.5 | 80.0 | 40.0 | 85.0 | 42.5 | 80.0 | 40.0 |
| | A4 | 210.0 | 297.0 | 105.0 | 52.5 | 80.0 | 40.0 | 95.0 | 47.5 | 80.0 | 40.0 | 85.0 | 42.5 | 80.0 | 40.0 |
| | LTR | 215.9 | 279.4 | 105.0 | 52.5 | 80.0 | 40.0 | 95.0 | 47.5 | 80.0 | 40.0 | 85.0 | 42.5 | 80.0 | 40.0 |
| | B5R | 257.0 | 182.0 | 88.2 | 44.1 | 67.2 | 33.6 | 79.8 | 39.9 | 67.2 | 33.6 | 73.0 | 36.5 | 67.2 | 33.6 |
| | LTRR | 279.4 | 215.9 | 81.1 | 40.6 | 61.8 | 30.9 | 73.4 | 36.7 | 61.8 | 30.9 | 67.0 | 33.5 | 61.8 | 30.9 |
| | A4R | 297.0 | 210.0 | 76.3 | 38.2 | 58.2 | 29.1 | 69.1 | 34.5 | 58.2 | 29.1 | 63.0 | 31.5 | 58.2 | 29.1 |
| | LGLR | 355.6 | 215.9 | 63.8 | 30.5 | 48.6 | 24.3 | 60.0 | 30.0 | 48.6 | 24.3 | 57.0 | 28.5 | 48.6 | 24.3 |
| | B4R | 364.0 | 257.0 | 62.3 | 29.5 | 47.5 | 23.7 | 59.0 | 29.5 | 47.5 | 23.7 | 56.0 | 28.0 | 47.5 | 23.7 |
| | A3R | 420.0 | 297.0 | 54.0 | 27.0 | 41.1 | 20.6 | 50.0 | 25.0 | 41.1 | 20.6 | 44.0 | 22.0 | 41.1 | 20.6 |
| | LDRR | 431.8 | 279.4 | 53.0 | 26.5 | 40.0 | 20.0 | 49.0 | 24.5 | 40.0 | 20.0 | 43.0 | 21.5 | 40.0 | 20.0 |
| | SRA3 | 450.0 | 320.0 | 50.4 | 25.2 | 38.4 | 19.2 | 45.6 | 22.8 | 38.4 | 19.2 | 40.8 | 20.4 | 38.4 | 19.2 |
| | 12 X 18 | 457.2 | 304.8 | 49.6 | 24.8 | 37.8 | 18.9 | 44.9 | 22.4 | 37.8 | 18.9 | 40.1 | 20.1 | 37.8 | 18.9 |
| | 13 X 19 | 482.6 | 330.2 | 47.0 | 23.5 | 35.8 | 17.9 | 42.5 | 21.3 | 35.8 | 17.9 | 38.0 | 19.0 | 35.8 | 17.9 |
| Bond | LTR | 215.9 | 279.4 | 35.0 | 17.5 | 35.0 | 17.5 | 35.0 | 35.0 | 35.0 | 17.5 | 35.0 | 17.5 | 35.0 | 17.5 |
| | LTRR | 279.4 | 215.9 | 24.0 | 12.0 | 24.0 | 12.0 | 24.0 | 24.0 | 24.0 | 12.0 | 24.0 | 12.0 | 24.0 | 12.0 |
| Tab | A4 | 222.7 | 297.0 | 97.0 | - | - | - | 87.8 | - | - | - | 79.4 | - | - | - |
| | LTR | 228.6 | 279.4 | 97.0 | - | - | - | 87.8 | - | - | - | 79.4 | - | - | - |
| Transparency | A4 | 210.0 | 297.0 | - | - | - | - | - | - | 80.0 | - | - | - | 80.0 | - |
| | LTR | 215.9 | 279.4 | - | 80.0 | - | - | - | - | 80.0 | - | - | - | 80.0 | - |

T-1-10

# Paper Type

Following shows the types of usable papers.
See the table below for the custom paper size.

| Type | Feeding direction (mm) | Width direction (mm) |
|---|---|---|
| Custom paper size 0-1 | 148.0 to 487.7 | 100 to 139.6 |
| Custom paper size 0-2 | 148.0 to 181.9 | 139.7 to 330.2 |
| Custom paper size 1-1 | 182.0 to 209.9 | 139.7 to 181.9 |
| Custom paper size 1-2 | 210.0 to 279.2 | |
| Custom paper size 1-3 | 279.3 to 432.0 | |
| Custom paper size 1-4 | 432.1 to 487.7 | |
| Custom paper size 2-1 | 182.0 to 209.9 | 182.0 to 209.9 |
| Custom paper size 2-2 | 210.0 to 279.2 | |
| Custom paper size 2-3 | 279.3 to 432.0 | |
| Custom paper size 2-4 | 432.1 to 487.7 | |
| Custom paper size 3-1 | 182.0 to 209.9 | 210.0 to 297.0 |
| Custom paper size 3-2 | 210.0 to 279.2 | |
| Custom paper size 3-3 | 279.3 to 432.0 | |
| Custom paper size 3-4 | 432.1 to 487.7 | |
| Custom paper size 4-1 | 182.0 to 209.9 | 297.1 to 330.2 |
| Custom paper size 4-2 | 210.0 to 279.2 | |
| Custom paper size 4-3 | 279.3 to 487.7 | |
| Custom paper size 4-4 | 432.1 to 487.7 | |
| Custom paper size 5 (long length) | 487.8 to 630.0 | 100 to 330.2 |

T-1-11

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Thin paper (52 to 63 g/m$^2$) | A3 | 420 | 297 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | B4 | 364 | 257 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4R | 297 | 210 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4 | 210 | 297 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | B5R | 257 | 182 | Yes | - | - | Yes | Yes | - | - | Yes |
| | B5 | 182 | 257 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | A5R | 210 | 148 | Yes | - | - | Yes | Yes | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | Yes | Yes | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | Yes | Yes | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | Yes | Yes | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | Yes | Yes | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | K8 | 390 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | Yes | Yes | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 0-1, 0-2 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 1-1, 1-2, 1-3, 1-4 | - | - | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | Yes | Yes | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Plain paper 1 (64 to 90 g/m$^2$) Recycled paper 1 (64 to 90 g/m$^2$) Color paper (64 to 90 g/m$^2$) | A3 | 420 | 297 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | B4 | 364 | 257 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4R | 297 | 210 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4 | 210 | 297 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | B5R | 257 | 182 | Yes | - | - | Yes | Yes | - | - | Yes |
| | B5 | 182 | 257 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | A5R | 210 | 148 | Yes | - | - | Yes | Yes | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | Yes | Yes | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | Yes | Yes | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | Yes | Yes | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | Yes | Yes | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | K8 | 390 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | Yes | Yes | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 0-1, 0-2 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 1-1, 1-2, 1-3, 1-4 | - | - | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | Yes | Yes | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Heavy paper 1 (91 to 180 g/m$^2$) Letterhead | A3 | 420 | 297 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | B4 | 364 | 257 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4R | 297 | 210 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4 | 210 | 297 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | B5R | 257 | 182 | Yes | - | - | Yes | Yes | - | - | Yes |
| | B5 | 182 | 257 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | A5R | 210 | 148 | Yes | - | - | Yes | Yes | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | Yes | Yes | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | Yes | Yes | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | Yes | Yes | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | Yes | Yes | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | K8 | 390 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | Yes | Yes | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 0-1, 0-2 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 1-1, 1-2, 1-3, 1-4 | - | - | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | Yes | Yes | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Heavy paper 2 (181 to 220 g/m$^2$) | A3 | 420 | 297 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | B4 | 364 | 257 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4R | 297 | 210 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | A4 | 210 | 297 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | B5R | 257 | 182 | Yes | - | - | Yes | Yes | - | - | Yes |
| | B5 | 182 | 257 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | A5R | 210 | 148 | Yes | - | - | Yes | Yes | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | Yes | Yes | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | Yes | Yes | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | Yes | Yes | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | Yes | Yes | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | Yes | Yes | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | Yes | Yes | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | Yes | Yes | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | K8 | 390 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | Yes | Yes | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | Yes | Yes | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 0-1, 0-2 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 1-1, 1-2, 1-3, 1-4 | - | - | Yes | - | - | Yes | Yes | - | - | - |
| | Custom paper size 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | Yes | Yes | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Heavy paper 3 (221 to 256 g/m$^2$) | A3 | 420 | 297 | Yes | - | - | - | - | - | Yes | Yes |
| | B4 | 364 | 257 | Yes | - | - | - | - | - | Yes | Yes |
| | A4R | 297 | 210 | Yes | - | - | - | - | - | Yes | Yes |
| | A4 | 210 | 297 | Yes | - | - | - | - | - | Yes | Yes |
| | B5R | 257 | 182 | Yes | - | - | - | - | - | - | Yes |
| | B5 | 182 | 257 | Yes | - | - | - | - | - | Yes | Yes |
| | A5R | 210 | 148 | Yes | - | - | - | - | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | - | - | - | Yes | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | - | - | - | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | - | - | - | - | - | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | - | - | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | - | - | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | - | - | - | Yes | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | - | - | - | Yes | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | - | - | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | - | - | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | - | - | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | - | - | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | - | - | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | - | - | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | - | - | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | - | - | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | - | - | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | - | - | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | - | - | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | - | - | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | - | - | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | - | - | - | Yes | Yes |
| | K8 | 390 | 270 | Yes | - | - | - | - | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | - | - | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | - | - | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | - | - | - | - | - |
| | Custom paper size 0-1, 0-2, 1-1, 1-2, 1-3, 1-4 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | - | - | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Transparency | A3 | 420 | 297 | - | - | - | - | - | - | - | - |
| | B4 | 364 | 257 | - | - | - | - | - | - | - | - |
| | A4R | 297 | 210 | Yes | - | - | - | - | - | - | - |
| | A4 | 210 | 297 | Yes | - | - | - | - | - | - | - |
| | B5R | 257 | 182 | - | - | - | - | - | - | - | - |
| | B5 | 182 | 257 | - | - | - | - | - | - | - | - |
| | A5R | 210 | 148 | - | - | - | - | - | - | - | - |
| | 11x17 | 431.8 | 279.4 | - | - | - | - | - | - | - | - |
| | LGL | 355.6 | 215.9 | - | - | - | - | - | - | - | - |
| | LTR | 215.9 | 279.4 | Yes | - | - | - | - | - | - | - |
| | LTRR | 279.4 | 215.9 | Yes | - | - | - | - | - | - | - |
| | STMTR | 215.9 | 139.7 | - | - | - | - | - | - | - | - |
| | SRA3 | 450 | 320 | - | - | - | - | - | - | - | - |
| | 12x18 | 457.2 | 304.8 | - | - | - | - | - | - | - | - |
| | EXEC | 184.1 | 266.7 | - | - | - | - | - | - | - | - |
| | OFFICIO | 317.5 | 215.9 | - | - | - | - | - | - | - | - |
| | E-OFFICIO | 320 | 220 | - | - | - | - | - | - | - | - |
| | B-OFFICIO | 355 | 216 | - | - | - | - | - | - | - | - |
| | M-OFFICIO | 341 | 216 | - | - | - | - | - | - | - | - |
| | A-OFFICIO | 340 | 220 | - | - | - | - | - | - | - | - |
| | A-LTR | 220 | 280 | - | - | - | - | - | - | - | - |
| | A-LTRR | 280 | 220 | - | - | - | - | - | - | - | - |
| | GLTR-R | 266.7 | 203.2 | - | - | - | - | - | - | - | - |
| | GLTR | 203.2 | 266.7 | - | - | - | - | - | - | - | - |
| | GLGL | 330.2 | 203.2 | - | - | - | - | - | - | - | - |
| | AFLS | 337 | 206 | - | - | - | - | - | - | - | - |
| | FLS | 330.2 | 215.9 | - | - | - | - | - | - | - | - |
| | 13x19 | 482.6 | 330.2 | - | - | - | - | - | - | - | - |
| | K8 | 390 | 270 | - | - | - | - | - | - | - | - |
| | K16 | 195 | 270 | - | - | - | - | - | - | - | - |
| | K16R | 270 | 195 | - | - | - | - | - | - | - | - |
| | F4A | 342.9 | 215.9 | - | - | - | - | - | - | - | - |
| | Custom paper size 0-1, 0-2, 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4, 5 (long length) | - | - | - | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | - | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | - | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Labels | A3 | 420 | 297 | Yes | - | - | - | - | - | Yes | - |
| | B4 | 364 | 257 | Yes | - | - | - | - | - | Yes | - |
| | A4R | 297 | 210 | Yes | - | - | - | - | - | Yes | - |
| | A4 | 210 | 297 | Yes | - | - | - | - | - | Yes | - |
| | B5R | 257 | 182 | Yes | - | - | - | - | - | - | - |
| | B5 | 182 | 257 | Yes | - | - | - | - | - | Yes | - |
| | A5R | 210 | 148 | Yes | - | - | - | - | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | - | - | - | Yes | - |
| | LGL | 355.6 | 215.9 | Yes | - | - | - | - | - | Yes | - |
| | LTR | 215.9 | 279.4 | Yes | - | - | - | - | - | Yes | - |
| | LTRR | 279.4 | 215.9 | Yes | - | - | - | - | - | Yes | - |
| | STMTR | 215.9 | 139.7 | Yes | - | - | - | - | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | - | - | - | Yes | - |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | - | - | - | Yes | - |
| | EXEC | 184.1 | 266.7 | Yes | - | - | - | - | - | - | - |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | - | - | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | - | - | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | - | - | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | - | - | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | - | - | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | - | - | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | - | - | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | - | - | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | - | - | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | - | - | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | - | - | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | - | - | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | - | - | - | Yes | - |
| | K8 | 390 | 270 | Yes | - | - | - | - | - | - | - |
| | K16 | 195 | 270 | Yes | - | - | - | - | - | - | - |
| | K16R | 270 | 195 | - | - | - | - | - | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | - | - | - | - | - |
| | Custom paper size 0-1, 0-2, 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4, 5 (long length) | - | - | - | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | - | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | - | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Tracing | A3 | 420 | 297 | Yes | - | - | - | - | - | - | Yes |
| | B4 | 364 | 257 | Yes | - | - | - | - | - | - | Yes |
| | A4R | 297 | 210 | Yes | - | - | - | - | - | - | Yes |
| | A4 | 210 | 297 | Yes | - | - | - | - | - | - | Yes |
| | B5R | 257 | 182 | Yes | - | - | - | - | - | - | Yes |
| | B5 | 182 | 257 | Yes | - | - | - | - | - | - | Yes |
| | A5R | 210 | 148 | Yes | - | - | - | - | - | - | - |
| | 11x17 | 431.8 | 279.4 | Yes | - | - | - | - | - | - | Yes |
| | LGL | 355.6 | 215.9 | Yes | - | - | - | - | - | - | Yes |
| | LTR | 215.9 | 279.4 | Yes | - | - | - | - | - | - | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | - | - | - | - | Yes |
| | STMTR | 215.9 | 139.7 | Yes | - | - | - | - | - | - | - |
| | SRA3 | 450 | 320 | Yes | - | - | - | - | - | - | Yes |
| | 12x18 | 457.2 | 304.8 | Yes | - | - | - | - | - | - | Yes |
| | EXEC | 184.1 | 266.7 | Yes | - | - | - | - | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | Yes | - | - | - | - | - | - | - |
| | E-OFFICIO | 320 | 220 | Yes | - | - | - | - | - | - | - |
| | B-OFFICIO | 355 | 216 | Yes | - | - | - | - | - | - | - |
| | M-OFFICIO | 341 | 216 | Yes | - | - | - | - | - | - | - |
| | A-OFFICIO | 340 | 220 | Yes | - | - | - | - | - | - | - |
| | A-LTR | 220 | 280 | Yes | - | - | - | - | - | - | - |
| | A-LTRR | 280 | 220 | Yes | - | - | - | - | - | - | - |
| | GLTR-R | 266.7 | 203.2 | Yes | - | - | - | - | - | - | - |
| | GLTR | 203.2 | 266.7 | Yes | - | - | - | - | - | - | - |
| | GLGL | 330.2 | 203.2 | Yes | - | - | - | - | - | - | - |
| | AFLS | 337 | 206 | Yes | - | - | - | - | - | - | - |
| | FLS | 330.2 | 215.9 | Yes | - | - | - | - | - | - | - |
| | 13x19 | 482.6 | 330.2 | Yes | - | - | - | - | - | - | Yes |
| | K8 | 390 | 270 | Yes | - | - | - | - | - | - | Yes |
| | K16 | 195 | 270 | Yes | - | - | - | - | - | - | Yes |
| | K16R | 270 | 195 | - | - | - | - | - | - | - | - |
| | F4A | 342.9 | 215.9 | Yes | - | - | - | - | - | - | - |
| | Custom paper size 0-1, 0-2 | - | - | Yes | - | - | - | - | - | - | - |
| | Custom paper size 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4 | - | - | Yes | - | - | - | - | - | - | Yes |
| | Custom paper size 5 (long length) | - | - | Yes | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | Yes | - | - | - | - | - | - | - |

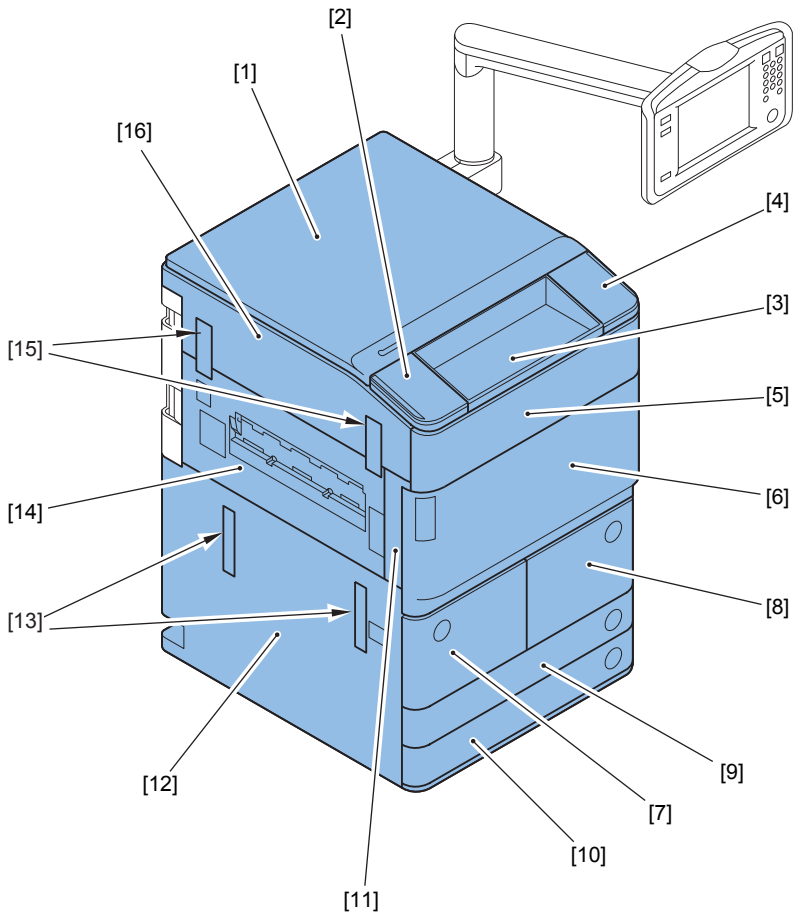
| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Cotton (Bond) | A3 | 420 | 297 | - | - | - | - | - | - | - | - |
| | B4 | 364 | 257 | - | - | - | - | - | - | - | - |
| | A4R | 297 | 210 | - | - | - | - | - | - | - | - |
| | A4 | 210 | 297 | - | - | - | - | - | - | - | - |
| | B5R | 257 | 182 | - | - | - | - | - | - | - | - |
| | B5 | 182 | 257 | - | - | - | - | - | - | - | - |
| | A5R | 210 | 148 | - | - | - | - | - | - | - | - |
| | 11x17 | 431.8 | 279.4 | - | - | - | - | - | - | - | - |
| | LGL | 355.6 | 215.9 | - | - | - | - | - | - | - | - |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTRR | 279.4 | 215.9 | Yes | - | - | Yes | Yes | - | Yes | Yes |
| | STMTR | 215.9 | 139.7 | - | - | - | - | - | - | - | - |
| | SRA3 | 450 | 320 | - | - | - | - | - | - | - | - |
| | 12x18 | 457.2 | 304.8 | - | - | - | - | - | - | - | - |
| | EXEC | 184.1 | 266.7 | Yes | - | - | Yes | Yes | - | - | Yes |
| | OFFICIO | 317.5 | 215.9 | - | - | - | - | - | - | - | - |
| | E-OFFICIO | 320 | 220 | - | - | - | - | - | - | - | - |
| | B-OFFICIO | 355 | 216 | - | - | - | - | - | - | - | - |
| | M-OFFICIO | 341 | 216 | - | - | - | - | - | - | - | - |
| | A-OFFICIO | 340 | 220 | - | - | - | - | - | - | - | - |
| | A-LTR | 220 | 280 | - | - | - | - | - | - | - | - |
| | A-LTRR | 280 | 220 | - | - | - | - | - | - | - | - |
| | GLTR-R | 266.7 | 203.2 | - | - | - | - | - | - | - | - |
| | GLTR | 203.2 | 266.7 | - | - | - | - | - | - | - | - |
| | GLGL | 330.2 | 203.2 | - | - | - | - | - | - | - | - |
| | AFLS | 337 | 206 | - | - | - | - | - | - | - | - |
| | FLS | 330.2 | 215.9 | - | - | - | - | - | - | - | - |
| | 13x19 | 482.6 | 330.2 | - | - | - | - | - | - | - | - |
| | K8 | 390 | 270 | - | - | - | - | - | - | - | - |
| | K16 | 195 | 270 | - | - | - | - | - | - | - | - |
| | K16R | 270 | 195 | - | - | - | - | - | - | - | - |
| | F4A | 342.9 | 215.9 | - | - | - | - | - | - | - | - |
| | Custom paper size 0-1, 0-2, 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 3-4, 4-1, 4-2, 4-3, 4-4, 5 (long length) | - | - | - | - | - | - | - | - | - | - |
| | Free size | 182.0 to 487.7 | 100 to 330.2 | - | - | - | - | - | - | - | - |
| | Free size (long length) | 487.8 to 630.0 | 100 to 330.2 | - | - | - | - | - | - | - | - |

| Type | Size | Feeding direction (mm) | Width direction (mm) | Pickup position | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Multi-purpose Tray | Right Deck | Left Deck | Cassette3 | Cassette4 | Paper Deck | POD Deck Lite | Insertion Unit |
| Tab paper | A4 | 210 | 297 | - | - | - | Yes | Yes | - | - | Yes |
| | LTR | 215.9 | 279.4 | - | - | - | Yes | Yes | - | - | Yes |
| Pre-Punched paper | A4 | 210 | 297 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | LTR | 215.9 | 279.4 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Postcard | Postcard | 148 | 100 | Yes | - | - | - | - | - | - | - |
| | Reply Postcard | 200 | 148 | Yes | - | - | - | - | - | - | - |
| | 4 on 1 Postcard | 200 | 296 | Yes | - | - | - | - | - | - | - |

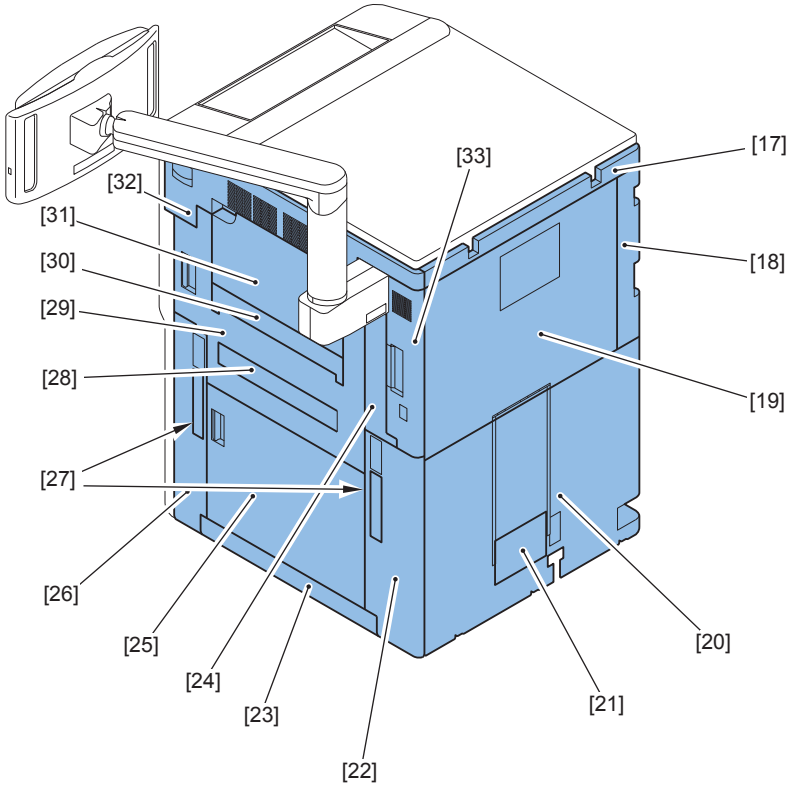
T-1-12

# External View

## External Cover



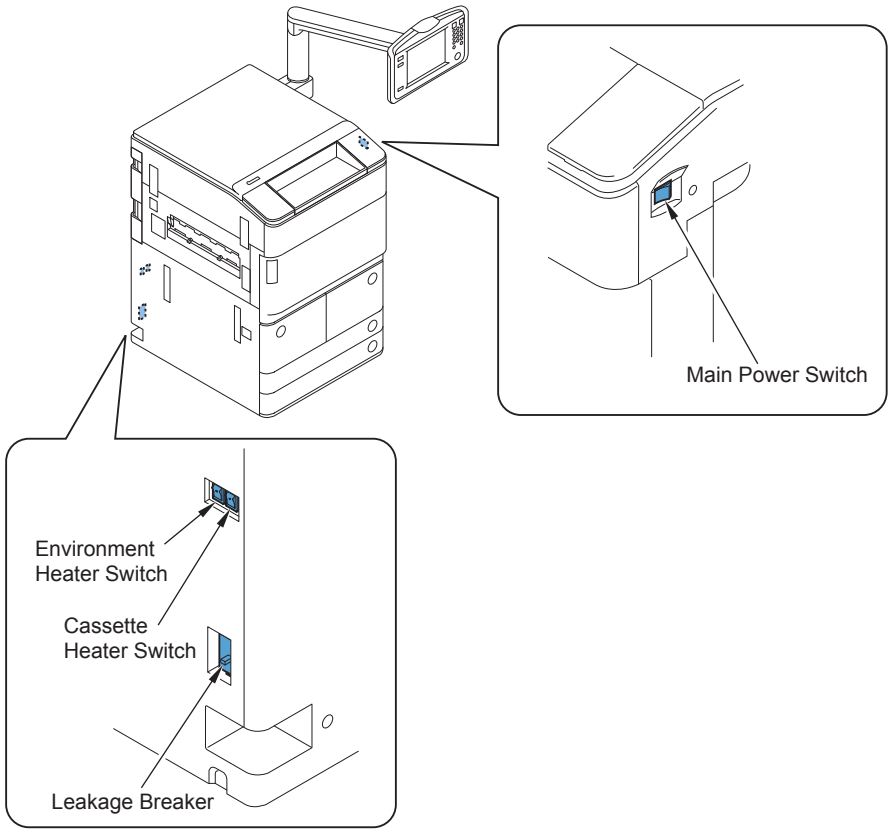

F-1-14




F-1-15

| | | | |
|---|---|---|---|
| [1] | Upper Cover | [2] | Upper Left Cover |
| [3] | Upper Middle Cover | [4] | Upper Right Cover |
| [5] | Toner Exchange Cover | [6] | Front Cover |
| [7] | Deck Left Cover | [8] | Deck Right Cover |
| [9] | Cassette Front Cover | [10] | Cassette Front Cover |
| [11] | Left Front Cover | [12] | Left Lower Cover |
| [13] | Left Handle Cover | [14] | Delivery Cover |
| [15] | Finisher Connector Cover | [16] | Left Upper Cover |
| [17] | Upper Rear Cover | [18] | Left Rear Cover |
| [19] | Rear Upper Cover | [20] | Rear Lower Cover |
| [21] | Filter Cover | [22] | Waste Toner Container Cover |
| [23] | Right Lower Cover | [24] | Right Rear Cover 2 |
| [25] | Vertical Path Cover | [26] | Right Front Cover |
| [27] | Right Handle Cover | [28] | Inner Cove |
| [29] | Right Cover | [30] | MP Pickup Tray Sub Cover |
| [31] | MP Pickup Tray | [32] | Right Upper Cover |
| [33] | Right Rear Cover 1 | | |

## Switches, I/F, Others

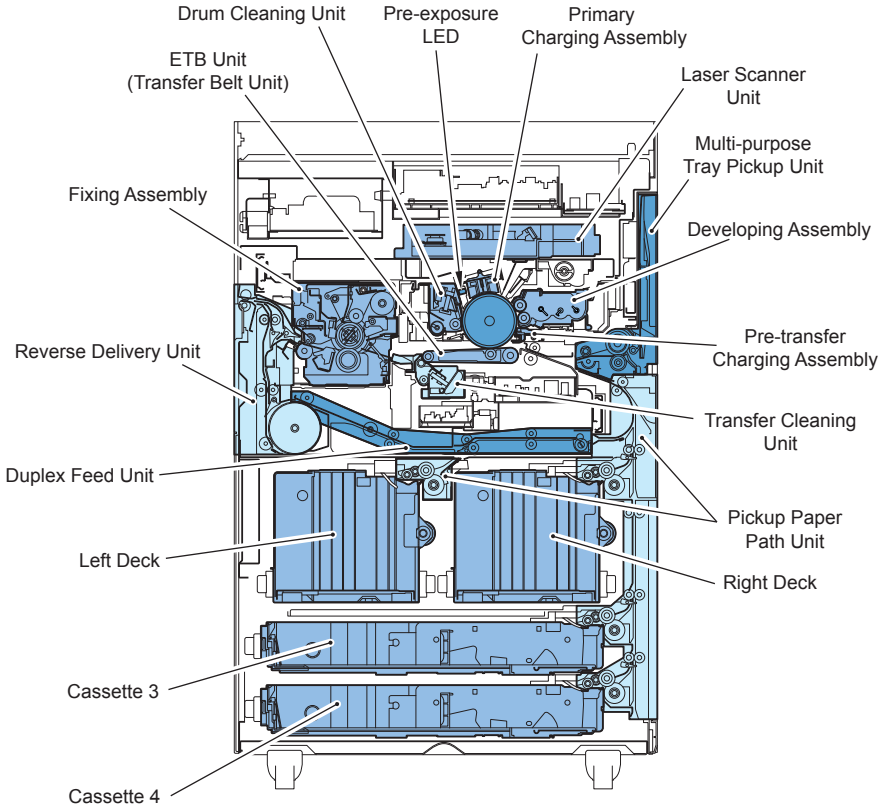



F-1-16

Be sure to perform the following procedure for checking the Leakage Breaker.

1) Turn OFF the main power switch and check that the Control Panel LED is off.
2) Using a pen point, press the test button of the breaker on the rear side of the machine.
3) Check that the breaker switch is OFF (O side).
4) Return the breaker switch to ON (I side).
5) Turn ON the main power switch.

## Cross-Section View




F-1-17

# Power Switch

## Types of Power Switches

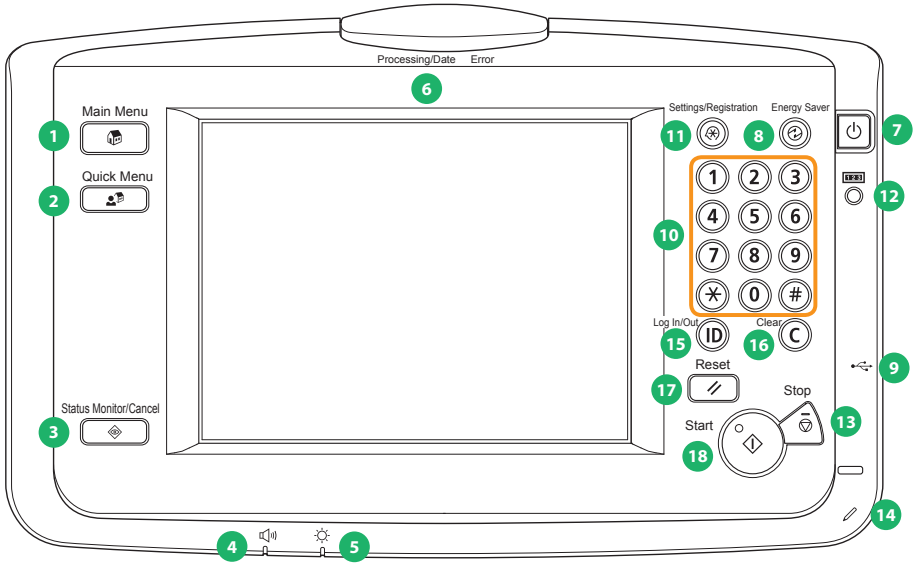
This machine has the Main Power Switch, the Control Panel Power Switch and the Environment Heater Switch.
Turning ON the Main Power Switch supplies the power in the usual case (except when the machine is in sleep mode).
The Environment Switch supplies or blocks the power to the Drum Heater, the Cassette Heater and the Reader Heater.

## Points to Note on Turning ON/OFF the Power Switch

- Do not turn OFF the Main Power Switch while the progress bar (to be displayed when the power is turned ON) is displayed, which indicates access to the HDD.
- Be sure to turn OFF the Main Power Switch to cut the power (there is no need to perform the shutdown sequence which has been performed with the conventional machines).
- After turning OFF the power (after turning OFF the Main Power Switch), do not turn ON the Main Power Switch unless the screen disappears.
  Do not turn OFF the power during downloading.

# Control Panel

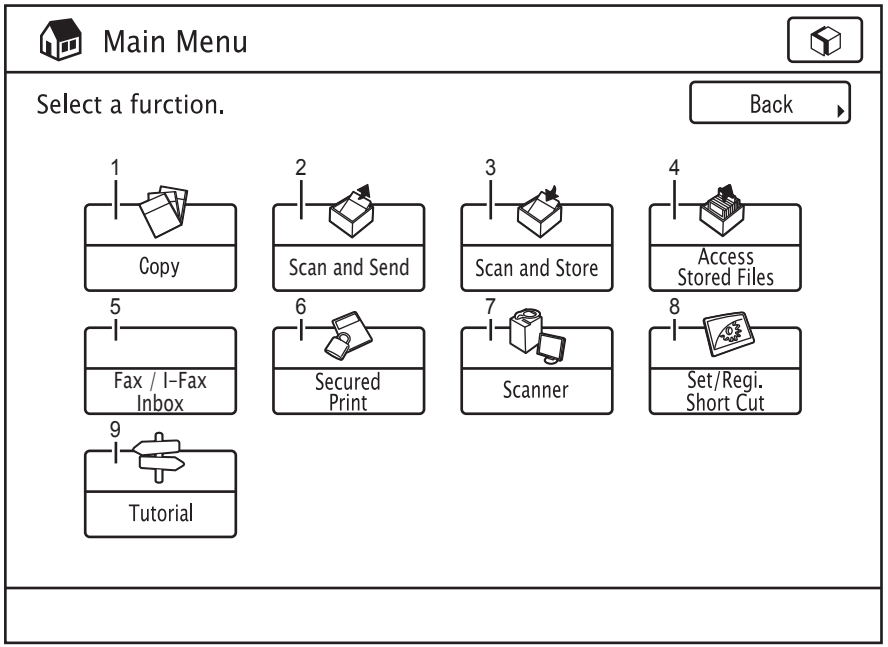
## Control Panel




F-1-18

| | | | |
|---|---|---|---|
| [1] | Main Menu Key | [10] | Numeric Key |
| [2] | Custom Menu Key | [11] | Settings/registration Key |
| [3] | Check/Stop Status Key | [12] | Check Counter Key |
| [4] | Volume Adjustment Key | [13] | Stop Key |
| [5] | Brightness Adjustment Key | [14] | Operation Pen |
| [6] | Touch Panel Display | [15] | ID Key |
| [7] | Control Panel Power Switch (Sub-power) | [16] | Clear Key |
| [8] | Energy Saver Key | [17] | Reset Key |
| [9] | USB Slot | [18] | Start Key |

## Main Menu




F-1-19

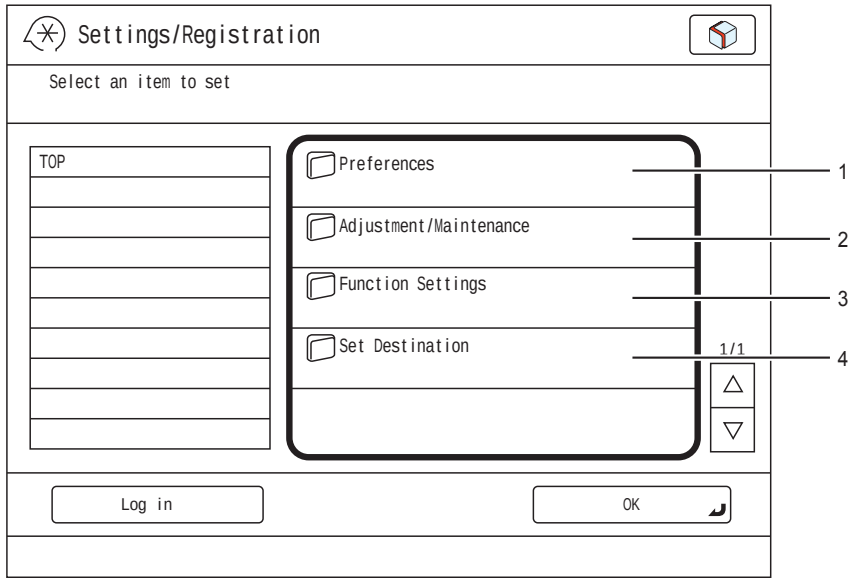
[1] Copy
[2] Scan and Send
[3] Scan and Save
[4] Access Stored Files
[5] Fax/I-Fax Inbox
[6] Secured Print
[7] Remote Scanner
[8] Shortcut to Settings/Registration
[9] Introduction to Useful Features

## Differences in Main Menu

| iR 7105/iR 5075 Series | iR ADVANCE 8105 / iR ADVANCE 6075 Series |
|---|---|
| Copy | Copy |
| Send/Fax | Scan and Send |
| Mail Box | Scan and Save (New) |
| | Access Stored Files (New) |
| | Fax/I-Fax Inbox |
| Menu Switch Key | ----- |
| Print | Secured Print |
| Remote Scanner | Remote Scanner |
| ----- | Shortcut to Settings/Registration (New) |
| (Easy NAVI) | Introduction to Useful Features |
| Web Browser | ----- |

T-1-13

## Settings/Registration Menu




F-1-20

[1] Preferences
[2] Adjustment/Maintenance
[3] Function Settings
[4] Management Settings

## Differences in Settings/Registration Menu

| iR 7105/7095/7085 Series | iR ADVANCE 8105/8095/8085 Series |
|---|---|
| Common Settings | Preferences |
| Timer Setting | |
| Adjustment/Cleaning | Adjustment/Maintenance |
| System Settings | Management Settings |
| Output Report | Function Settings |
| Copy Settings | |
| Send/Receive Settings | |
| Mail Box Settings | |
| Printer Settings | |
| Address Book Settings | ----- |

T-1-14

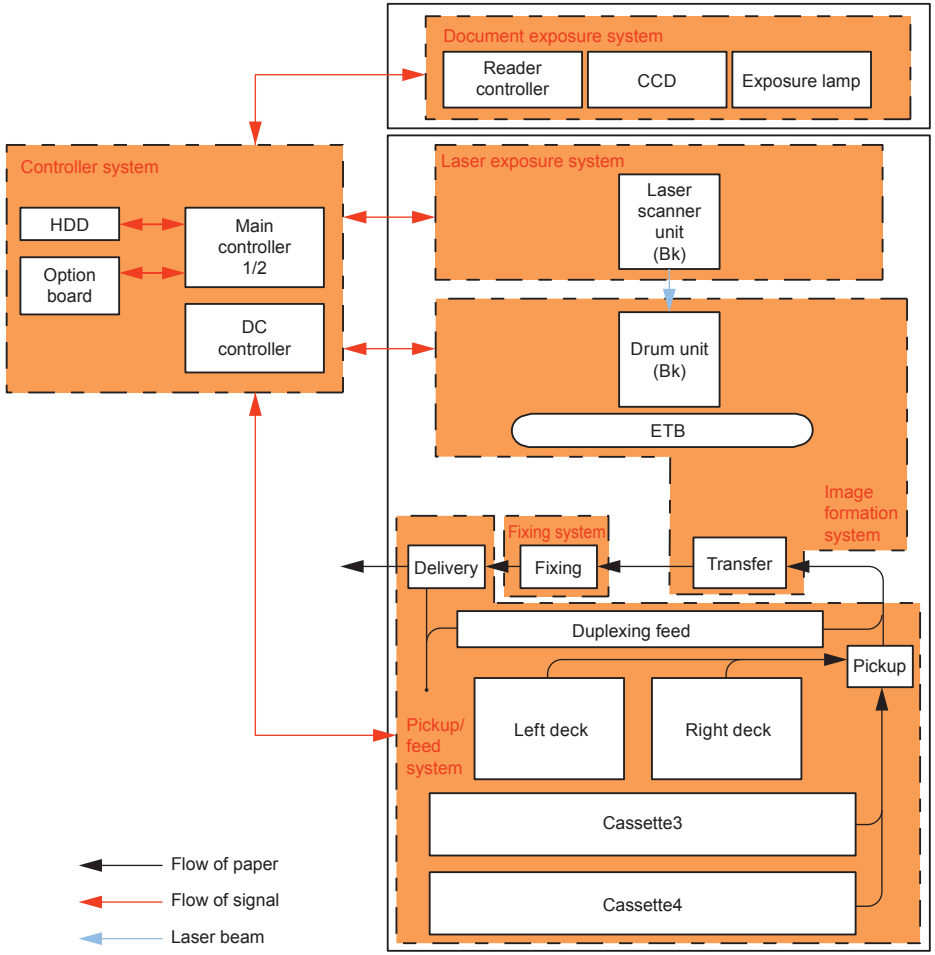
# 2 Technology

- Basic Configuration
- Main Controller
- Laser Exposure System
- Image Formation System
- Fixing
- Pickup / Feed System
- External Auxiliary System
- MEAP
- Embedded RDS
- Updater
- System Management Operations

# Basic Configuration

## Functional Configuration

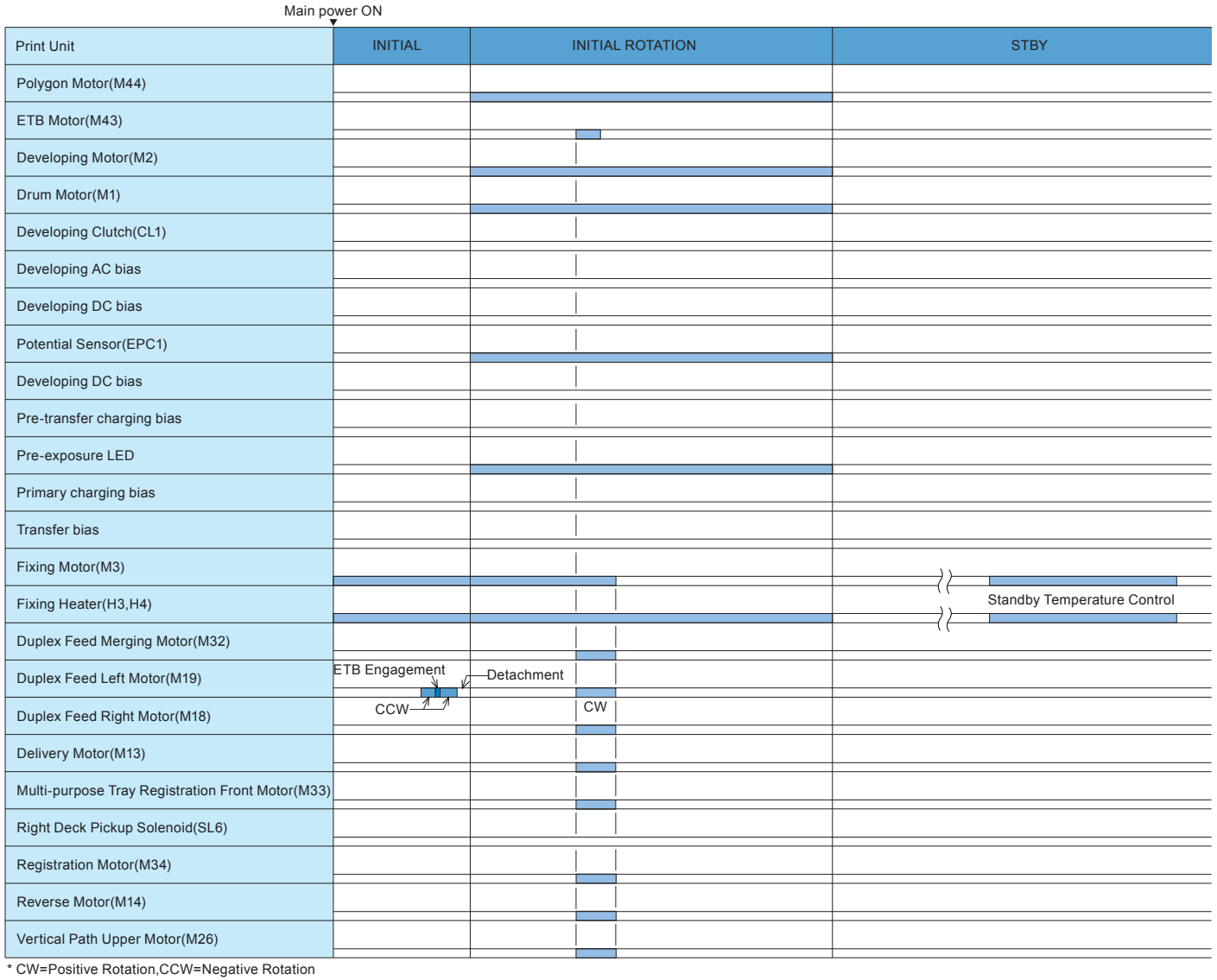
The machine may broadly be divided into the following functional system blocks; document exposure system block, controller system block, laser exposure system block, image formation system block, fixing system block and pickup/feed system block.




F-2-1

# Basic Sequence

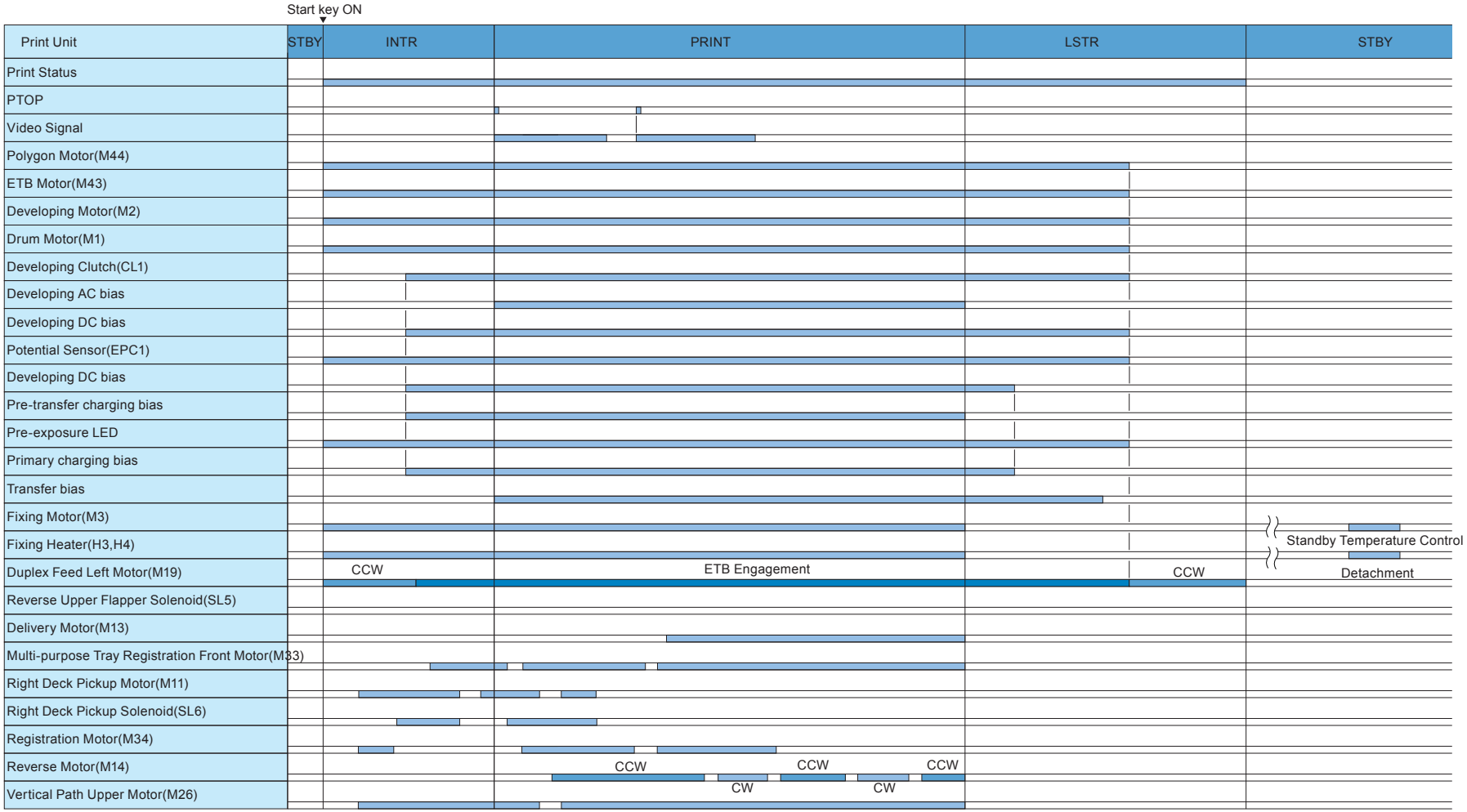
## Basic sequence at power ON




* CW=Positive Rotation,CCW=Negative Rotation

F-2-2

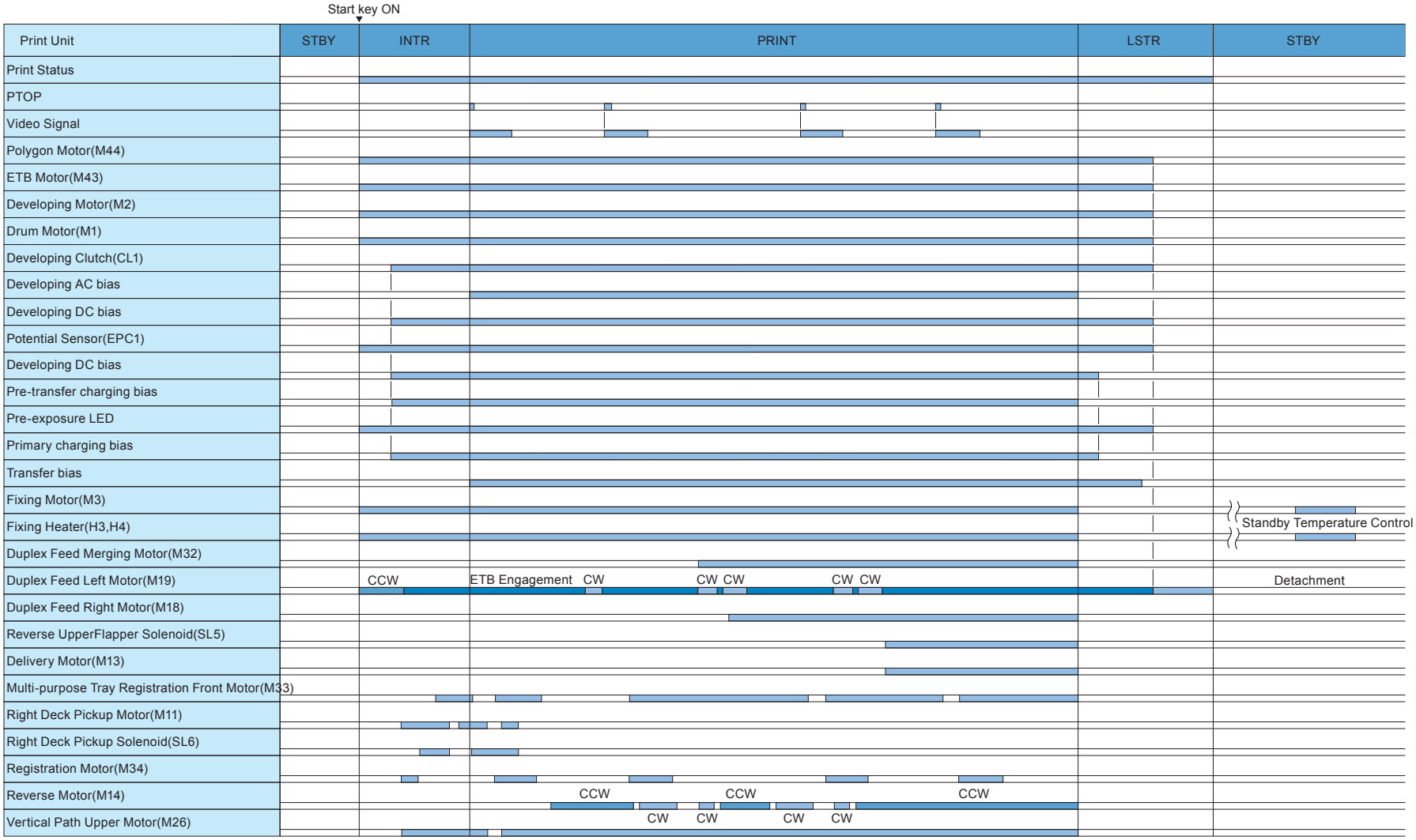
## Basic sequence at printing <Condition: A4 1-sided (2 sheets), Right deck, Reverse delivery>




* CW=Positive Rotation,CCW=Negative Rotation

F-2-3

## Basic sequence at printing <Condition: A4 2-sided (2 sheets), Right deck, Reverse delivery>




* CW=Positive Rotation,CCW=Negative Rotation

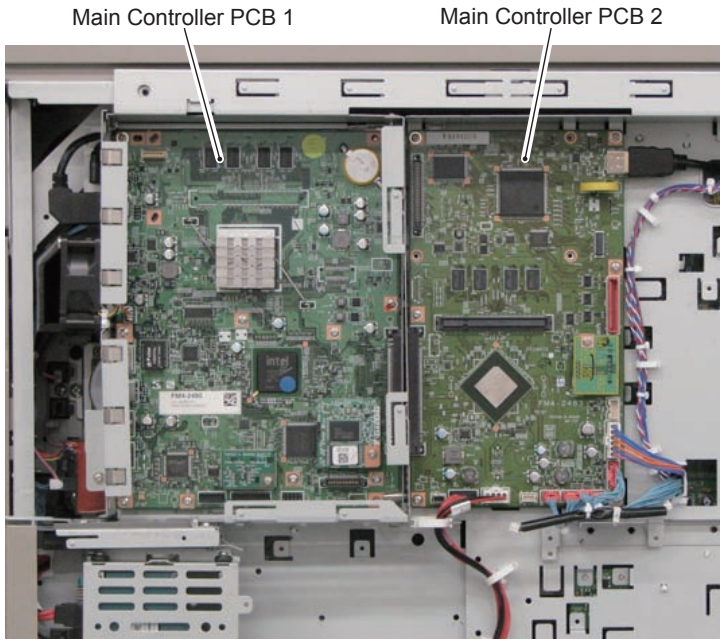
F-2-4

# Main Controller

## Overview

### Features

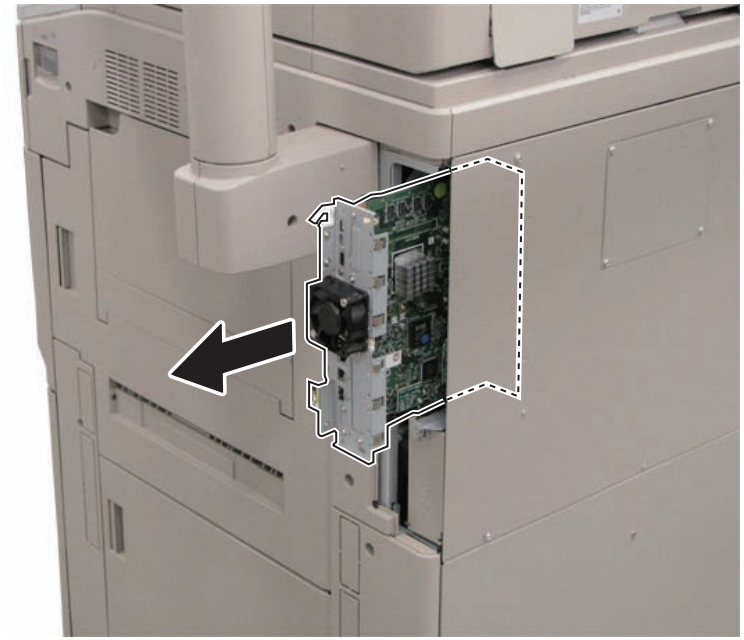
Using a new controller enables high speed PDL processing, high image quality and high functionality.




F-2-5

Main Controller PCB 1 controls the entire system while Main Controller PCB 2 mainly controls image processing.

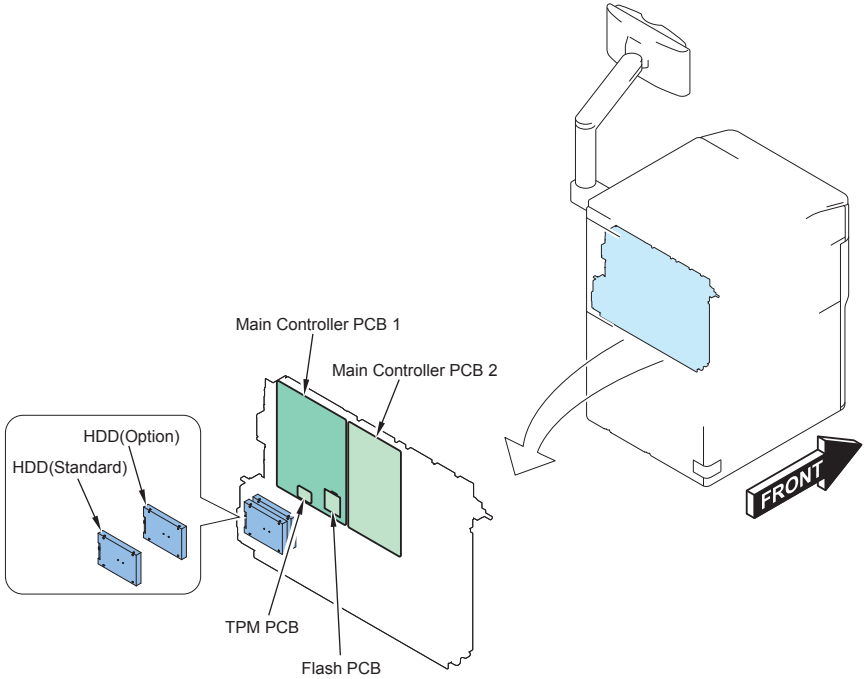
Main Controller PCBs 1 and 2 are connected through the Riser (connector for interface). Removability/installability of Main Controller PCB 1 has been improved by introducing this configuration (Slot-in/out)



F-2-6

# Specifications/configuration

## PCBs



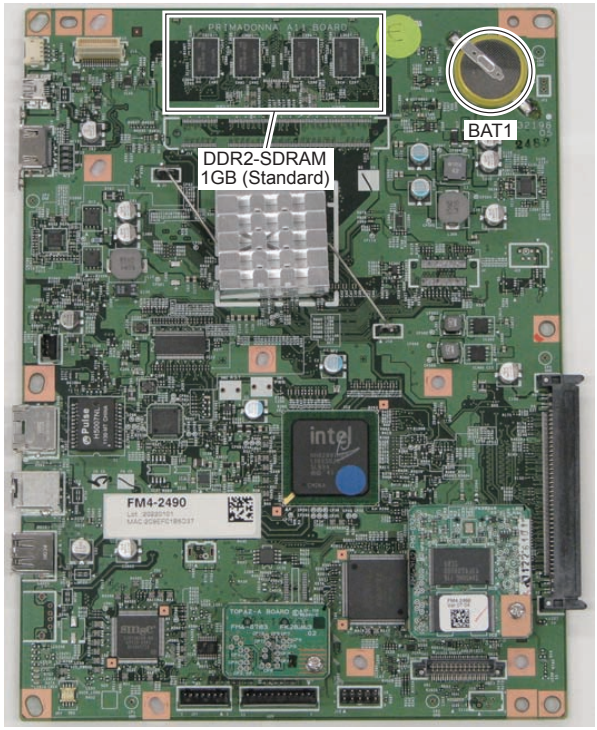

F-2-7

| Parts name | Function, specifications, features |
|---|---|
| Main controller PCB 1 | CPU: 1.8 GHz, Control of the entire system<br>Various controls (HDD control,memory, control panel, electric power, voice), I/Fs (PCI, USB(host),USB(devise),LAN), RTC |
| Flash PCB | Boot program |
| TPM PCB | To generate and save encryption key<br>Available only when TPM settings is ON: Management Settings > Data Management > TPM Settings (default: OFF)<br>Not available with China models |
| Main controller PCB 2 | CPU: 400 MHz, Image control<br>Image processing (resolution conversion, image rotation, halftone process, scanner image process, printer image process, compression/decompression, decoding, direct mapping, image area determination, generation of histogram,Trimming,Masking) ,<br>USB(devise) control,I/F (Reader, Printer,FAX,HDD,Power supply) |
| HDD | 2.5 inch SATA I/F Standard: 160 GB (Area of use: 160 GB)<br>Up to 2 HDDs can be mounted in the case of mirroring configuration.<br>BOX data, Address book, security information (password, certificate)<br>Op.: (2.5 inch / 160 GB) HDD-J1, (2.5 inch / 1 TB) HDD-K1 |

T-2-1

## Memory

Main controller PCB 1

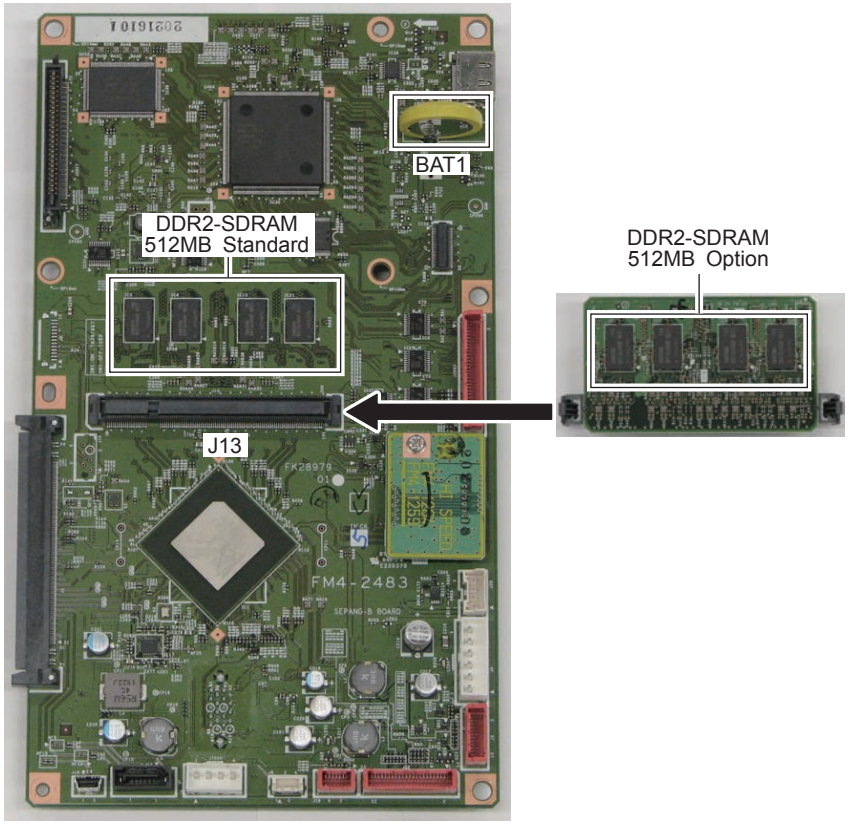



F-2-8

| Parts name | Function, specifications, features |
|---|---|
| DDR2-SDRAM | 1GB (standard)<br>Clock frequency: 667 MHz<br>Used for saving image, program data |
| Lithium battery (BAT1) | For RTC<br>Life: approx. 10 years |

T-2-2

Main controller PCB 2



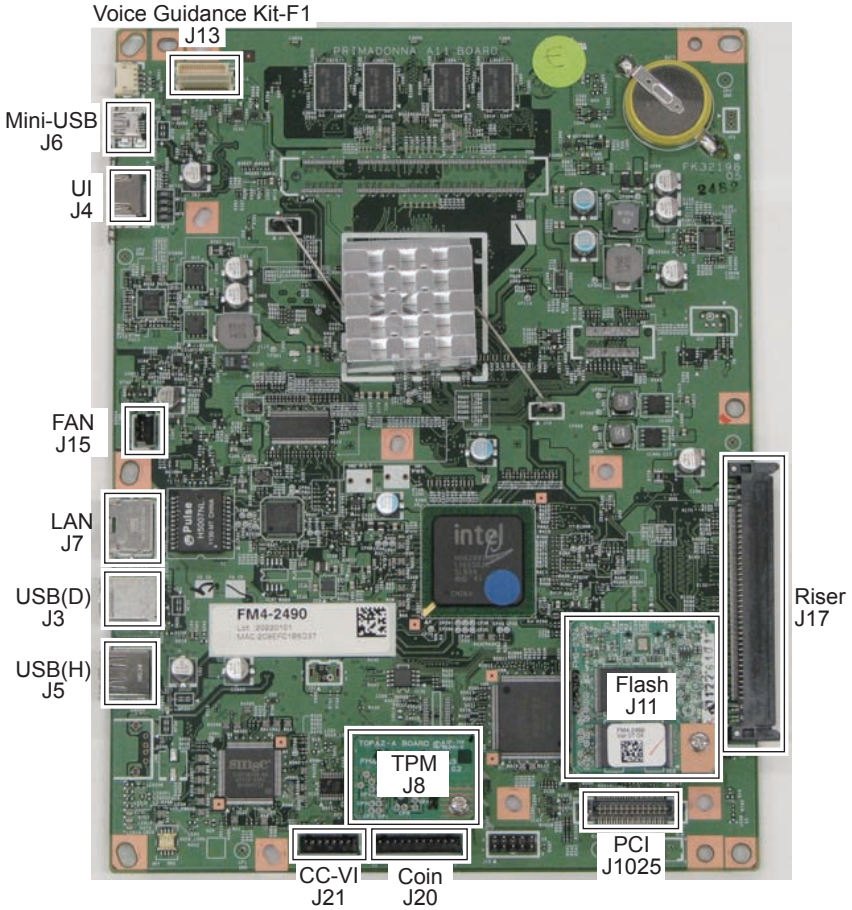

F-2-9

| Parts name | Function, specifications, features |
|---|---|
| DDR2-SDRAM | 512 MB (standard) / clock frequency: 400 MHz<br>Scanner image process, printer image process, resolution conversion, compression/decompression, coding/decoding |
| DDR2-SDRAM | 512 MB (Op) / clock frequency: 400 MHz<br>Product name: Additional Memory Type B (512MB)<br>Rasterizing, rendering, resolution conversion, coding/decoding<br>Required when 600dpi color scanning (mode) is used |
| SRAM | 16 Mbit<br>To save data in Settings/Registration Mode/ Service Mode and image data management information in HDD |
| Lithium battery (BAT1) | For SRAM backup, Life: approx. 10 years |

T-2-3

## I/F, connector

Main controller PCB 1

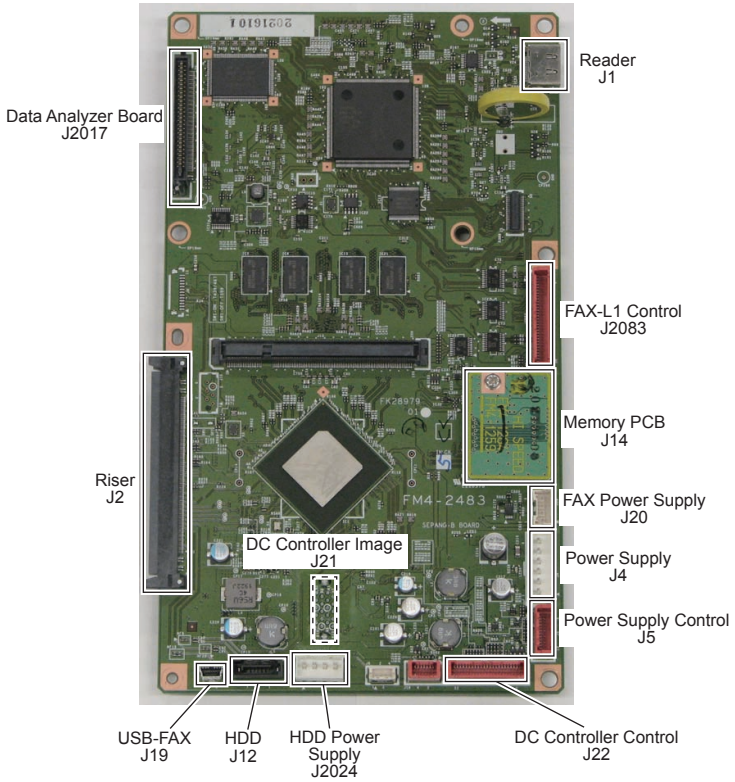



F-2-10

| No. | Function, specifications | No. | Function, specifications |
|---|---|---|---|
| J3 | USB I/F (Device) | J13 | Voice I/F (Op.) |
| J4 | UI:Control panel I/F | J15 | FAN:Fan I/F |
| J5 | USB I/F (Host)<br>For MEAP, For USB keyboard (Op.) | J17 | Raiser I/F<br>To connect Main Controller PCB 2 |
| J6 | Mini-USB I/F<br>Connect USB Device Port-A2 (Op.) | J20 | Coin:I/F for card reader, I/F for serial interface kit, I/F for coin manager (all Op.) |
| J7 | LAN I/F<br>1000BASE-T/100BASE-TX/10BASE-T | J21 | CC-VI:I/F for control interface kit (Op.) |
| J8 | TPM PCB I/F | J1025 | Not used |
| J11 | Flash PCB I/F | | |

T-2-4

Main controller PCB 2



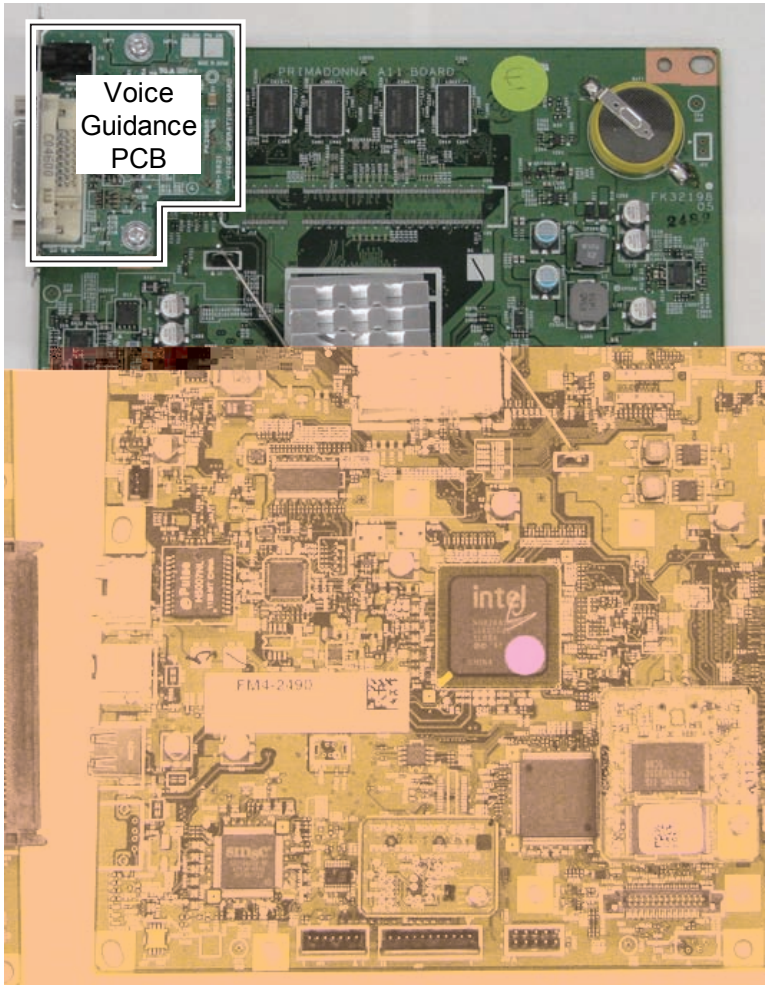

F-2-11

| Jack No. | Function, specifications | Jack No. | Function, specifications |
|---|---|---|---|
| J1 | Reader I/F | J20 | FAX Power Supply I/F |
| J2 | Riser I/F<br>To connect Main Controller PCB 1 | J21 | DC Controller image data I/F<br>To connect from the back of Main Controller PCB 2 |
| J4 | Power Supply I/F | J22 | DC Controller Control data I/F |
| J5 | Power Supply Control I/F | J2017 | Image analysis PCB I/F<br>Product name: Data Analyzer Board-B1 |
| J12 | HDD I/F | J2024 | HDD Power Supply I/F |
| J14 | Memory PCB I/F | J2083 | FAX I/F for 1-line FAX<br>Product name: Advanced G3 FAX Board-AL1 |
| J19 | USB-FAX I/F for 2 to 4-lines FAX<br>Product name: Advanced G3 2nd Line Fax Board-AL1, Advanced G3 3rd/4th Line Fax Board-AL1 | | |

T-2-5

## Function expansion options

Main controller PCB1

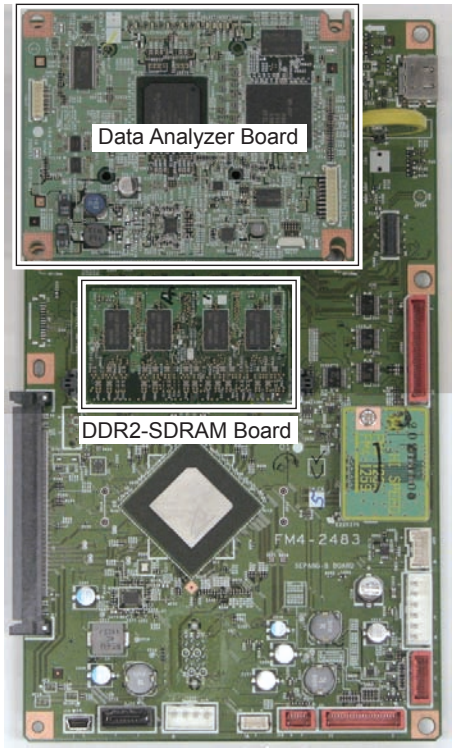



F-2-12

| Name | Function, specifications, features |
|---|---|
| Voice Guidance PCB | Product name: Voice Guidance Kit-F2 |

T-2-6

Main controller PCB 2



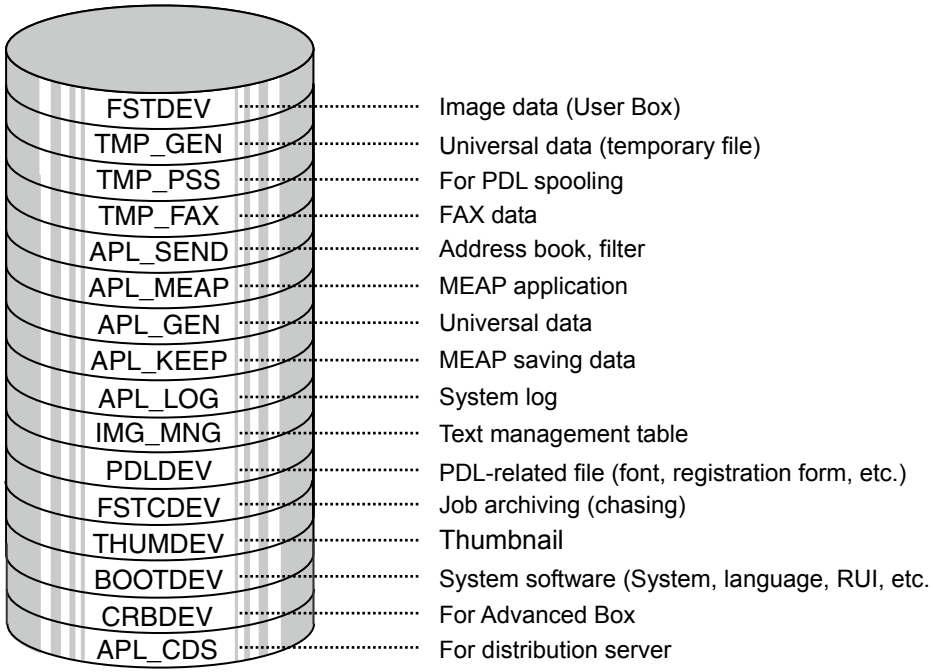

F-2-13

| Name | Function, specifications, features |
|---|---|
| Image analysis PCB | Product name: Data Analyzer Board-B1<br>Scan protection for output original (Copy/SEND/BOX) |

T-2-7

## HDD

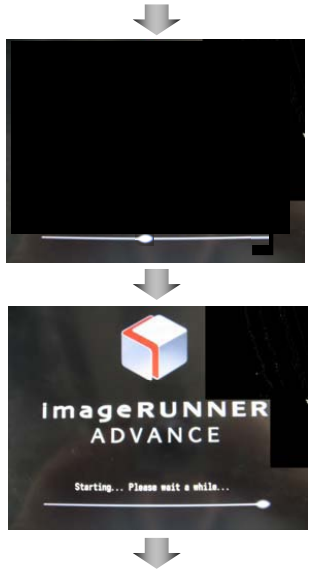
The partitions for Advanced Box and the distribution server are added.
User Box (same as the existing machine) area is 50 GB and Advanced Box area is 15 GB.
Advanced Box area can be increased by installing the high-capacity HDD option.




F-2-14

# Boot/Shutdown sequence

## Boot sequence




Standby screen display

[ ]: program storage location

- Starting BIOS
  [Main controller PCB 1]
- Starting IPL, OS
  [Flash PCB]

- Starting system software for main/sub CPU
  [HDD -> DDR2-SDRAM]
- Starting application

F-2-15

NOTE:
Due to the high speed startup, the progress bar and the activating PCB are not synchronized.
For this reason, the progress bar cannot be utilized for troubleshooting.
See the following error code list for the troubleshooting.

Related error codes (major error codes):

| Error code | | Error description |
|---|---|---|
| E602 | | HDD error |
| | 0001 | HDD failed to be recognizedStartup partition (BOOTDEV) is not found at startup |
| | 0002 | No system software for the main CPU |
| | 0006 | No system software for the sub CPU |
| | 4000 | Startup failure of OS |
| | 4001 | OS startup file is not found |
| E604 | | Insufficient memory |

T-2-8

NOTE:
When the following errors occur, the system of the host machine has not been started normally.
Therefore the error code is not recorded in the log.
E602-
0001
0002
0006
4000
4001

## Shutdown sequence

Before turning OFF the main power switch, it is necessary to perform HDD completion processing (to preventdamage on the HDD), cooling of the internal printer (to prevent fixed toner due to high temperature) and exhaust (to prevent smeared image due to chemical reaction of ozone in the machine and photosensitive drum). This sequential processing is called “shutdown sequence” and was executed on the legacy models manually (by holding down the power supply switch on the Control Panel for a specific duration).
When the main power switch is turned OFF on the main body, Main Controller PCB 1 detects this operation and then the shutdown sequence starts/executes automatically.

NOTE:
On the assumption that the shutdown sequence was not completed normally, the host machine is shut down by the Relay PCB in approx. 120 seconds.

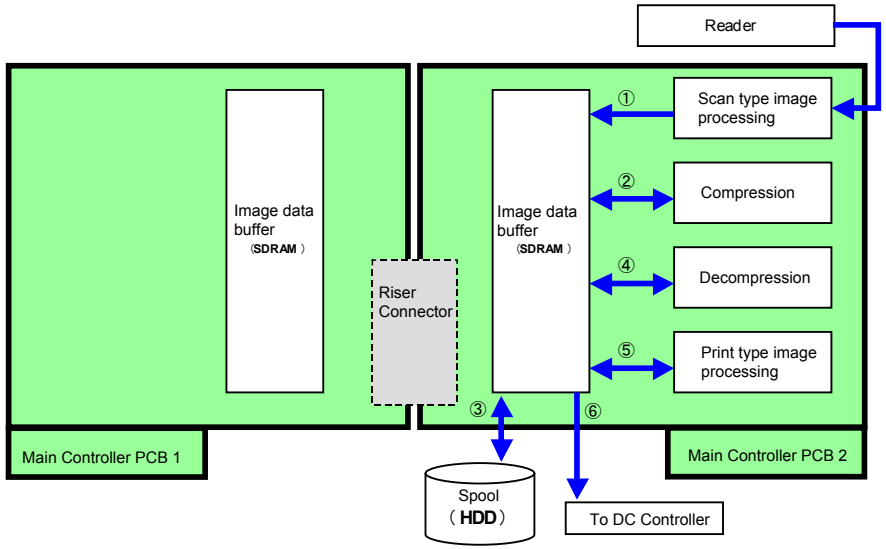
# Controls

## Flow of Image Data

Following shows major image data flow.

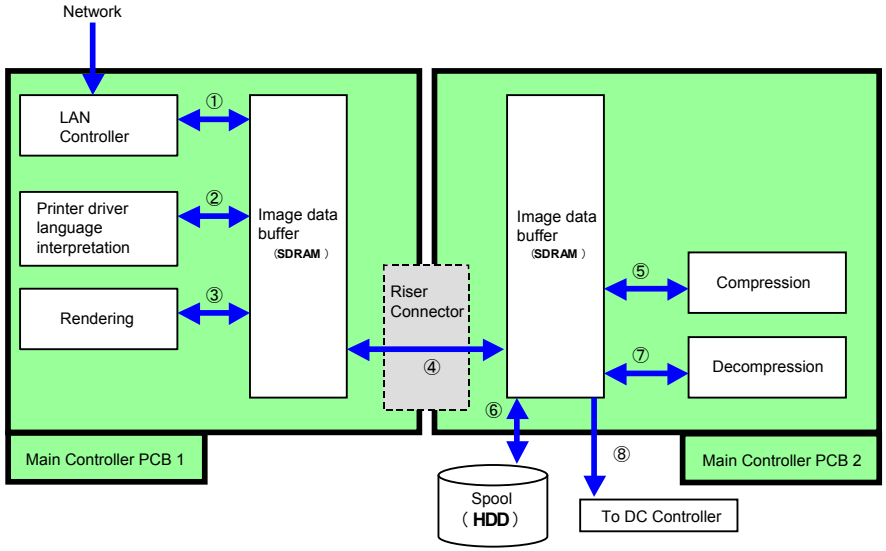
- The arrow mark indicates the flow of image data.
- Numbers (1, 2, etc.) indicate processing order.

### Copy



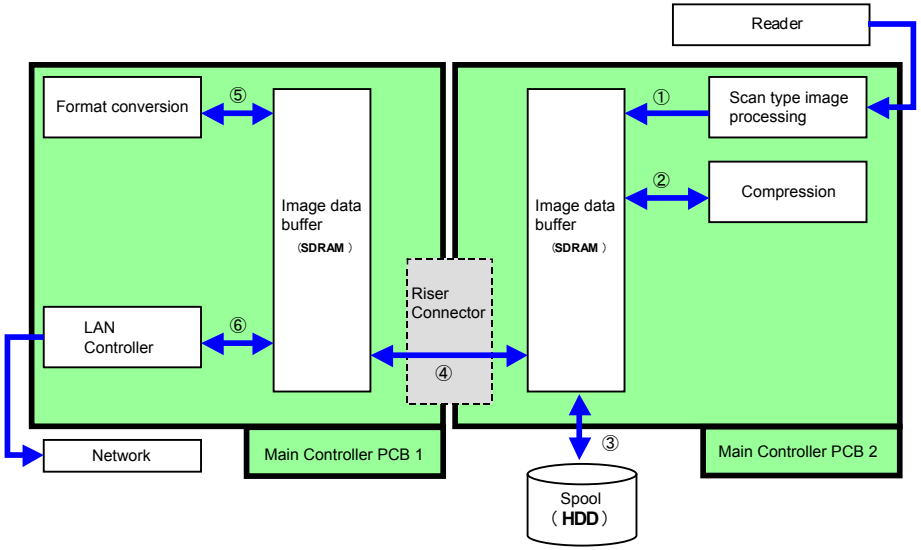

F-2-16

### Print



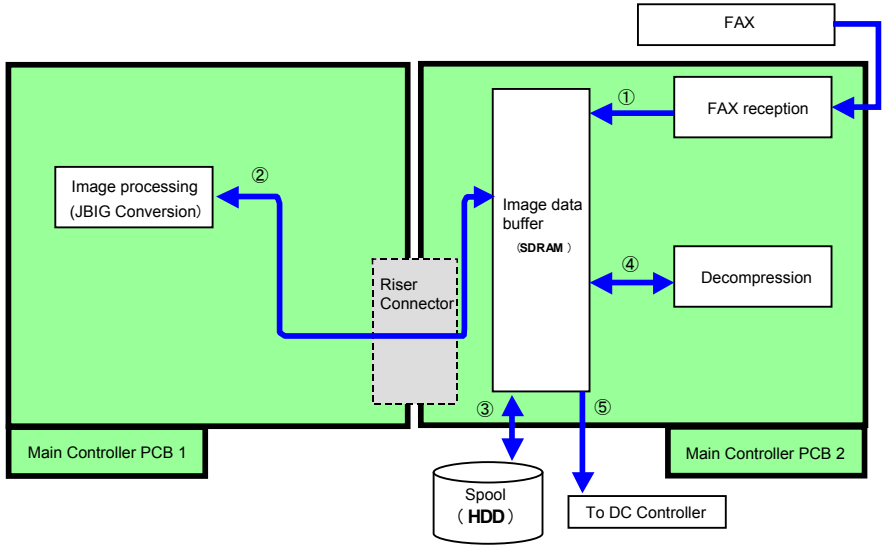

F-2-17

## ● SEND




F-2-18

## ● FAX

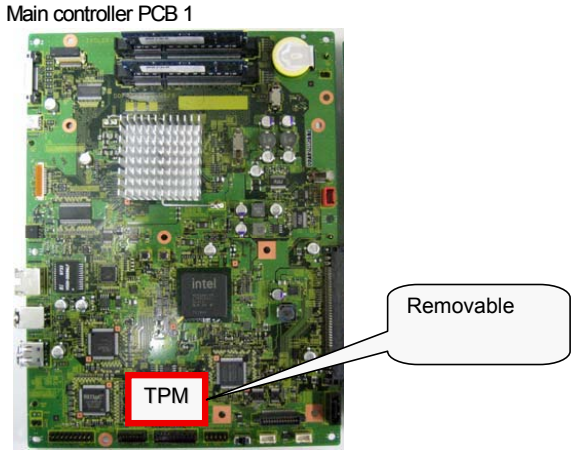



F-2-19

# ■ Security features (encryption key and certificate, password protection)

## ● Overview

The main controller PCB 1 of the host machine holds a new PCB named “TPM PCB”. “TPM” stands for “Trusted Platform Module”, which collectively refers to the chip set for generating and storing encryption keys and computing public key encryption.




F-2-20

The TPM PCB protects security information (passwords, certificates, and encryption keys) stored in the HDD and SRAM. Note that this PCB does not protect set, registered or stored data other than security information.

The TPM key embedded in the chip is used to encrypt / decrypt security information. The TPM key is protected from illegal access in a virtually perfect manner, thus the security information of the host machine is securely protected even in the following conditions.

- When the HDD and / or the main controller PCB is taken out from the host machine and installed in the MFP with the different serial number (the model information held in the TPM PCB is specific to the machine originally enabled the TPM setting)
- When the system of the host machine is hacked via the network

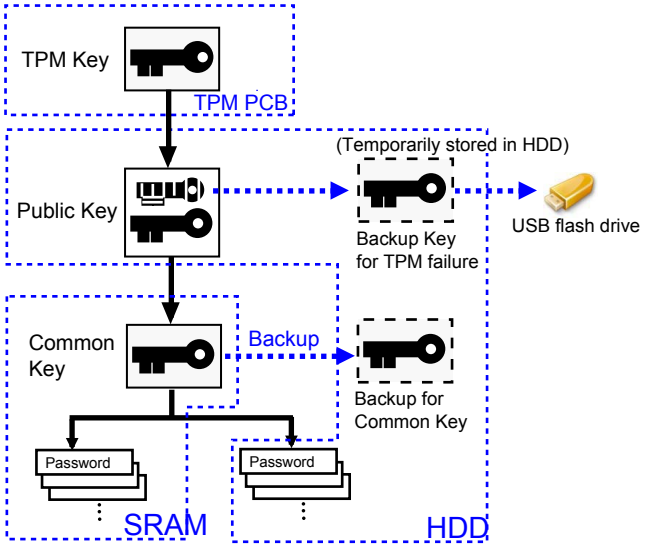
Enable this function in Setting / Registration mode.

Management Setting > Data Management > TPM Setting -> ON (OFF by default)

## Configuration of Security Information

The security functionality behaves differently depending on the TPM setting on the UI.
This machine provides the two types of TPM settings. See the figure below for the security information flow in each setting.

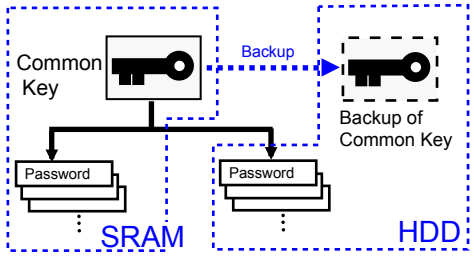
- When the TPM setting is ON




F-2-21

When the TPM setting is ON, the TPM key is enabled to secure information with the three keys. Therefore, the security information held in each machine is safely protected.
The security information in this setting can be accessed by the three keys and multiple passwords stored in the SRAM and HDD.
Each data is stored in the specified location (enclosed with blue dots in the figure above).
Since the data in the upper layer are linked to those in the lower layer, security information is activated only when data in all the layers are linked.
For the backup purpose, the backup key is temporarily stored also in the HDD to be prepared for a TPM failure (only for the initial failure after the TPM setting is ON).
This key can be backed up using the USB flash drive. Once backed up, the backup key is deleted from the HDD.
The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. However, the common key stored in the HDD automatically restores that in the SRAM so that the security information is decodable even after servicing. Note that the security information is not decodable correctly in case the HDD is failed or formatted because the public key information stored in the HDD is cleared. If this occurs, execute “Initialize All Data / Settings” in user mode to set the TPM setting to OFF. This will maintain the password information in the SRAM even after the password information is initialized.

- When the TPM setting is OFF:




F-2-22

When the TPM setting is OFF, the TPM key is disabled. Thus, the security information is protected only by the common key.
Under this setting, the security information held in this machine is protected at the level equivalent to the conventional machines.
The security functionality in this setting is configured by the common key and multiple passwords stored in the SRAM and HDD.
When the TPM setting is set to OFF, the security information is protected by the common key and multiple passwords stored in SRAM and HDD.
The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. Since the common key stored in the HDD will automatically restore the common key in the SRAM, the security information is decodable correctly even after servicing. Unlike the case that the TPM setting is set to ON, the password information stored in the HDD is initialized when the HDD is replaced or formatted. However, the password information is maintained in the SRAM.

## TPM Setting for Security Information

The security information can be protected with or without TPM by switching between TPM settings in Setting / Registration mode.

- When the TPM setting is ON
  The security functionality is enabled in 4 levels (TPM key, public key, common key and password).
- When the TPM setting is OFF
  The security functionality is enabled in 2 levels (common key and password).

## Preparation before Installing TPM

Before installing TPM, ask the user to back up data.
Follow the steps below to back up data.

1) From Remote UI, execute Setting / Registration > Management Setting > Data Management > Import / Export. The following data types should be backed up.

- Address book (see *1)
- Device settings (transfer settings, address book, frequently-used Send functions) (see *2)
- Setting / Registration
- Printer settings can be exported
- Favorites stored in the web browser (only when the web browser is enabled) (see *3)

*1 Each of address books can be exported. If the address book is seen as a part of device settings, this step can be disregarded.
*2 Among settings in the main menu, only “Frequently-used Setting” under “Scan and Send” can be backed up.
*3 These are available only in the specific models or configurations.

2) Select “Export” from Custom Menu of the Remote UI to back up “Custom Menu Setting Information”.

3) Log in to the system as Administrator from User Management of Advanced Box on Remote UI. Then, execute “Export” to back up “User Information of Advanced Box”.

## Works before / after introduction

Execute the following in Setting / Registration mode (“TPM setting” is OFF by default).

1. Enable the feature
2. Backup the TPM key
3. Restore the TPM key
4. Disable the feature

The works above are basically done by users.

CAUTION:

When the TPM setting is set to “ON”, advice users on the following:

Back up the TPM key swiftly after the setting is ON

Keep the password used at backup securely

Never lose the USB flash drive with the backup TPM key file saved

The TPM key should be restored after the TPM PCB is replaced due to failures or the like.

(TPM key restoration is enabled only at TPM PCB replacement.)

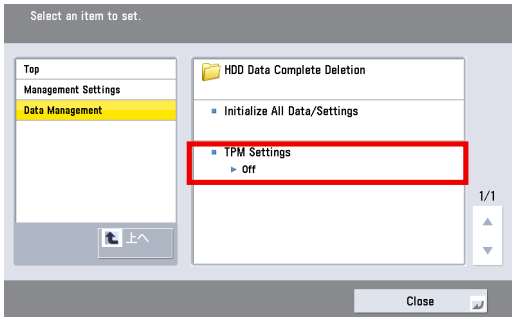
Unless the key is restored, the security information (passwords, encryption key, and certificates) cannot be used.

When the key restoration is failed due to the USB flash drive lost or others, “Initialize All Data / Settings” should be executed to reactivate TPM functionality. The security may be undermined if the old Setting / Registration data are maintained as it is.

1. Enable Functionality

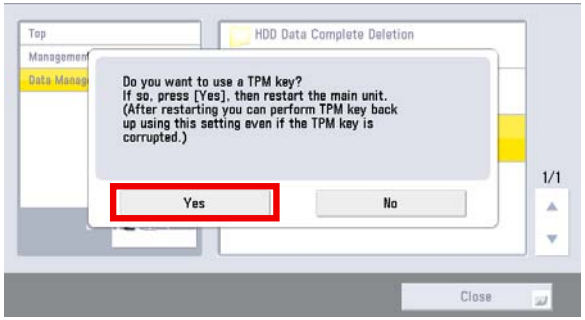
NOTE:Setup of “System Management PIN”
It is recommended for users (administrators) to set the system management PIN before installing TPM. The TPM key is backed up after the TPM setting is set to “ON”. However, the key backup is permitted only once. Unless the key is properly backed up, users other than administrators may illegally obtain the backup file. To avoid such risks effectively, the system management PIN should be set.

1)Set Management Setting > Data Management > TPM Setting to “ON”.
Setting / Registration




F-2-23

2)Click “Yes”, and restart the machine.




F-2-24

This setting is enabled after the machine is restarted.

2.TPM Key Backup

The TPM key backup file can be stored only in USB flash drive (supported file system: FAT32).
Note that this file requires the memory free space of several MBs.

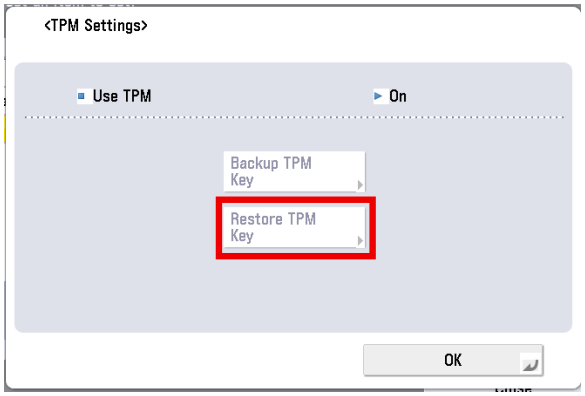
F-2-25

1)Insert the USB flash drive to the machine.
The USB I/F (host) is found at the side of the control panel as well as the main controller PCB.

CAUTION:
Ensure to insert only one USB flash drive.
If the backup job is started with 2 or more USB flash drives connected, the message is shown to notify that the backup is failed.

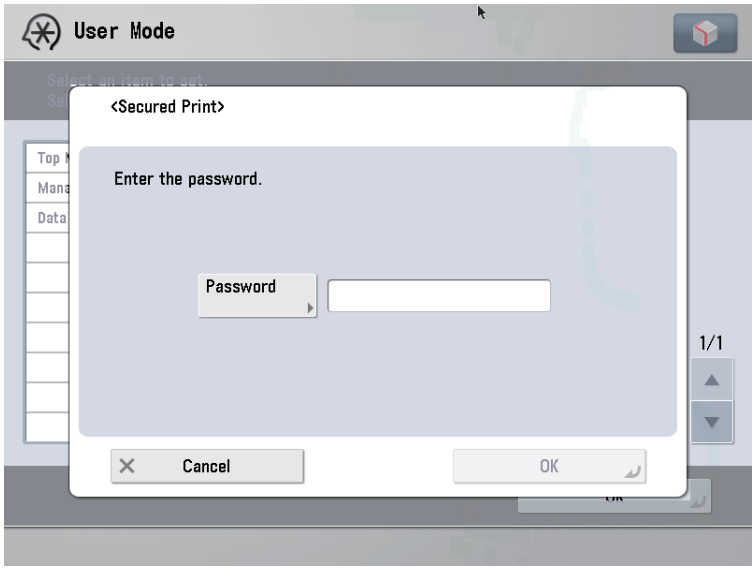
NOTE:
The USB flash drive holds the TPM key backup files by serial number. Thus, backup files for multiple machines can be saved in a USB flash drive.

2)Click [Back up TPM Key] in Management Setting > Data Management > TPM Setting.



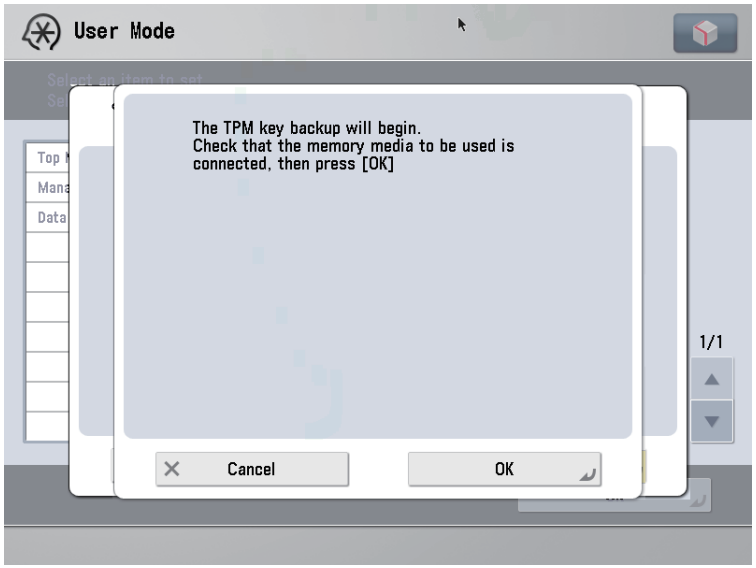

F-2-26

3) Click [Password] to enter the password (4-12 digits). Then, enter the password for confirmation.




F-2-27

4) Click [OK] to initiate TPM key backup.




F-2-28

5) Click [OK] on Backup Completion Screen and remove the USB flash drive.

CAUTION: The following may cause failures in backup.

If any of the following is detected, the backup process is aborted and the message and the cause for the failure are shown on the screen. Take an appropriate measure to recover this.

- The USB flash drive is not inserted to the machine
- 2 or more USB flash drives are inserted to the machine
- The USB flash drive has insufficient free memory space
- The USB flash drive is write-protected
- No key is found

CAUTION: The USB flash drive should be securely stored.

Give advice users on the following points.

- The USB flash drive should be securely stored
- Once the TPM key backup file is saved in the USB flash drive, never save the backup file on a server or the like accessible to unanimous users.

NOTE:Name of TPM key backup file
The serial number for the machine is automatically assigned as the backup file name.

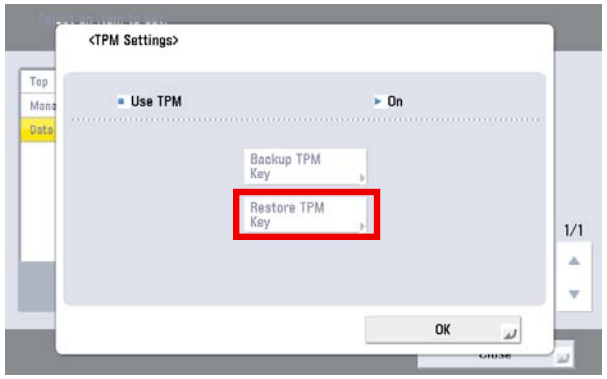
3. Restore of TPM key

Procedure is about the same as the backup work.

Difference between restore work and backup work:

Rebooting is necessary (turn OFF and then ON the main power) after completion of restore work.

1) Connect the USB memory that saves TPM key.
2) Select the following: Management setting > Data management > TPM setting; and click [Restore TPM key].




F-2-29

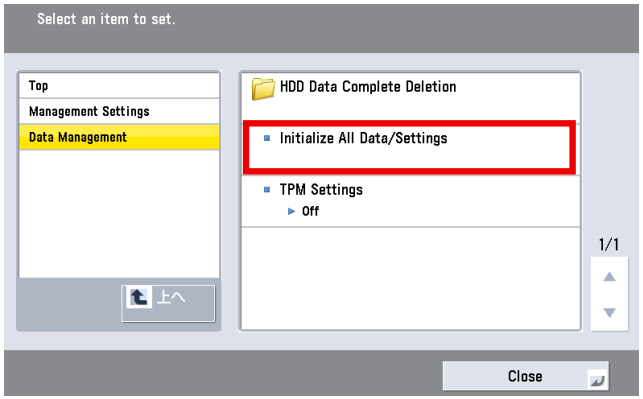
3) Enter the password set in the backup process.
4) Click [OK] on Start Restoration Screen. The restoration process is started.
5) Click [OK] on Restoration Completion Screen. Remove the USB flash drive and turn OFF/ ON the main power switch.

CAUTION: The following may cause failures in restoration.

If any of the following is detected, the restoration process is aborted and the message and the cause for the failure are shown on the screen. Take an appropriate measure for recovery.

- The USB flash drive is not inserted to the machine
- 2 or more USB flash drives are inserted to the machine
- The USB flash drive is security-protected
- No TPM key is saved in the USB flash drive
- The TPM key saved in the USB flash drive is not for the machine
- The wrong password is entered
- After the TPM key was backed up, [Initialize All Systems/ Settings] was executed
- SRAM (the main controller PCB 1) or HDD is crashed

4. Disable the feature
   To set “OFF” for the TPM setting, execute [Initialize All Data / Settings].




F-2-30

CAUTION: Points to caution when disabling functionality

To disable the use of TPM, all data and settings should be initialized. If this is executed, user information saved in the HDD/ SRAM is totally cleared. Ensure to back up the data before disabling TPM settings.

### List of data to be cleared

- Data saved in BOX/ Advanced Box
- Data saved in Inbox (Fax Box/ System Box)
- Destination data registered in Address Book
- Read mode registered using Send function
- Mode memory registered using Copy/ Box function
- MEAP applications and their license files
- Data saved using MEAP applications
- Password for MEAP SMS (Service Management Service)
  (The password is returned to default if any change is made.)
- User authentication information registered by local device authentication via SSO-H (Single Sign-On H)
- Unsent documents (documents for scheduled transmission and reserved transmission)
- Job logs
- Contents set in Setting / Registration
- Image-composite registration form
- Registered transfer settings

Key pair and server certificate registered in Management Setting (Setting/ Registration) > [Device Management] > [Certificate Settings]

### Steps of data restoration after recovery

The restoration process triggers Setting/ Registration > Management Setting > Data Management > Import/ Export > Import/ Export Setting/ Registration on the UI.
The data listed below cannot be restored, thus should be set again.

### Environment Settings

- Paper settings
- Display settings in the destination to save
- Time fine-adjustment for timer/ power settings
- Date/ time settings (excluding time zone and daylight-saving settings)
- User settings for SNMPv3
- Context settings
- Firewall settings (excluding MAC address filter)

### Function Settings

- Image-composite form for the common print operation
- Printer settings
- Transfer settings for the common receipt/ transfer settings
- Inbox settings
- Frequently-used Copy settings
- Registered short-cuts in “Other Functions”
- Frequently-used Send settings
- Frequently-used settings for saving/ using files

### Address Settings

- Address Book

### Management Settings

- Sheet counts in Department ID Management
- Settings for device information distribution
- Certificate settings
- License registration
- Remote operation settings
- Box backup/ restoration
- TPM Settings

## Overview of Actions taken against Troubles

| Location with failure | TPM Setting = ON | TPM Setting = OFF | Relevant Error Code |
|---|---|---|---|
| TPM PCB | 1. Check the TPM PCB connection<br>2. Replace the TPM PCBs<br>3. Turn OFF/ ON the power<br>4. See the section of “Restoring TPM Key” to restore the TPM key.<br>5. Turn OFF/ ON the main power for recovery | N/A (TPM PCB is not in use when the TPM setting is set to OFF.) | Initially E746-0031 is shown on the screen. When the power is turned OFF/ON after the TPM PCB is replaced, E746-0032 is shown (only when the TPM setting is set to ON). |
| HDD | 1.Replace the HDDs.<br>2.Format the HDD.<br>3.Download the system software.<br>4.See the section of “Disabling Functionality” to execute “Initialize All Data/ Settings”.<br>5.Turn OFF/ON the power. The TPM setting is automatically set to OFF.<br>6.Set the TPM setting to ON (the public key and the common key are automatically set). | 1. Replace the HDDs.<br>2. Format the HDD.<br>3. Download the system software.<br>4. Restore the password information stored in the HDD. | Initially E602-xxxx is shown (the different extension is shown depends on cases). After the system software is reinstalled, E746-0033 is shown. |
| Main Controller PCB 2 (SRAM) | 1. Replace the main controller PCB 2.<br>2. The common key backed up in the HDD will be automatically restored in the SRAM.<br>3. The TPM setting on the control panel is reset to OFF. Manually set the TPM setting to ON (the machine is operated in the TPM setting ON).<br>4. Restore the password information stored in the SRAM (see *1). | 1. Replace the main controller PCB 2.<br>2. The common key backed up in the HDD will be automatically restored in the SRAM.<br>3. Restore the password information stored in the SRAM (see *1). | E747-xxxx (the different extension is shown depends on cases). |

T-2-9

*1 If “No” is indicated in the field of Backup Column in the table of “Security Information Storage Location”, the relevant information should be set manually again.

## Related Error Code

| Error Code | | Error description, Assumed cause, remedy | |
|---|---|---|---|
| E746 | | Error in encryption | |
| | 0031 | Error in hardware | |
| | | Assumed cause | The TPM PCB is not mounted; the TPM PCB for the other machine is mounted; the TPM chip is crashed. |
| | | Remedy | Mount the TPM PCB for the machine; replace with the new TPM PCB |
| | 0032 | Error in engine ID of SoftID | |
| | | Assumed cause | Mismatched data in TPM |
| | | Remedy | Format the system.<br>Format the HDD using SST or USB memory, and download the system software. For details, see "Chapter 6: Upgrading". For your reference, the method using USB memory is described below.<br>1. Prepare the USB memory which system software was registered.<br>2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode.<br>3. Insert the USB memory to the equipment.<br>4. Execute [4]: Format HDD in the main menu. After formatting is completed, the machine reboots automatically and starts with the download mode.<br>5. Execute [1]: Upgrade (Auto) in the main menu. System software is downloaded and the machine restarts automatically. |

| Error Code | | Error description, Assumed cause, remedy | |
|---|---|---|---|
| E746 | | Error in encryption | |
| | 0033 | Error in engine ID of SoftID | |
| | | Assumed cause | Error that can be recovered |
| | | Remedy | When the TPM key was backed up, it can be restored.<br>1. Connect the USB memory which stores the TPM key.<br>2. Go to Management Settings > Data Management > TPM Settings, and then click "Restore TPM Key".<br>3. Enter the password set at backup operation.<br>4. When the restoration completion screen is displayed, click "OK". Remove the USB memory, and turn OFF and then ON the main power.<br><br>When the TPM key was not backed up, formatting the system is required.<br>Format the HDD using SST or USB memory, and download the system software. For details, see "Chapter 6: Upgrading". For your reference, the method using USB memory is described below.<br>1. Prepare the USB memory which system software was registered.<br>2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode.<br>3. Insert the USB memory to the equipment.<br>4. Execute [4]: Format HDD in the main menu. After formatting is completed, the machine reboots automatically and starts with the download mode.<br>5. Execute [1]: Upgrade (Auto) in the main menu. System software is downloaded and the machine restarts automatically. |

T-2-10

## Security Information Storage Location

| Storage Location | Data Type | Function | Name of Data | Backup Availability |
|---|---|---|---|---|
| HDD | Password/ PIN | BOX | BOX Password | Yes |
| HDD | Password/ PIN | BOX | Password for Fax BOX | Yes |
| HDD | Password/ PIN | SEND | Password for a file destination of Address Book | Yes |
| HDD | Password/ PIN | MEAP | Authentication information registered by local device authentication via SSO-H | Yes |
| HDD | Certificate/ Secret Key | SSL,AMS | Device key pair (SSL, AMS) | No |
| HDD | Certificate/ Secret Key | Signature SEND | User key pair | No |
| HDD | Others | User setting information | Key information linked to user (password) | No |
| SRAM | Password/ PIN | BOX | Password for encryption at BOX backup | No |
| SRAM | Password/ PIN | BOX | Password for SMS server at BOX backup | No |
| SRAM | Password/ PIN | Advanced BOX | Password for Advanced BOX backup | No |
| SRAM | Password/ PIN | Advanced BOX | Password for SMS server at Advanced BOX backup | No |
| SRAM | Password/ PIN | SEND | Password for LDAP server | Yes |
| SRAM | Password/ PIN | SEND | Password for POP3 server | Yes |
| SRAM | Password/ PIN | SEND | Password for time-stamped PDF | Yes |
| SRAM | Password/ PIN | SEND | Password for Adobe ES Rights Management Server | Yes |
| SRAM | Password/ PIN | SEND | PIN for destination list (in destination setting) | Yes |
| SRAM | Password/ PIN | UI | Password for service mode | No |
| SRAM | Password/ PIN | Network | Password for IPP authentication | Yes |
| SRAM | Password/ PIN | Network | Password for FTP authentication | Yes |
| SRAM | Password/ PIN | Network | User name and password for client in Proxy authentication | Yes |
| SRAM | Password/ PIN | Network | Login password for Netware print server | Yes |

| Storage Location | Data Type | Function | Name of Data | Backup Availability |
|---|---|---|---|---|
| SRAM | Password/ PIN | Network | Policy common key for IPSec | Yes |
| SRAM | Password/ PIN | Network | User name and password for PEAP/TTLS authentication | Yes |
| SRAM | Password/ PIN | Others | Password for FAX receipt | Yes |
| SRAM | Password/ PIN | Others | Department management data (including System Manager password) | Yes |
| SRAM | Encryption key | MIB | Authentication and encryption keys for SNMPv3 | No |
| SRAM | Password/ PIN | MEAP | SMS login password | Yes |

T-2-11

### ● Security Information Storage Location (data managed under the mechanism other than TPM management)

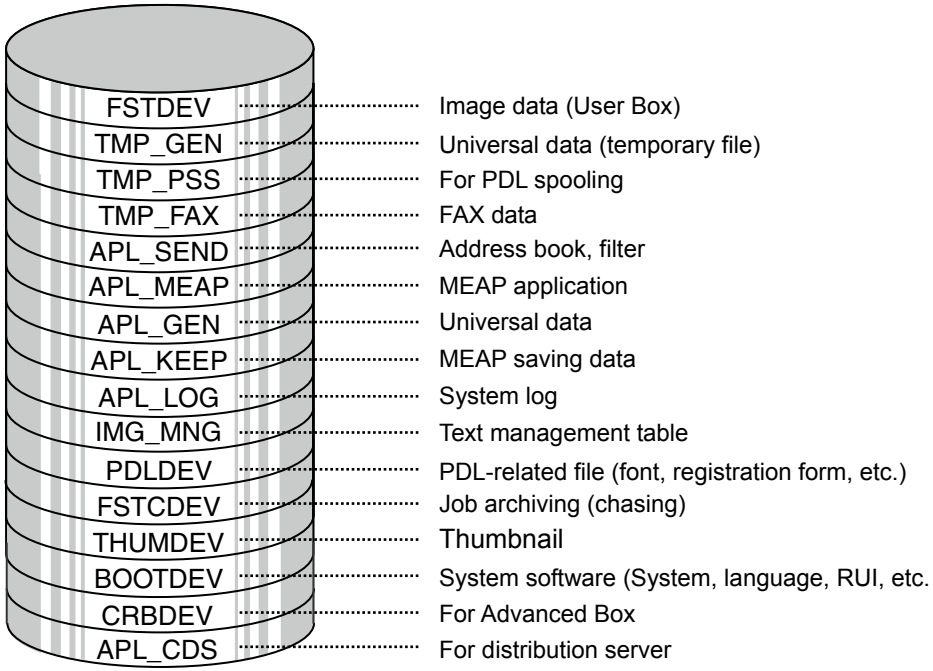
| Storage Location | Data Type | Function | Name of Data | Backup Availability |
|---|---|---|---|---|
| HDD | Password/ PIN | Advanced BOX | User information in Advanced BOX | Yes |

T-2-12

## ■ Option HDD

The HDD capacity mounted on this machine is 160GB as standard. Mounting a 2.5 inch/1TB HDD-K1 (option) makes 1TB in HDD capacity. High capacity is required in the case of saving large amounts of data with “Advanced Box”
Mounting this option increases capacity for Advanced Box.

15GB(Approximately): in the case of 160GB HDD capacity
629GB(Approximately): in the case of 1TB HDD capacity

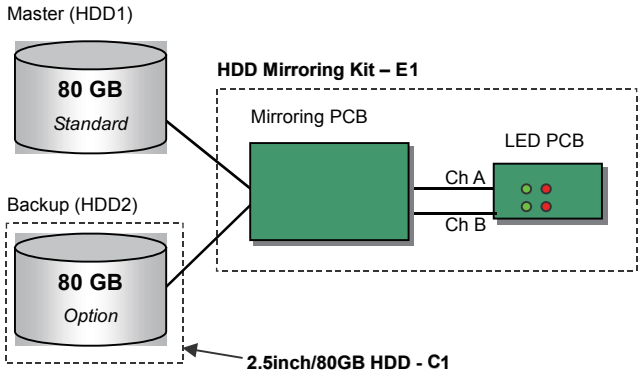


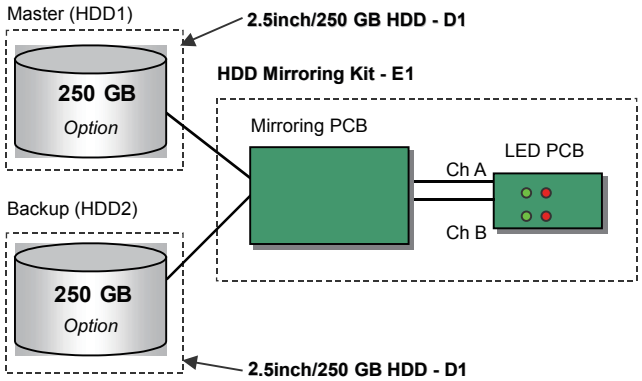

F-2-31

Out of 1TB capacity, 629GB(Approximately) is allocated to Advanced Box (CRBDEV). After deducting 20% snapshot area and area used for the file system, the capacity that can be actually used as document storage area is 503GB(Approximately).

## HDD mirroring feature (option)

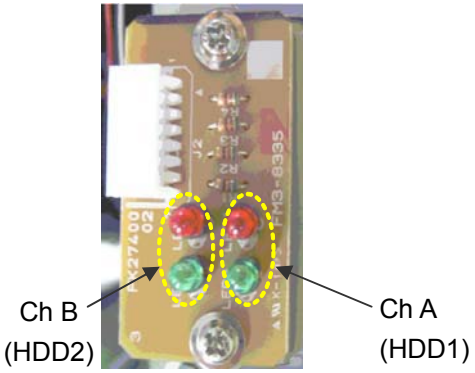
This option enables mirroring of HDD data (RAID1).
In the case of failure in one HDD, the operation is performed with the other HDD. This feature minimizes downtime as well as improves reliability as the document server.
There are 2 types of mirroring configurations according to the HDD capacity (160GB / 1TB):



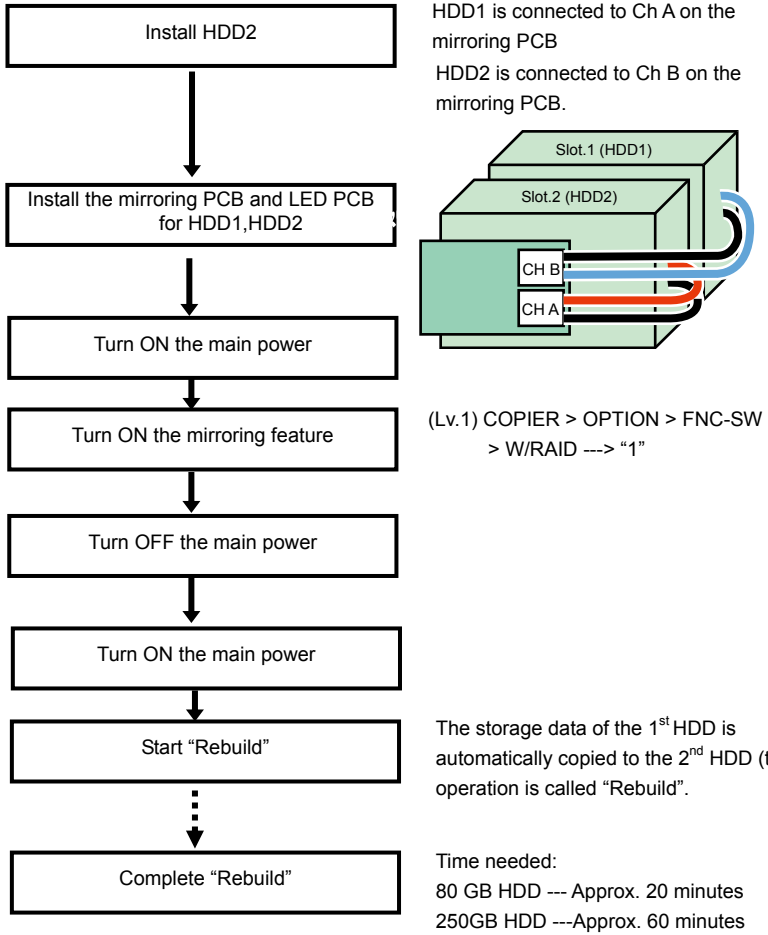

F-2-32

Mirroring PCB controls reading/writing timing of HDD data.
LED PCB makes the LED show operation status of the HDDs.




F-2-33

## To start using this feature (installation)




F-2-34

“Rebuild” progress is shown in a massage at the status line on the control panel.
“Copying hard disk data... xx%“

NOTE:
- This machine can be used even during “rebuild” process (operation is performed with HDD1)
- The HDD will not be damaged even if turning OFF the power during “rebuild” process. “Rebuild” is resumed once the power is turned ON the next time. This does not apply in the case of blackout or disconnecting the power code during “rebuild” process

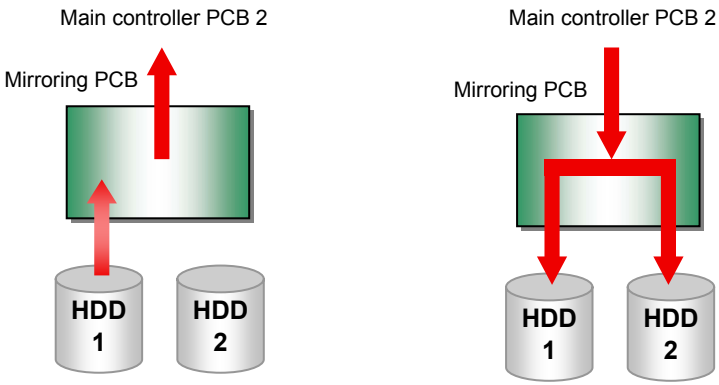
## HDD reading/writing operation

At reading:

Data is read by HDD1 (master HDD) only

At writing:

The same data is written to each HDD at the same timing




F-2-35

The ACT LED (green) on the LED PCB is lighted up/blinking if reading/writing to each HDD is performed properly.

In the case of failure:

- The LED (red) on the LED PCB is blinking. If only one HDD is faulty, the operation is continued by the other HDD.
- If both two HDDs are faulty, E602 error is shown on the control panel to stop the operation.

List of operation status (LED)

---: Light-out A: lighting-up B: blinking

| Status | HDD 1 (Ch A) | | HDD 2 (Ch B) | |
|---|---|---|---|---|
| | Green LED | Red LED | Green LED | Red LED |
| At normal operation | --- | --- | --- | --- |
| During access with HDD1 | A | --- | --- | --- |
| During access with HDD2 | --- | --- | A | --- |
| HDD1 is faulty | --- | A | --- | --- |
| HDD2 is faulty | --- | --- | --- | A |
| During data copy to HDD1 (rebuild) | ---/A | B | ---/A | --- |
| During data copy to HDD1 (rebuild) | ---/A | --- | ---/A | B |

T-2-13

## Description of Modes

The mirroring system of this machine consists of 4 modes.

The modes in parentheses show the mirroring system statuses.

The status flows among the modes below during operation.

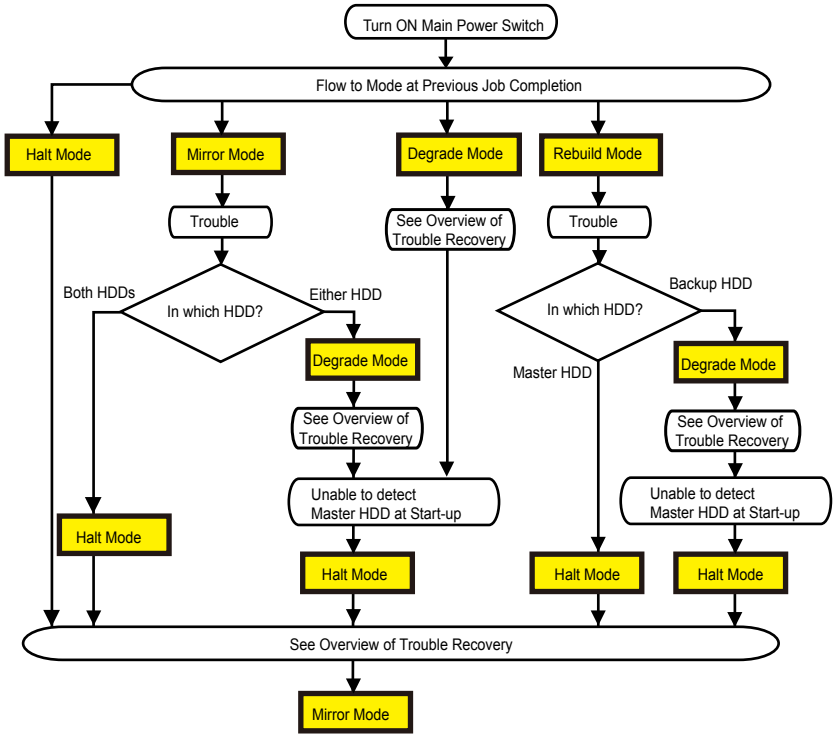
The table below lists descriptions of modes and operational overview.

| Name of Mode | Description | Master HDD Status | Backup HDD Status |
|---|---|---|---|
| Mirror Mode | Both HDDs are normally operated | In normal operation | In normal operation |
| Degrade Mode | Any trouble occurred in the backup HDD suspends mirroring operation. The machine can be used under this condition, however, the backup HDD should be replaced at the earliest convenience. | In normal operation | With troubles (HDD not installed/ HDD in trouble) |
| Rebuild mode | The data of the master HDD is copied (rebuilt) to the backup HDD. The machine can be used under this condition. | In normal operation | In recovery from the trouble (Copying data of Master HDD) |
| Halt mode | Both HDDs are in trouble (see *1) | In trouble (HDD not installed/ HDD installed not registered/ HDD disconnected while the mirroring board is in operation) | With troubles (HDD not installed/ HDD installed not registered/ HDD disconnected while the mirroring board is in operation) |

T-2-14

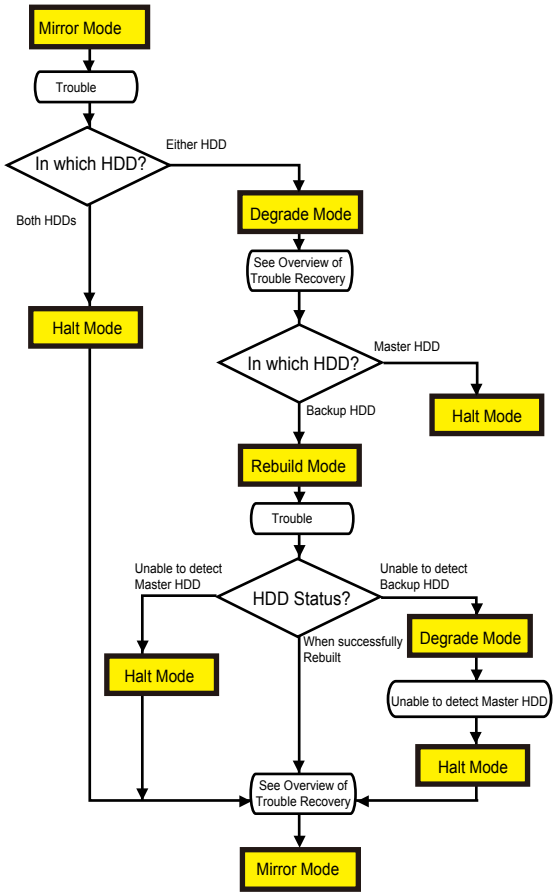
*1: Turn OFF/ ON the power in this mode, the mode returns to the previous mode.

## Mode Flow at Start-up




F-2-36

## Mode Flow during Operation




F-2-37

## Overview of Trouble Recovery

When any trouble occurs in the mirroring system, take the action for recovery appropriate to each mode.
The HDD in trouble can be located by the red LED on the LED PCB.
In case the master HDD cannot be located, turn OFF/ ON the power to check whether the green LED is lit on the LED PCB.
The firstly blinked green LED (ChA or ChB) in a high speed tells the Master HDD, which is accessed firstly.
The green LED not lit on a channel tells the location of Backup HDD.

| Name of Mode | Status | Action for Recovery | HDD1 (ChA) Red LED | HDD2 (ChB) Red LED |
|---|---|---|---|---|
| Mirror Mode | Normal (at standby) | Under normal operation | --- | --- |
| Degrade Mode (see*1) | HDD1 in trouble | 1. Check the connection between HDD1 and Mirroring Board or Main Controller PCB 2.<br>2. When the trouble is not recovered, replace the HDD1. | A | --- |
| | HDD2 in trouble | 1. Check the connection between HDD2 and Mirroring Board or Main Controller PCB 2.<br>2. When the trouble is not recovered, replace HDD2. | --- | A |
| Rebuild mode | Copying data to HDD1 (Rebuild) | Copying (under Rebuild) | B | --- |
| | Copying Data to HDD2 (Rebuild) | Copying (under Rebuild) | --- | B |
| Halt mode | Both HDDs in trouble | 1. Check Master HDD and Backup HDD (see *2)<br>2. When the trouble is not recovered, replace the two HDDs (format the replaced HDD and download the system software). | A | A |

T-2-15

---: Not lit  A: Lit  B: Blinking at an interval of 0.5 seconds
*1: This mode shows the message, “Need to replace hard disks (contact your service engineer)”, on the control panel. In addition, “310006” is indicated in CODE field of Alarm Log in service mode (COPIER > DISPLAY > ALARM-2).
*2: Never install the HDD used in the other model. The used HDD holds the ID specific to the firstly-installed machine, thus this machine is unable to recognize it. If done, you need to reinstall the HDD recognized in this machine.

## Points to Note in Servicing concerning Mirroring Functionality

1. The modes other than Mirror Mode indicate troubles, which require swift recovery.
   The power can be turned OFF even during Rebuild process. However, it is recommended not to turn off the power and wait until the mode flows to Mirror Mode. In addition, HDD removal after power-OFF is guaranteed only in Mirror Mode.

2. The mirroring board controls Master HDD and Backup HDD. This control is performed based on the HDD serial number and the model serial number instead of slot locations.
   If HDDs are replaced in a careless manner during servicing in the field, the Master and Backup HDDs may be switched.
   Ex) When the master HDD is in trouble, the mirroring board automatically recognizes the backup HDD as the master. Thus, the master and backup HDDs are switched even without changing the slot locations.
   If the Master HDD cannot be located, turn OFF/ ON the power to check on which channel the green LED is lit on the LED PCB.
   The firstly-blinked LED (ChA or ChB) shows the Master HDD, which is accessed firstly after power-on.

3. For users who intend to use the removable and mirroring functionality concurrently, instruct them not to change the removable HDD location in advance.
   Change of HDD locations after power-OFF is allowed as specifications only in Mirror Mode. Otherwise, HDD removal or change of location is not guaranteed.

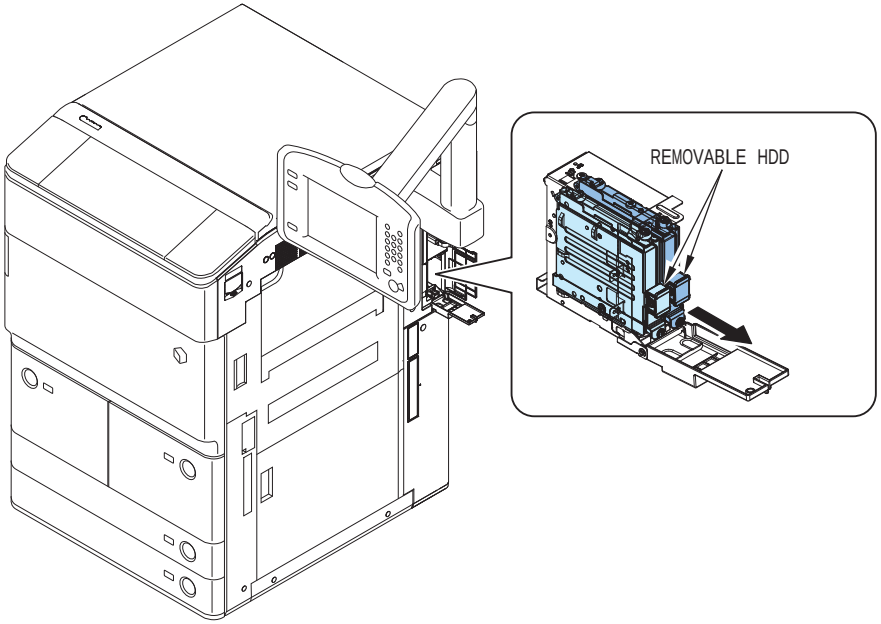
4. The following conditions are required to replace HDDs at power-ON.
   - Removable HDD is extended
   - Either HDD is in trouble

5. Upgrading should be done only in Mirror Mode while mirroring in ongoing. Upgrading in Degrade or Rebuild mode is basically prohibited. Always prioritize Mirror Mode when you take any actions.

## Removable HDD (option)

With this option, users can easily install or remove the HDD (slot-in/out).
This option is assumed to be used for: enhancing information security at government/public offices or private

- With this option, users can easily install or remove the HDD (slot-in/out).
- This option is assumed to be used for: enhancing information security at government/ public offices or private companies.




F-2-38

NOTE:
- To use this option, no setting is required with the software.
- The user needs to prepare a key because there is no key with this kit.

## HDD Encryption/ Mirroring Kit (optional)

This option enables to generate the encryption key inside the encryption board and to encrypt the whole HDD including the system software. Encryption allows leaks of confidential data, even when the HDD is stolen, including image data (temporarily generated at Copy or Print jobs) and user data stored in BOX/ Advanced BOX. In addition, the data written into the two hard disks are also encrypted when the HDD mirroring functionality is enabled. The following descriptions focus on the HDD encryption function. See the previous section for the mirroring functionality.

### HDD Encryption Functionality

The HDD of the host machine holds temporary image data including scanned images or PDL data as well as user data in BOX and Advanced BOX. Such images or user file information are saved in the HDD only with system information cleared. Under this condition, the data or images can be restored by accessing directly to the stolen HDD using the access editor and the like. To counter such threats against securities, data written to the disk should be always encrypted to protect them from illegal restoration of image data or others. This product employs an unconventional approach to achieve HDD encryption and mirroring functionality with the dedicated chipset on a board (Canon MFP Security Chip Version 2.00). Since the two functions are operated in a HDD, the encryption functionality can be independently enabled.

### Data Encryption Mechanism

The encryption board receives signals transmitted from the controller board, and encrypts and saves them in the HDD.
The encryption board receives the encrypted data saved in the HDD to decode and send them to the controller.
The encryption board can be configured with a HDD and an encryption/ mirroring board, or with 2 HDDs and an encryption/ mirroring board.

### Conditions for Encryption Board Operation

The encryption board has the function to recognize and authenticate the host machine. An error is triggered if a second-hand HDD encryption/ mirroring board is installed to the other machine.

### Compatibility among Device, Encryption Board and HDD

E602-2000 error may occur if the unmatched authentication information is found between the controller and the HDD encryption board and the encryption board is mounted.
The device, the encryption board and HDD can be connected in 4 use cases.

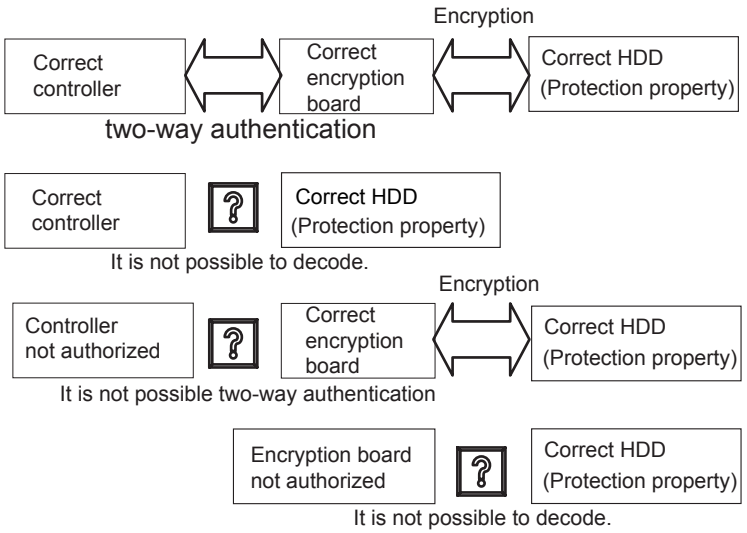
The following shows the statuses for each use case.

Case 1: Normally operated

Case 2: HDD-related error occurs because the system on the HDD cannot be read (other than E602-2000 error)

Case 3: E602-2000 is triggered by failure in mutual authentication

Case 4: Unable to decode properly due to unmatched key for the encryption board




F-2-39

## Actions against Troubles – Overview

| Servicing | User data | Recovery | Action |
|---|---|---|---|
| HDD replacement | cleared | Replace HDDs | 1) Format the HDD |
| | | | 2) Install the system software |
| Encryption board replacement | cleared | Install HDD encryption Kit | 1) Replace encryption board |
| | | | 2) Initialize Encryption Board (see *1) |
| | | | 3) Format the HDD |
| | | | 4) Install the system |
| Main controller 2 replacement (SRAM) | cleared | Clear the key for HDD data encryption kit | 1) Initialize the encryption board (see *1) |
| | | | 2) Format the HDD |
| | | | 3) Install the system |
| Main controller 1 replacement | not cleared | N/A | N/A |
| Main controller clear | Information held in SRAM cleared | After MN-CON clear process is done | MN-CON clear does not clear authentication information; no work is required specifically for HDD encryption kit |

T-2-16

*1: How to Initialize Encryption Board

1. Initialize the encryption board via SST.

This step makes the disk unformatted (E602-0001 is triggered if the unformatted disk is started).

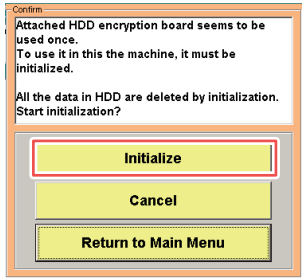
2. Format the HDD and reinstall SYSTEM via SST.

When you start the HDD formatting, the message is automatically shown to confirm whether to initialize the encryption board (Key Clear).

Key Clear will disable accesses to HDD data permanently. Cautions should be taken in Key Clear execution.

### <Points to Note in Initialization via SST>

The screen below is shown when you gain access to SST in safe mode due to E602-2000. Poor board connection also causes this error. Check the board connection to seek error recovery. Initialization of the encryption board will disable accesses to HDD data permanently. Cautions should be taken in initialization.



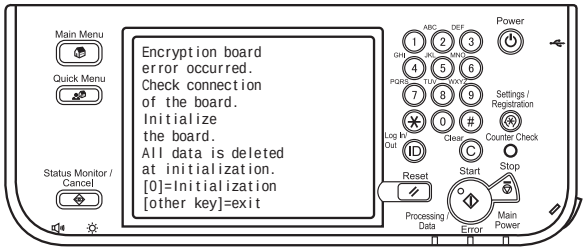

F-2-40

### <Points to Note in Initialization using USB>

The screen below is shown on the control panel when E602-2000 occurred and the machine is started in safe mode using the USB flash memory with system data stored.

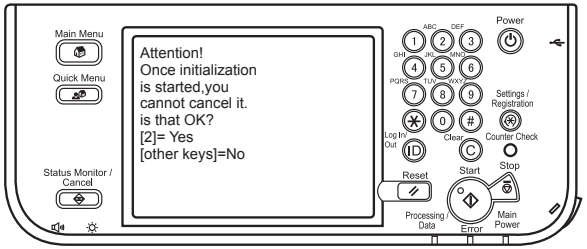
The message as shown in the figure below is displayed.

Select “0” when you are ready to initialize the encryption board.




F-2-41

The figure below shows the final screen in initializing the encryption board.
The message as shown in the figure below is shown on the screen.
Select “2” when you initialize the encryption board.
We recommend checking the board connection before starting initialization




F-2-42

## Relevant Error Codes

### E602 and detailed codes

| E code | Description | Cause | Detection Timing | Actions |
|---|---|---|---|---|
| E602 -2000 | Authentication Error | Error in authentication between the host machine and the encryption board | Start-up | Check connections between the encryption board and the HDD and between the encryption board and the main controller 2. This error may be triggered after replacement of the encryption board or the main controller 2. At any rate, this error disables accesses to HDD data. When no problem is found in connections, use SST to execute Key Clear > Format > Install System. |
| | Failure in Encryption Board | Error in recognition of the encryption board | | |
| | Device Error | Failure in the encryption board | | |

T-2-17

### E610 and detailed codes

| E code | Detailed Code | Cause (Detected Error) | Actions |
|---|---|---|---|
| E610 | | Failure in the HDD encryption key | |
| | 0001 | Failure in the HDD encryption key (Error in hardware configuration). No encryption board is installed. | Ask the user to check the hardware configuration. |
| | 0002 | Failure in the HDD encryption key (Error in hardware configuration). The memory space is insufficient for encryption operation. | Ask the user to check the hardware configuration. |
| | 0101 | Failure in the HDD encryption key (Error in initialization). Failed to initialize the memory space where the key is stored. | Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors. |
| | 0102 | Failure in the HDD encryption key (Error in initialization). Failed to initialize the encryption processing unit. | Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors. |
| | 0201 | Failure in the HDD encryption key. Error in the encryption processing unit. | Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors. |
| | 0202 | Failure in the HDD encryption key. Error in the encryption processing unit. | Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors. |
| | 0301 | Failure in the HDD encryption key (Error in the encryption key). Failed to create the encryption key. | Turn OFF/ON the power. If the error is not recovered, this may be caused by hardware-related factors. |
| | 0302 | Failure in the HDD encryption key (Error in the encryption key). Detected the failure in the encryption key. | Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (SRAM). Note that this error initializes the HDD. |
| | 0303 | Failure in the HDD encryption key (Error in the encryption key). Detected the failure in the encryption key. | Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (SRAM). Note that this error initializes the HDD. |
| | 0401 | Failure in the HDD encryption key (Error in the encryption processing). Error is detected during the encryption process. | Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (the encryption board). |
| | 0402 | Failure in the HDD encryption key (Error in the encryption processing). Error is detected during the decoding process. | Turn OFF/ON the power. If the error is not recovered, this may be caused by a hardware-related factor (the encryption board). |

T-2-18

# Service Operations

## HDD

<Procedure of parts replacement>

Refer to Removing HDD

<Procedure of adjustment>

1. Before Replacing

Perform the following operations. Be sure to get an approval from the user beforehand.

1) Backup of the set/registered data

Use the Remote UI.

Management Settings > Data Management > Import/Export

Target data:

- Address List
- Forwarding Settings
- Settings/Registration
- Web Access Favorites
- Printer Settings
- Paper Information

2) Printing the set/registered data

Use the service mode.

(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT

List of the set/registered data which cannot be backed up is printed.

2. After Replacing

1) HDD format

1-1) Start with the safe mode. (While pressing 2 and 8 keys simultaneously, turn ON the main powerswitch.)

1-2) Use SST to format all partitions.

2) Downloading system software

2-1) Use SST to download the system software (System, LANG, RUI and others).

3) Initializing the key, certificate and CA certificate

(Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY

4) Turning OFF and ON the main power switch

5) Restoring the backup data

Use the Remote UI.

Management Settings > Data Management > Import/Export

6) Resetting/registering the data

While referring to the list of set/registered data which was printed before replacement, reset/register the data.

7) When the user generates and adds the encryption key, certificate and/or CA ertificate, request the user to generate them again.

8) Executing “Auto Adjust Gradation (Full Adjust)”

Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

When using the Card Reader and imageWARE Accounting Manager

Card ID used for imageWARE Accounting Manager is stored in the HDD, so NSA collection control is not enabledafter the HDD replacement. After the HDD is replaced, reinstall the card ID from imageWARE Accounting Manager using the following procedures.

1) Go to COPIER > FUNCTION> INSTALL > CARD and enter the numerical value of the leading card which is used for Department ID. Then, press “OK” button.(e.g.: If No.1 to No.1000 cards are used for Department ID, enter “1” of the leading card.)
2) After turning OFF and ON the main power switch, perform the following operations from Settings/Registration mode.
   In Management Settings > User Management > Department ID Management > Page Totals, be sure that “ID00000001” to “ID00001000” are created.
   Set the following: Preferences > Network > TCP / IP Settings > IPv4 Settings> IP Address Settings > IP Address, Gateway Address, Subnet Mask
   In Management Settings > User Management> System Manager Information Settings> System Manager ID and System PIN, register any number for them. Then, turn OFF and ON the main power switch.
   If “System Manager ID” and “System PIN” are not registered, “card registration to device” cannot be executed for the imageWARE Accounting Manager setting operation.
3) Download the card ID from imageWARE Accounting Manager to the Main Body again.
4) After downloading is completed, go to Management Settings > User Management > Department ID Management > Page Totals. Be sure that only the downloaded card ID is displayed.
5) Print using the user card registered from imageWARE Accounting Manager. Be sure that the card information used for the target devices of imageWARE Accounting Manager is collected.

CAUTION:Points to Caution when Using the System Software-installed HDD

When using the HDD which was installed the system software of the other achine (different serial number), be sure to format the HDD after the installation. If the HDD is not formatted, the operation cannot be guaranteed.

## Main Controller PCB 1

<Procedure of parts replacement>

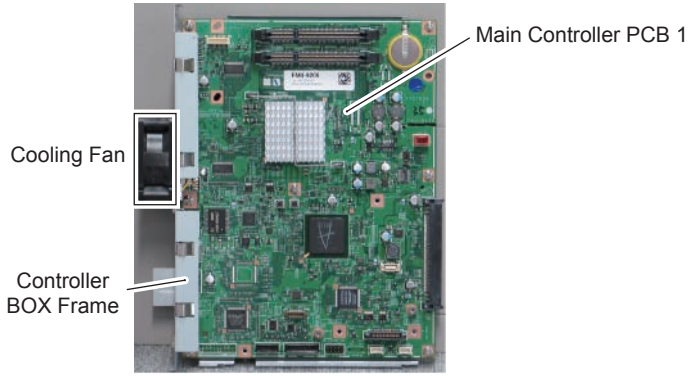
see "Removing Main Controller PCB 1," on p. 4-80.

<Procedure of adjustment>

Service part:

Setting unit: Main Controller PCB 1 + Controller Box Frame + Cooling Fan

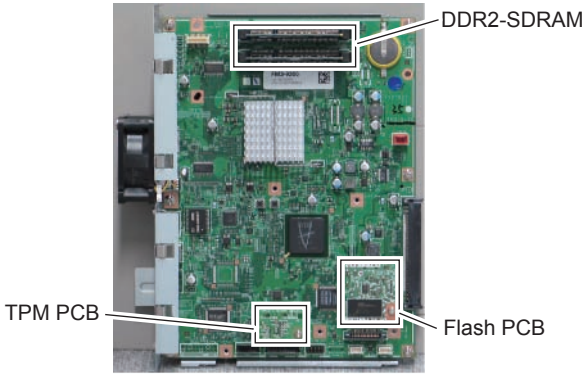
Parts number differs on a model basis (speed basis).




F-2-43

In order to secure the accuracy of connector connection when slotting in, this service part is provided with the PCB being installed to the frame.

1) Transferring the parts from old PCB to new PCB
   - DDR2-SDRAM (2 pc.)
   - Flash PCB
   - TPM PCB




F-2-44

NOTE:
Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.

## Main Controller PCB 2

<Procedure of parts replacement>

see "Removing Main Controller PCB 2," on p. 4-82.

<Procedure of adjustment>

Service part:

Setting unit: Main Controller PCB 2 + Controller Box Frame

F-2-45

1. Before Replacing

Perform the following operations. Be sure to get an approval from the user beforehand.

1) Backup of the set/registered data

Use the Remote UI.

Management Settings > Data Management > Import/Export

Target data:

- Address List
- Forwarding Settings
- Settings/Registration
- Web Access Favorites
- Printer Settings
- Paper Information

2) Printing the set/registered data Use the service mode.

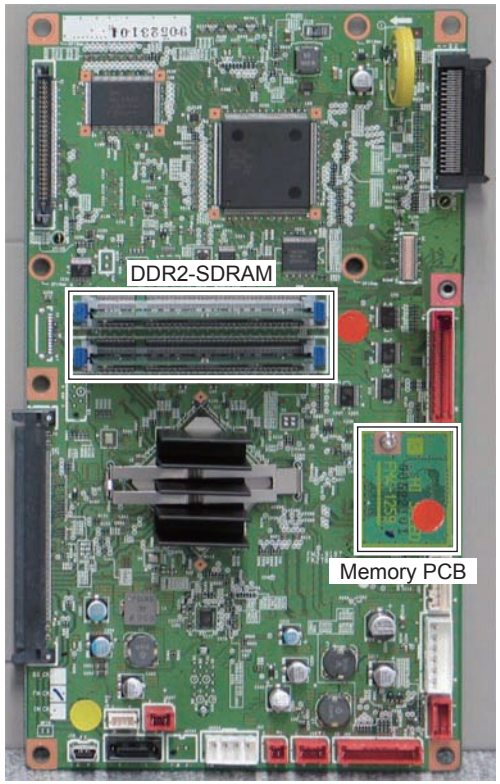
(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT

List of the set/registered data which cannot be backed up is printed.

2. When Replacing

1) Transferring the parts from old PCB to new PCB

- DDR2-SDRAM (1 pc.) (When option DDR2-SDRAM is installed: 2 pc.)
- Memory PCB




F-2-46

Prohibited Operation:

Do not transfer the following parts to another model (which has a different serial number).If you fail to do so, the Main Body does not activate normally and this might cause to fail the restoration.

- Main Controller PCB 1
- Main Controller PCB 2 (with Memory PCB installed)
- Memory PCB

3. After Replacing
   1) After installing the parts, turn ON the main power switch.
   2) Restoring the backup data
      Use the Remote UI.
      Management Settings > Data Management > Import/Export
   3) Resetting/registering the data
      While referring to the list of set/registered data which was printed out before replacement, reset/register the data.
   4) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again

## ■ TPM PCB

<Procedure of parts replacement>

see "Removing Main Controller PCB 1," on p. 4-80.

<Procedure of adjustment>

When TPM setting is “OFF”

Any operation is not necessary at replacement.

When TPM setting is “ON”

It is necessary to restore the TPM key which was backed up after changing the setting to “ON”.

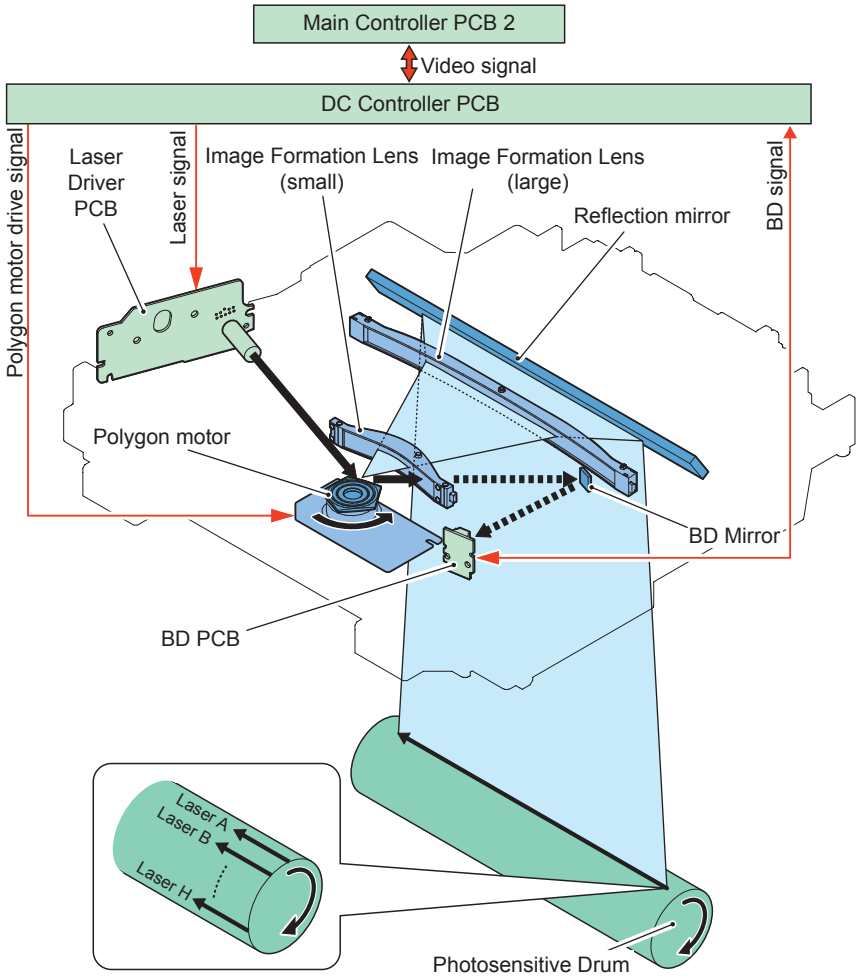
1) Removing the network cable
   Until the TPM key is restored, information might be leaked due to the inappropriate access via network, so be sure to perform this operation appropriately.
2) Connecting the USB Memory after turning ON the main power switch
3) Restoring the TPM key
   Management Settings > Data Management >TPM Settings> Restore of TPM Key
4) Turning OFF and ON the main power switch

# Laser Exposure System

## Overview

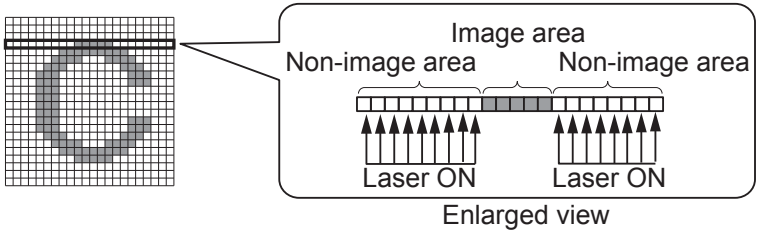
### Overview

This machine uses an 8-beam method that enables exposure of 8 beams per scanning direction for high productivity.



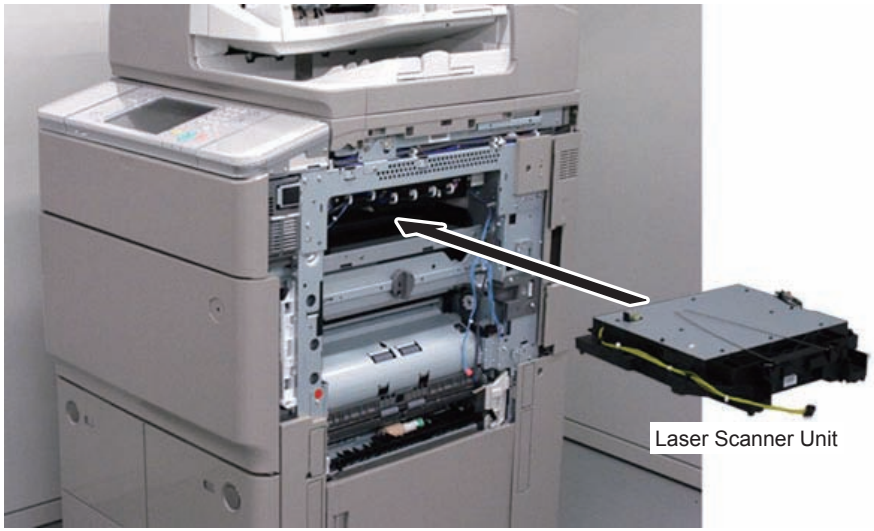

F-2-47

Laser is applied to the Nom-image image on the positively-charged drum with this machine.




F-2-48

Laser Scanner Unit can be removed from the side of the main body.



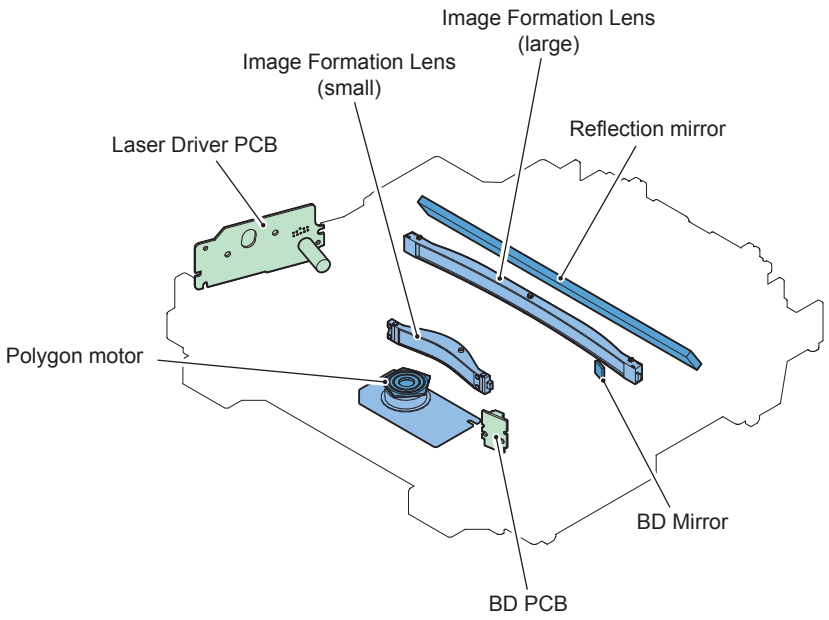

F-2-49

## Specifications

| Item | | Description |
|---|---|---|
| Laser team | Wave length | 670nm |
| | Laser type | Red color laser |
| | Laser output | 7mW(Max) |
| | Number of laser beams | 8 beams |
| Resolution | | 1200dpi |
| Scanner motor | Type | Brushless motor |
| | Number of rotations | 35,400rpm(Process speed 500mm/sec) |
| Number of scanner mirror (polygon) surfaces | | 5 |
| Controls | Laser ON timing control | Laser ON/OFF control |
| | | Main scanning synchronization control |
| | | Sub scanning synchronization control |
| | Laser beam intensity control | APC control |
| | Others | Duplex print magnification correction(mageRUNNER ADVANCE C8105/8095/6055 only) |
| | | Laser scanner motor control |
| | | Laser shutter control |

T-2-19

## Parts Configuration



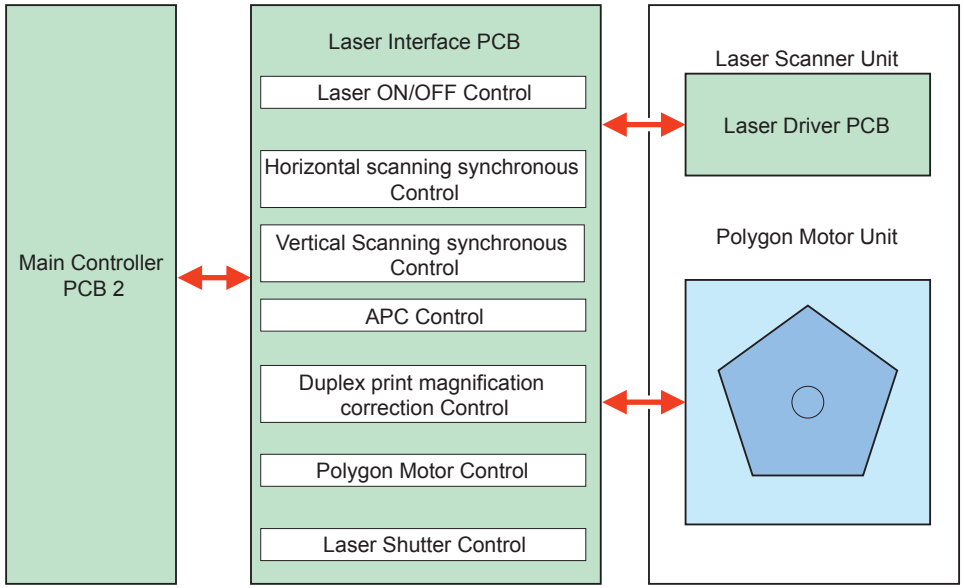

F-2-50

| Name | Role |
|---|---|
| Laser driver | Laser driver |
| Polygonal mirror | Perform scanning with a laser beam in the main scanning direction. |
| Reflection mirror | Reflect a laser team to the drum. |
| Correction lens | Correct a main-scanning tilt of the laser beam coming from the folding mirror. |
| Tilt correction motor | Correct a main-scanning tilt by moving the correction lens. |
| Image Formation Lens (small) | To connect focuses on the Drum to provide an image |
| Image Formation Lens (Large) | To connect focuses on the Drum to provide an image |

T-2-20

# Controls

## Overview




F-2-51

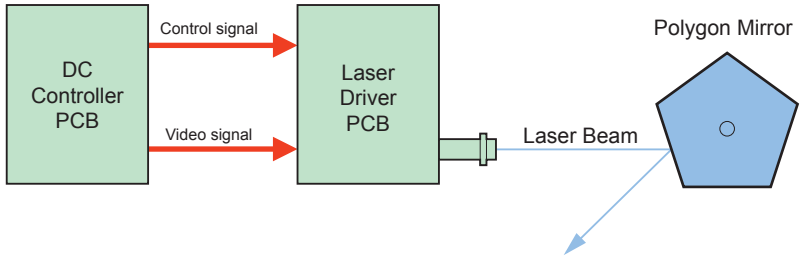
| Item | | Purpose/Description |
|---|---|---|
| Laser ON timing control | Laser ON/OFF control | Turn ON/OFF a laser beam according to the combination of laser control signals. |
| | Main scanning synchronization control | Performed to adjust the writing position in the main scanning direction. |
| | Sub scanning synchronization control | Performed to adjust the writing position in the sub scanning direction. |
| Laser beam intensity control | APC control | 1Performed to keep a specified level of laser beam for each line. |
| Duplex print magnification correction control | | To correct image size between the front and the rear when making 2-sided print. |
| Laser polygon motor control | | To be executed to rotate the Polygon Mirror at the specified speed. |
| Laser shutter control | | To prevent exposure of laser light in the machine when the Cover is open. |

T-2-21

## Laser ON Timing Control

### Laser ON/OFF Control

This control is performed to turn ON/OFF a laser beam according to the combination of laser control signals.




F-2-52

<Timing of Execution>

After the power is turned ON

<Details of the Control>

The DC controller switches the mode among four modes (Forcible OFF mode, APC mode, Print mode, Standby mode) according to the laser control signal.

| Mode | Laser status | Remarks |
|---|---|---|
| Forcible OFF | OFF | Clear the laser beam intensity setting determined by APC. |
| APC | ON | Adjust the laser beam intensity. |
| Print mode | OFF/ON | Irradiate a laser beam according to the video signal. |
| Standby mode | OFF | The main unit is placed in the standby status. |

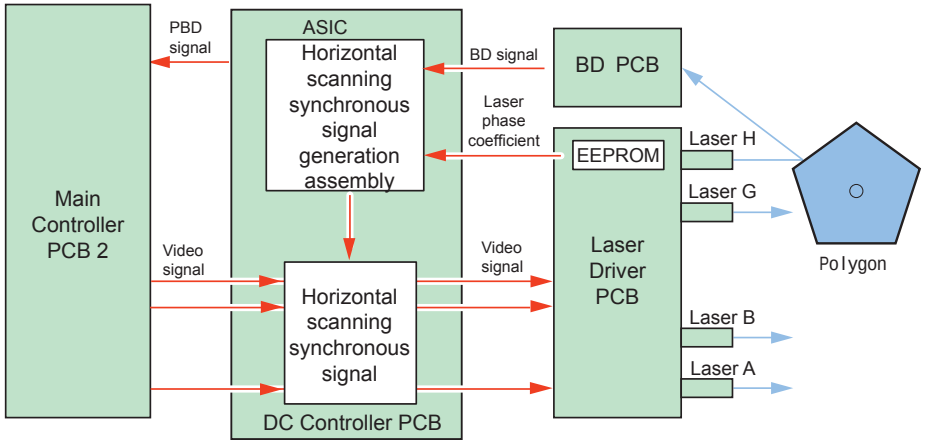
T-2-22

## Main Scanning Synchronization Control

This control is performed to adjust the writing position in the main scanning direction.

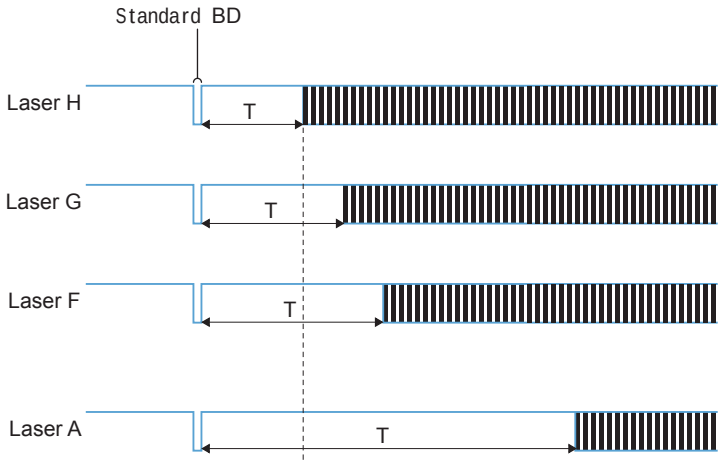
<Timing of Execution>
For every eight lines

<Details of the Control>
1) The synchronization control in horizontal scanning direction is executed with reference to Laser A.
2) The BD PCB is located on the light path of Laser A laser beam and the laser beam is emitted to the BD PCB.
3) The BD PCB detects laser beam of Laser A and generates BD signal to be sent to the DC Controller PCB.
4) The DC Controller sends the PBD signal to Main Controller PCB 2 according to BD signal.
5) Based on the laser phase coefficient and the BD signal, the DC Controller PCB generates synchronization signal in horizontal scanning direction on an 8 lines basis at the generation area of synchronization signal in horizontal scanning direction.
6) Once the PBD signal is received, Main Controller PCB 2 sends video signal to the DC Controller PCB.
7) The video signal sent from Main Controller PCB 2 is output to the Laser Driver PCB according to the synchronization signal in horizontal scanning direction.




F-2-53

NOTE:
EEPROM on the Laser Driver PCB stores the 8-beam phase displacement coefficient (laser phase coefficient), which is unique to the Laser Scanner Unit, and corrects 8-beam phase difference based on the stored coefficient. When a Laser Scanner Unit is replaced, the DC Controller PCB automatically retrieves the laser phase coefficient of EEPROM.



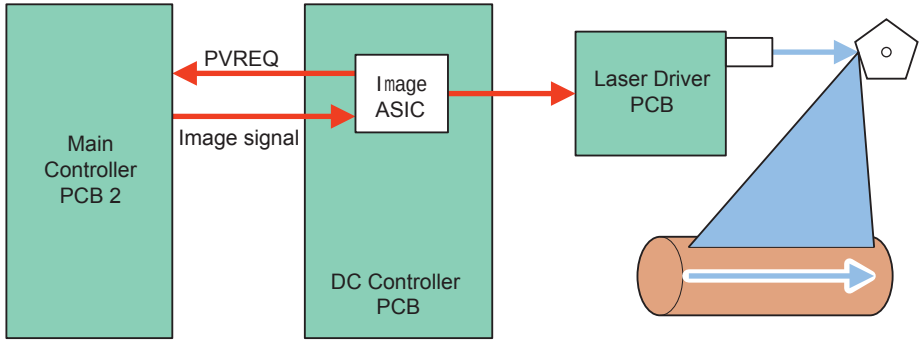

F-2-54

## ● Sub Scanning Synchronization Control

This control is performed to adjust the writing position in the sub scanning direction.

<Execution timing>
When printing is started

<Control Description>
1) The DC Controller PCB generates synchronization signal in vertical scanning direction (PVREQ) and sends to Main Controller PCB 2.
2) Main Controller PCB 2 receives PVREQ (synchronization signal in vertical scanning direction) and sends the video signal to the DC Controller PCB.
3) The DC Controller PCB sends drive signal to the Laser Driver PCB to turn on the laser.




F-2-55

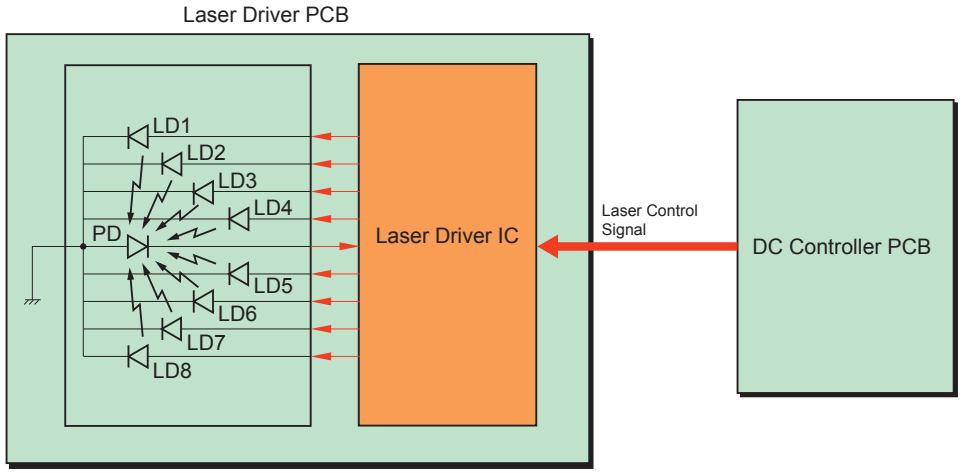
# ■ Laser Beam Intensity Control

## ● APC (Auto Power Control) Control

To keep constant laser light intensity per 8 beams (1BD basis)

<Execution timing>
When the laser is scanned (per line)

<Control Description>
1) The DC Controller PCB outputs laser control signal to the Laser Driver IC in the Laser Driver PCB to set in APC mode.
2) The Laser Driver IC is set in APC mode and makes laser diodes (LD1 to LD8) to forcibly emit in series.
3) The Laser Driver IC monitors laser diodes (LD1 to LD8) with the Photo Diode (PD) and adjusts output of laser diode until the laser light intensity reaches a specified level.




F-2-56

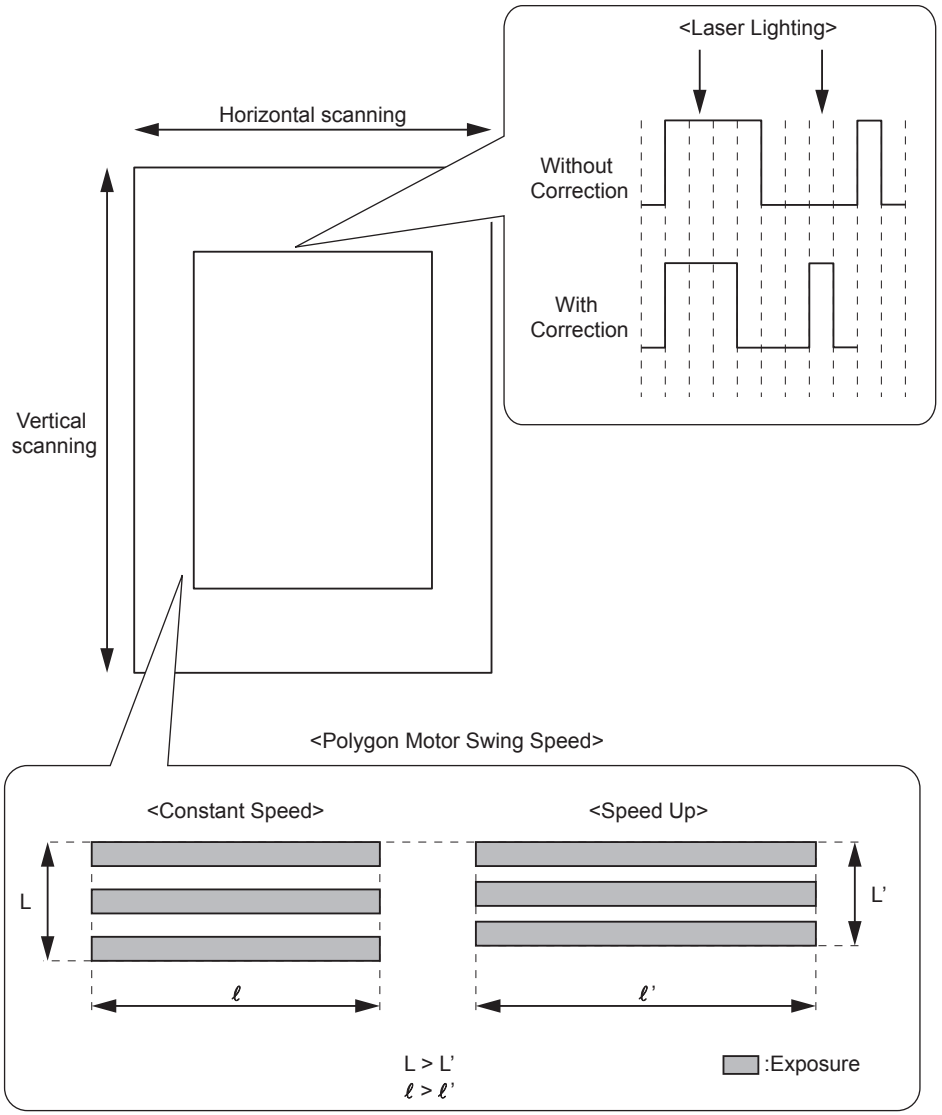
## Duplex print magnification correction

When the paper passes through the fixing area after the image was created on the 1st side of the 2-sided print, the paper temporarily gets shrunk due to the heat. Then, creating the image on the 2nd side causes the 2nd side image extended, which makes the 2nd side image larger than the 1st side image when the paper size returns to the original size after the paper is delivered outside the machine.

<Execution timing>
When the image on the 2nd side of 2-sided print is created

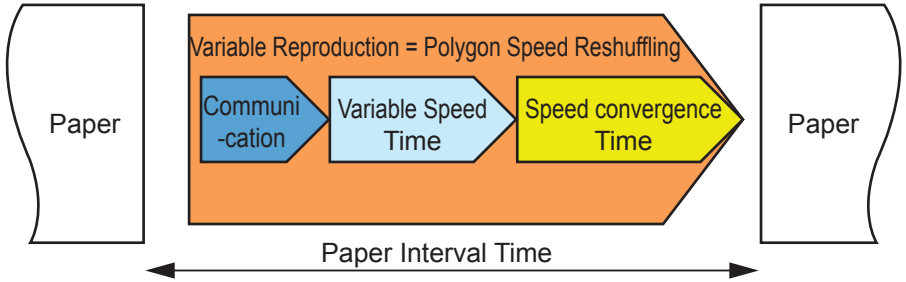
<Control description>
When the 2nd side is printed, the following controls are executed with consideration of paper's shrinkage level.
Main scanning direction:
The image in horizontal scanning direction is reduced by skipping the image data.

Sub scanning direction:
The image is reduced by increasing rotating speed of the Polygon Motor.
Increasing rotating speed of the Polygon Motor causes an increase of magnification ratio in horizontal scanning direction, and equally effects as skipping of image data.




F-2-57

When magnification is corrected, changing the Polygon Motor speed between sheets might be slower depending on the speed, so productivity might be reduced.



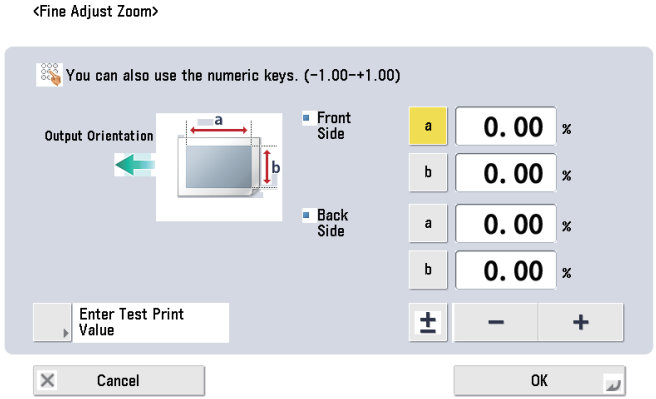

F-2-58

| Variable speed Wide | PPM | | |
|---|---|---|---|
| | 105ppm | 95ppm | 85ppm |
| -0.3% | 79% | 80% | 82% |
| -0.6% | 71% | 74% | 75% |
| -1.0% | 69% | 71% | 73% |

T-2-23

* In the actual use, it is assumed that changing speed over 0.6% is rarely seen.

Related “Settings/Registration” mode
Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings >Details/Edit > Adjust Image position > Fine Adjust Zoom



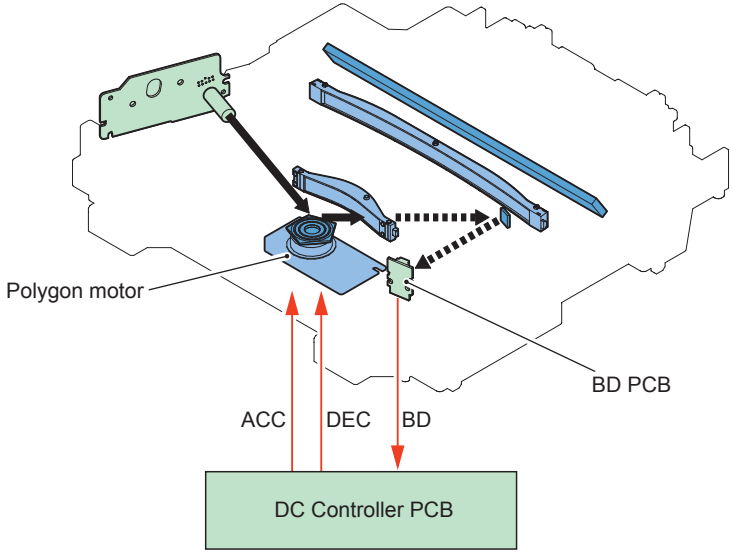

F-2-59

## Polygon Motor Control

This control is performed to rotate the polygon mirror at a specified speed.

<Execution timing>
When the Polygon Motor is started

<Control description>
1) The DC Controller PCB outputs acceleration signal (ACC) to forcibly rotate the Polygon Motor.
2) The speed detection signals (FG, BD) are detected to be compared with the reference signal generated in the reference signal generation area, so that the acceleration signal (ACC) and the deceleration signal (DEC) are controlled to keep the specified speed.




F-2-60

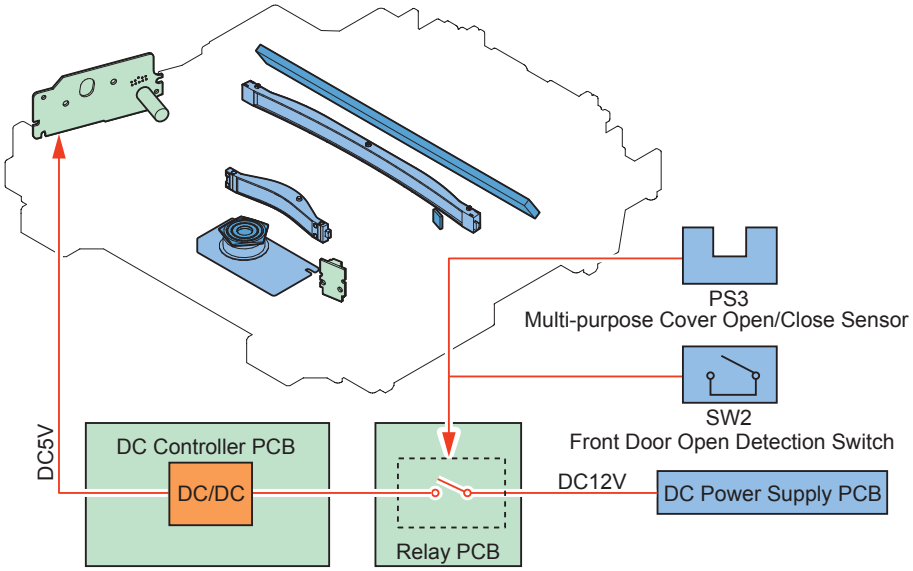
Related Error Code
E100: Failure to detect PLOCK signal during BD rotation
E110: Failure to detect VLOCK signal during FG rotation

## Laser Shutter Control

To prevent laser exposure in the machine when the Cover is open

<Execution timing>
When the Front Door or Multi tray Cover opens/closes

<Control description>
When the Front Door or Multi tray Cover opens, the DC Controller PCB stops power supply (DC5V) of the Laser Driver to prevent laser exposure.




F-2-61

NOTE:
This control is executed by the software only and there is no shutter to prevent laser exposure.

# Servicing

## Periodically Replaced Parts

None

## Consumable Parts

None

## Periodical Servicing List

| Parts name | Qty | Cleaning interval | Remarks |
|---|---|---|---|
| Dust-proof glass | 1 | - | Clean when black lines or the like occurs due to soil on the Dustproof Glass. |

T-2-24

## When Replacing Parts

| No. | Parts Name | When replacing parts |
|---|---|---|
| 1 | Laser Scanner Unit | 1) Execution of potential control (COPIER>FUNCTION>DPC>DPC)<br>2) Write down the write start position adjustment value of laser in the following service mode on the service label.<br>COPIER > ADJUST > LASER > PVE-OFST |

T-2-25

## Major Adjustments

None

# Image Formation System

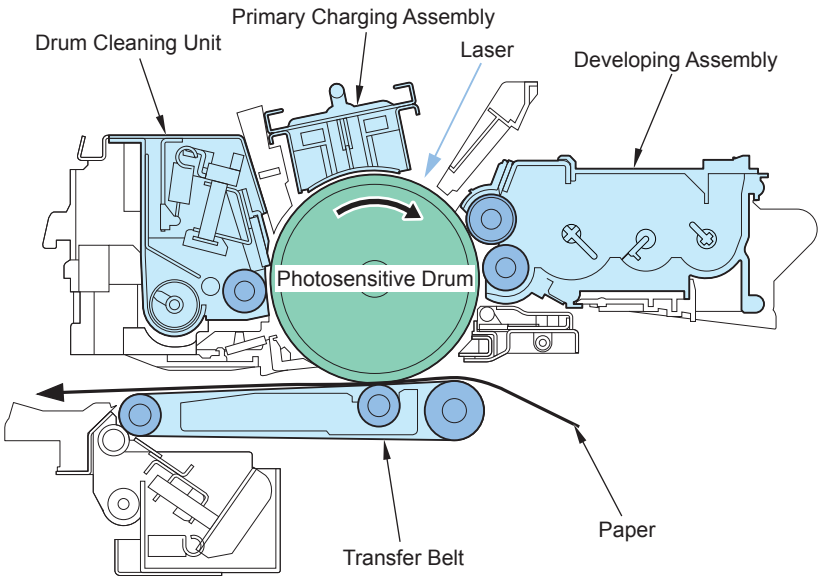
## Overview

### Overview

Toner image is formed by the magnetic, 1-component toner projection developing method in image formation system.

To ensure high quality print, this machine introduces the following new technologies:

- Small-diameter toner
  High resolution by fine-grained toner
- Belt transfer method
  Improved transfer/feeding performance by the belt feeding
- Twin-developing method
  Improving developing efficiency by the 2-time developing. Uneven developing at the first developing is evened out with the second development.
  At the second development, if toner is excessively supplied to the drum at the first development, the excessive toner is pulled to the cylinder. If the amount of toner on the drum is not enough, toner shortfall is supplied to the drum from the cylinder.
- Image Stabilization Control
  Image density/gradation correction by the D-max control and the D-half control
- The shutter mechanism is added to the Primary Charging Assembly and the Pre-transfer Charging Assembly.
  This prevents discharge products from attaching on the Drum, thus prevents image failure just after startup.
- Improved accessibility to the periodically replaced / durable parts provides increased serviceability.




F-2-62

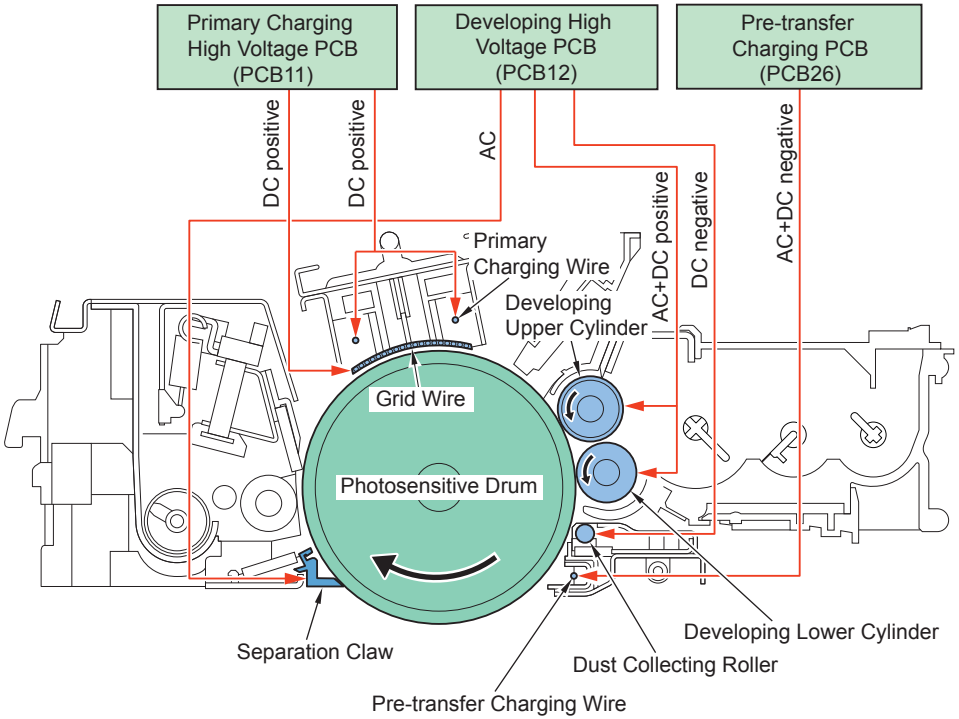
# Specifications

## Basic Specifications

| Item | | Function/Method |
|---|---|---|
| Photosensitive Drum | Material | A-Si |
| | Drum diameter | 84 mm diameter |
| | Cleaning | Cleaning Blade |
| | Process speed | 500 mm/sec |
| | Separation method | Curvature separation + separation claw |
| | Drum Heater | Yes (42 +/- 2 deg C) |
| | Drum HP detection | Yes |
| Developing Assembly | Developing method | Dry, 1-component toner projection method |
| | Developing Cylinder | iR-ADV 8105/8095/8085 series |
| | | 2 cylinders (twin-developing method) |
| | | - Developing upper cylinder: 20 mm diameter |
| | | - Developing lower cylinder: 20 mm diameter |
| | Toner | Magnetic negative toner |
| | Toner level detection | Yes (magnetic sensor) |
| Primary charging | Charging method | Corona charging (2 charging wires + grind wire) |
| | Cleaning | Cleaning Pad (charging wire) |
| | Shutter | Yes |
| Pre-transfer charging | Charging method | Corona charging (1 charging wire) |
| | Cleaning | Cleaning Pad (charging wire) |
| | Shutter | Yes |
| Transfer method | | Direct transfer (ETB: Electrostatic Transfer Belt) |
| ETB Unit | Material | CR rubber + urethane resin |
| | Circumferential length | 298.5 mm |
| | Cleaning | Brush Roller + Cleaning Blade |
| | Transfer method | Transfer Roller (sponge roller) |
| | Separation method | Curvature separation + static eliminator |
| | Disengagement mechanism | Yes |
| Waste Toner Container | Capacity | Equivalent to 1 million sheets |
| | Full-level detection | Yes |
| | Presence/absence detection | No |
| Toner Container | Method | Set-on (manual) |
| Patch Sensor | | Yes |

T-2-26

## Charging Specifications




F-2-63

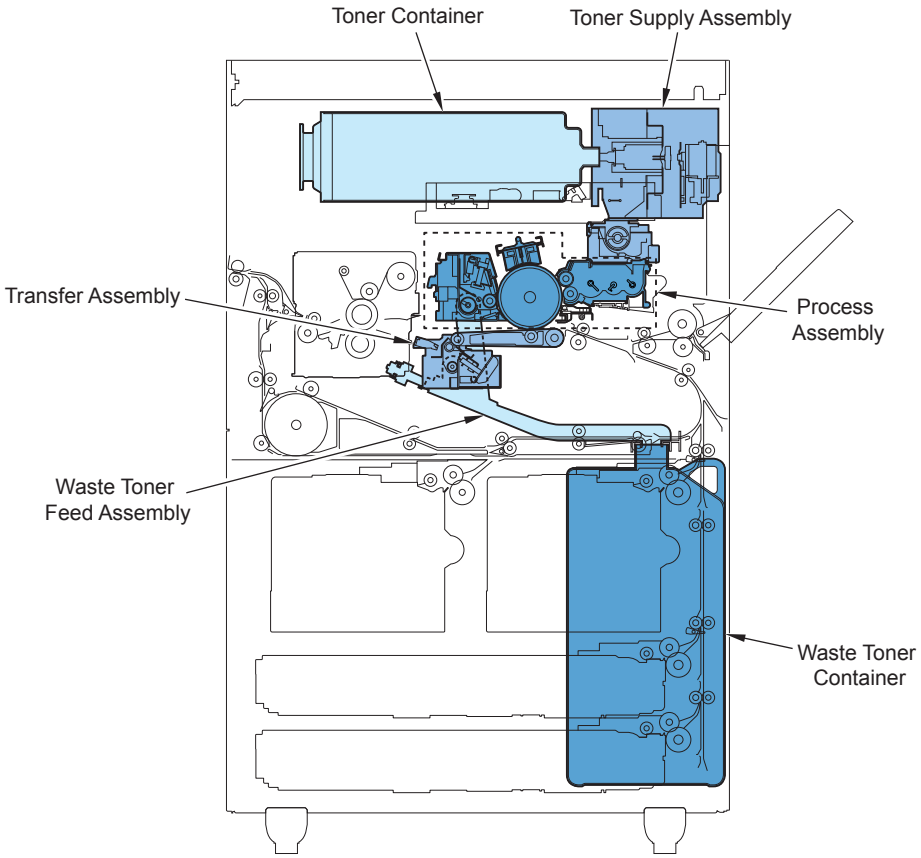
| Item | | Bias value | Remarks |
|---|---|---|---|
| Primary charging bias | DC bias | 6000 to 9000 V | To be specified by the potential control |
| Grid bias | DC bias | 530 to 800 V | To be specified by the estimated life and environment* |
| Developing bias | AC bias | 1500 V | Fixed value (ON/OFF only) |
| | DC bias | 200 to 300 V | To be specified by the D-max control |
| Dust-collection bias | DC bias | -1000 V | Constant voltage control |
| Pre-transfer charging bias | AC bias | 8300 V | Fixed value (ON/OFF only) |
| | DC bias | 0 to 6000 V | Constant current control (to be specified by the environment*) |
| Transfer bias | DC bias | 0 to 6500 V | Constant current control (to be specified by the environment*, paper type and print mode) |
| Separation claw bias | AC bias | 690 Vpp | Fixed value (ON/OFF only) |

T-2-27

* Detected by the Environment Sensor (THU1)

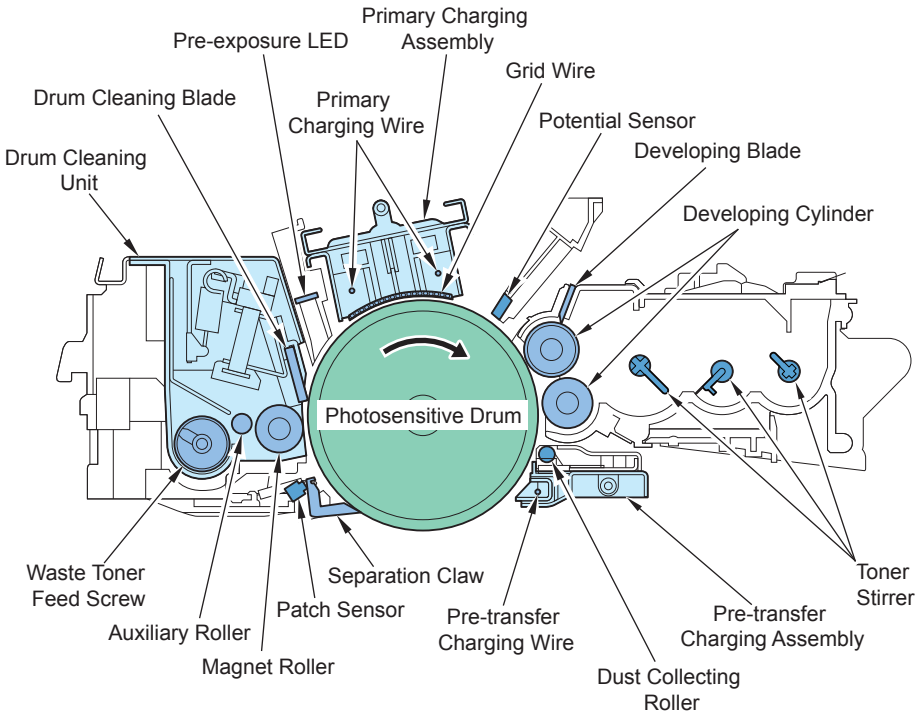
# Parts Configuration

## Entire Configuration



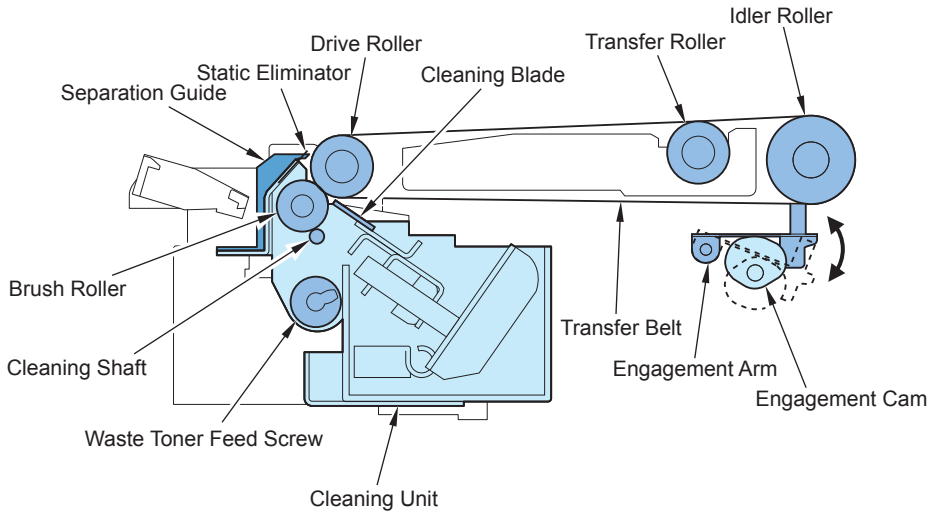

F-2-64

## Process Area




F-2-65

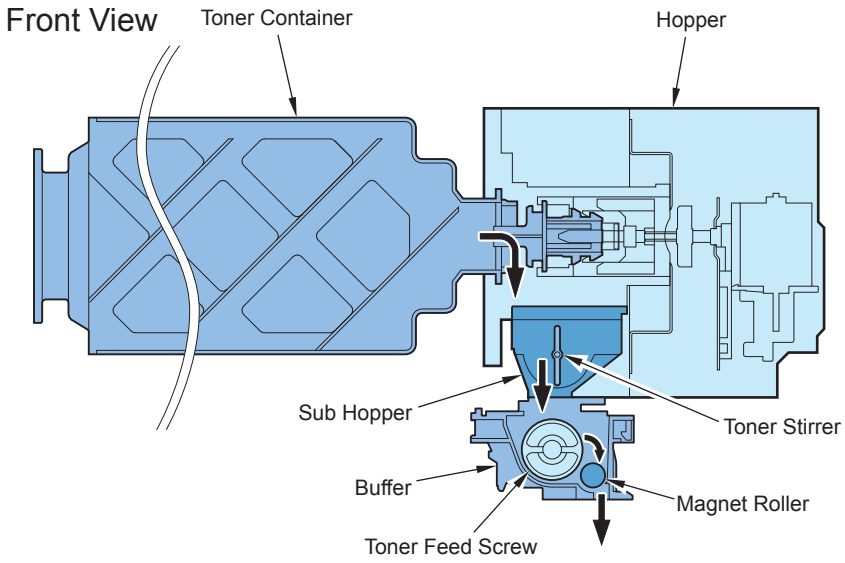
## Transfer Area



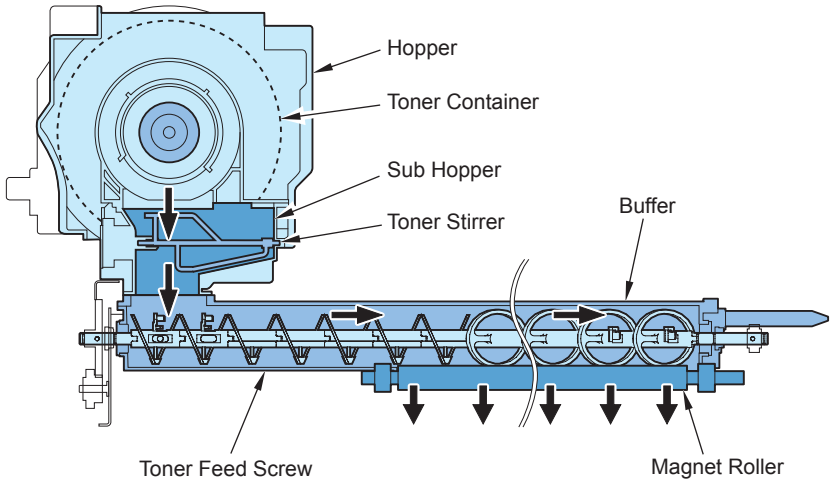

F-2-66

## Toner Supply Area

Front View

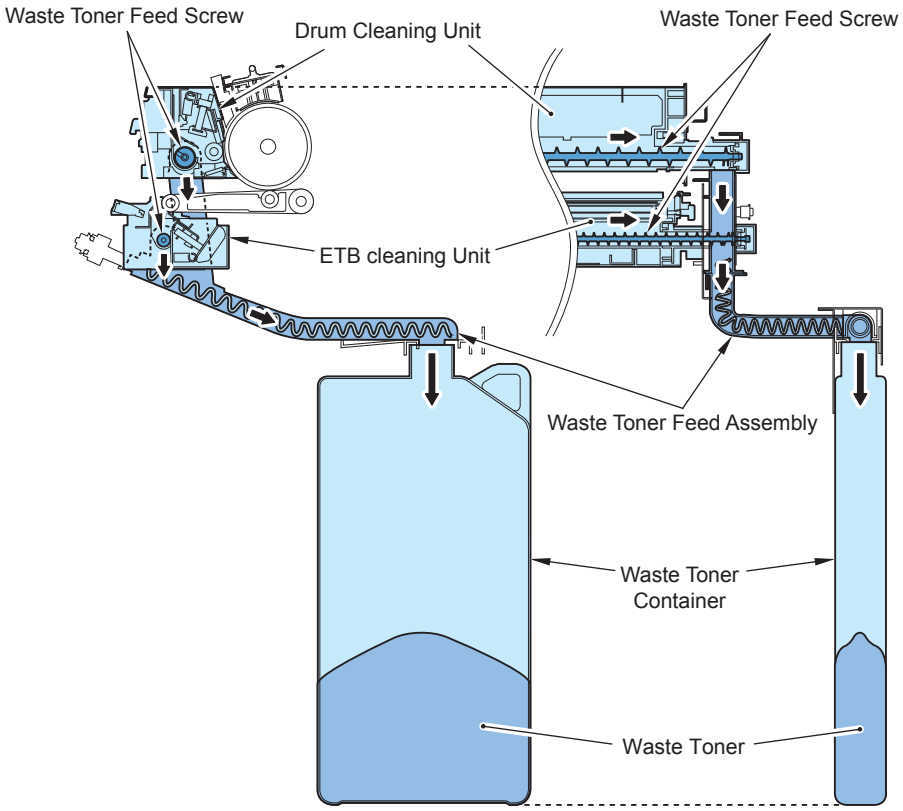



Right Side View




F-2-67

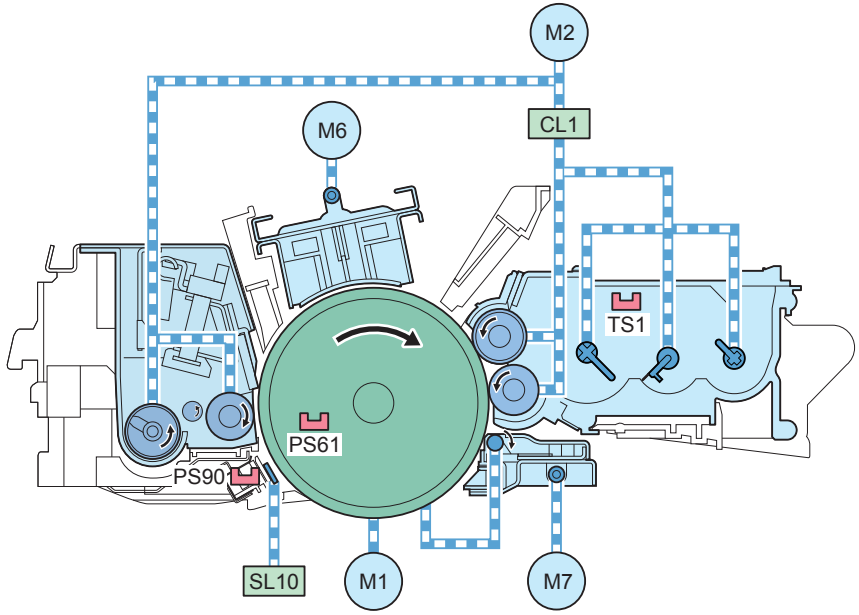
## Waste Toner Feeding Area




F-2-68

# Drive Configuration

## Process Area

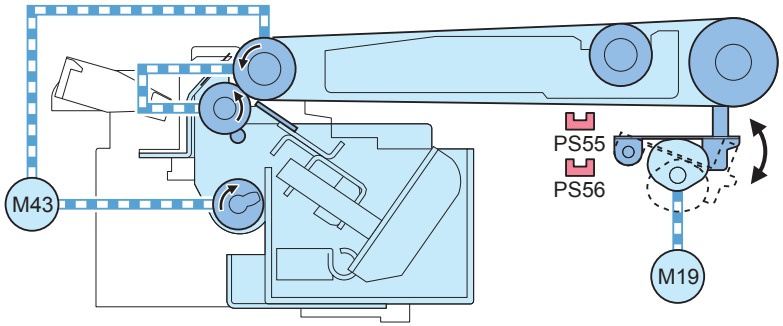



F-2-69

| Code | Name | Function |
|---|---|---|
| M1 | Drum Motor | To drive the Photosensitive Drum and the Dust-collection Roller |
| M2 | Main Motor | To drive the Developing Cylinder, the Toner Stirring Plate, the Magnet Roller and the Waste Toner Feed Screw |
| M6 | Primary Charging Wire Cleaning Motor | To drive the Primary Charging Wire Cleaning Pad and the Primary Charging Shutter |
| M7 | Pre-transfer Charging Wire Cleaning Motor | To drive the Pre-transfer Charging Wire Cleaning Pad and the Pre-transfer Charging Shutter |
| SL10 | Patch Sensor Shutter Solenoid | To drive the Patch Sensor Shutter |
| CL1 | Developing Clutch | To drive the Developing Cylinder and the Toner Stirring Plate |
| TS1 | Developing Toner Sensor | To detect toner level in the Developing Assembly |
| PS61 | Drum Home Position Sensor | To detect home position of the Photosensitive Drum |
| PS90 | Patch Sensor | To detect toner density (image stabilization control) |

T-2-28

## Transfer Area

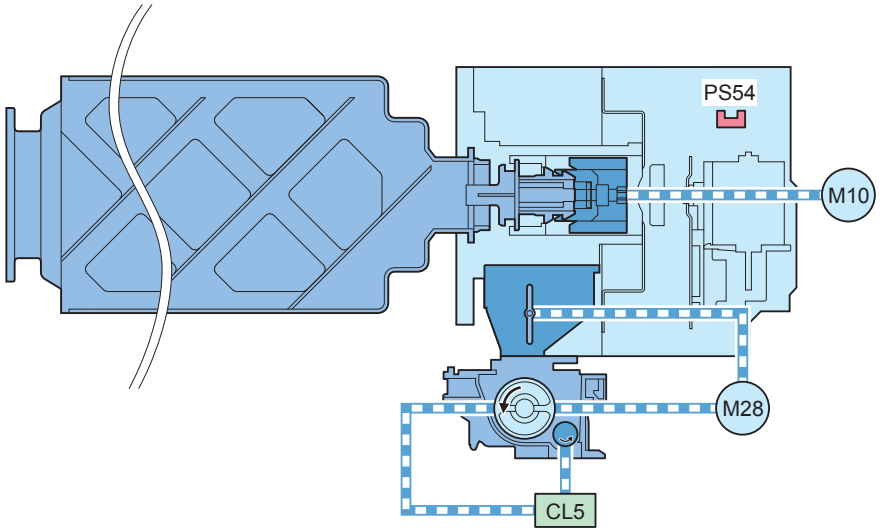


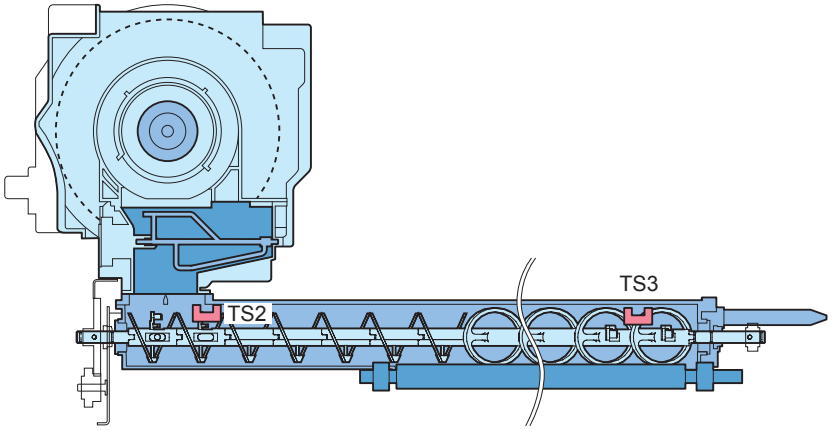

F-2-70

| Code | Parts name | Function |
|---|---|---|
| M19 | Duplex Feed Left Motor | To make the ETB Unit (ETB) engaged/disengaged |
| M43 | ETB Motor | To drive the ETB Drive Roller, the Brush Roller and the Waste Toner Feed Screw. |
| PS55 | ETB Engage Sensor | To detect engagement of the. |
| PS56 | ETB Disengage Sensor | To detect disengagement of the ETB (home position). |

T-2-29

## Toner Supply Area



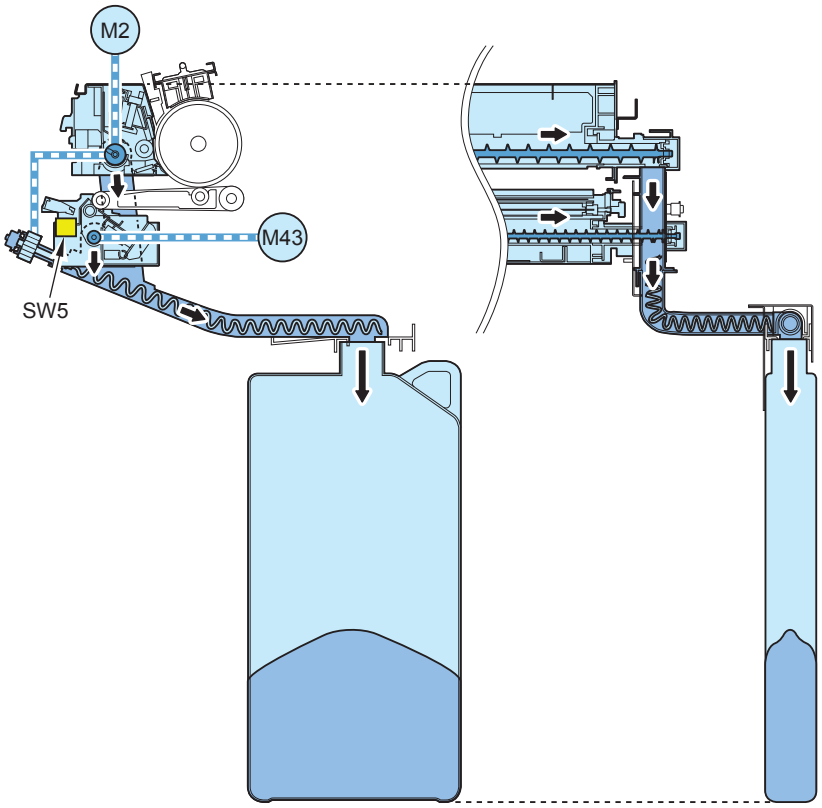

F-2-71

| Code | Parts name | Function |
|---|---|---|
| M10 | Hopper Toner Supply Motor | To drive the Toner Stirring Plate (to supply toner to the Buffer) |
| M28 | Buffer Toner Feed Motor | To drive the Toner Feed Screw and the Toner Stirring Plate (to feed toner) |
| CL5 | Developing Assembly Toner Supply Clutch | To drive the Magnet Roller (to supply toner to the Developing Assembly) |

| Code | Parts name | Function |
|---|---|---|
| TS2 | Buffer Toner Sensor 1 | To detect toner level in the Buffer(To avoid oversupply to the Buffer) |
| TS3 | Buffer Toner Sensor 2 | To detect toner level in the Buffer (to detect absence of toner in the Buffer) |
| PS54 | Toner Replacement Cover Sensor | To detect whether the Toner Replacement Cover is opened/closed. |

T-2-30

## Waste Toner Feeding Area




F-2-72

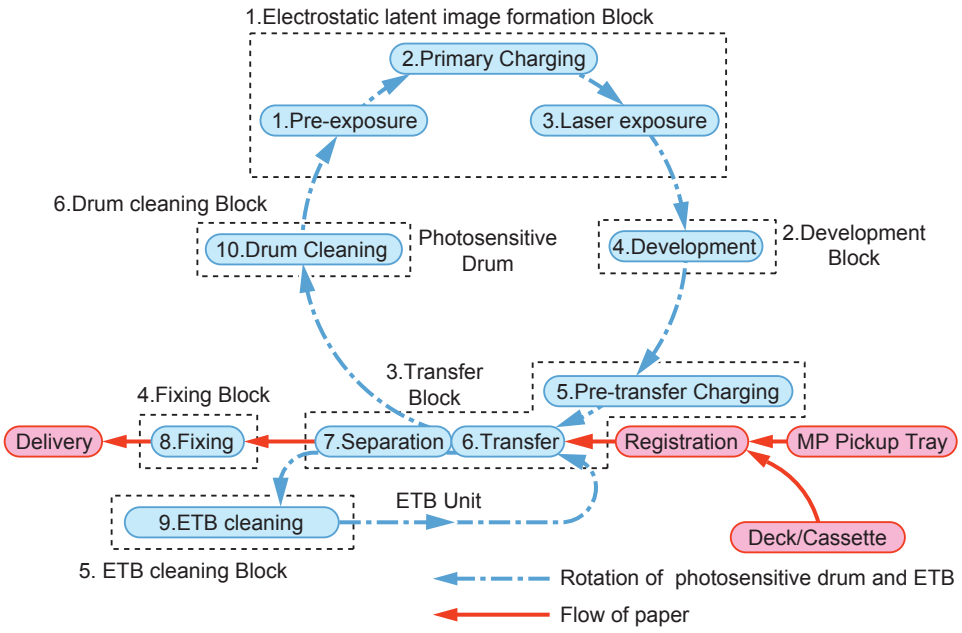
| Code | Parts name | Function |
|---|---|---|
| M2 | Developing Motor | To drive the Waste Toner Feed Screw(Drum Cleaning Unit) |
| M43 | ETB Motor | To drive the Waste Toner Feed Screw(ETB Cleaning Unit) |
| SW5 | Waste Toner Lock Detection Switch | To detect lock of the Waste Toner Feed Screw |

T-2-31

## Print Process

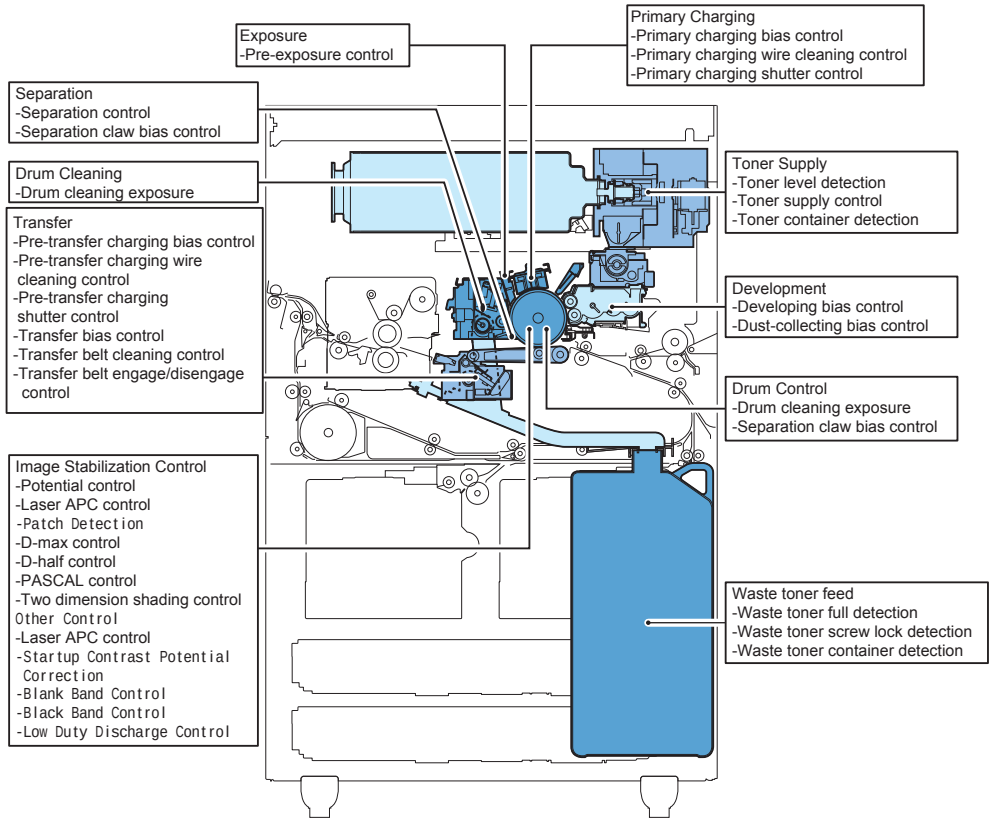
| Block | Step | | Overview |
|---|---|---|---|
| Static formation block | 1 | Exposure | Light emission from the Pre-exposure LED removes residual potential on the surface of the Photosensitive Drum to prevent density unevenness. |
| | 2 | Primary charging | The surface of the Photosensitive Drum is charged to make a uniform positive potential. This machine uses the Primary Charging Assembly which indirectly gives potential from the Charging Wire to the Photosensitive Drum. |
| | 3 | Laser exposure | Emission of the laser beam forms a static latent image on the surface of the Photosensitive Drum. When the laser beam is applied on the surface of the positively charged Photosensitive Drum, the potential at the emitted part is reduced. |
| Developing block<br>Transfer block | 4 | Developing | With the magnetic, 1-component toner projection developing method, toner that has been negatively charged by the Developing Cylinder is attached to the latent image on the surface of the Photosensitive Drum to make it visible. |
| | 5 | Pre-transfer charging | Toner on the Photosensitive Drum is made to be a uniform potential. |
| | 6 | Transfer | Positive potential is applied to the Transfer Roller so that the toner on the Photosensitive Drum is transferred on a paper. |
| | 7 | Separation | With the curvature separation method and the static eliminator, the paper is separated from the Photosensitive Drum and the ETB. |
| Fixing block | 8 | Fixing | The toner on the paper is fused on the paper by heat and pressure. |
| ETB cleaning block | 9 | ETB cleaning | The Cleaning Blade removes the residual toner attached on the ETB. |
| Drum cleaning block | 10 | Drum cleaning | The Cleaning Blade removes the residual toner attached on the Photosensitive Drum. |

T-2-32




F-2-73

# Controls




F-2-74

| Control name | | Description |
|---|---|---|
| Exposure | | |
| | Pre-exposure control | To apply the light of the Pre-exposure LED on the surface of the Photosensitive Drum. |
| Primary charging | | |
| | Primary charging wire bias control | To apply the positive potential to the Primary Charging Wire and the Primary Grid Plate. |
| | Primary charging wire cleaning control | To clean the Primary Charging Wire. |
| | Primary charging shutter control | To prevent image failure caused by ozone generated from the Primary Charging Wire. |
| Developing | | |
| | Developing bias control | To apply positive potential to the Developing Cylinder so that the toner on the Developing Cylinder is attached on the surface of the Photosensitive Drum. |
| | Dust-collection bias control | To collect the scattered toner to prevent toner that scatters during developing process from being attached to the Photosensitive Drum. |
| | Toner collection sheet bias control | To apply negative potential to the Toner Collection Sheet. |
| Transfer | | |
| | Pre-transfer charging bias control | To charge toner negatively and evenly to ensure stability of transfer performance. |
| | Pre-transfer charging wire cleaning control | To clean the Pre-transfer Charging Wire to prevent the Charging Wire failure that is caused by soil of the Pre-transfer Charging Wire. |
| | Pre-transfer charging shutter control | To prevent image failure caused by ozone generated from the Pre-transfer Charging Wire. |
| | Transfer bias control | To apply positive potential to the Transfer Roller so that the toner on the Photosensitive Drum is transferred on the paper. |
| | Transfer belt cleaning control | To remove the residual toner on the Transfer Belt to prevent image failure that is caused by toner soil on the belt. |
| | Transfer belt engagement/ disengagement control | To engage/disengage the Transfer Belt with the Photosensitive Drum. |
| Separation | | |
| | Separation control | To separate paper from the Photosensitive Drum and the Transfer Belt. |
| | Separation bias control | To remove toner attached to the Drum Separation Claw. |
| Drum cleaning | | |
| | Drum cleaning control | To remove residual toner on the Photosensitive Drum. |
| Drum control | | |
| | Drum home position detection | To detect home position of the Photosensitive Drum. |
| | Drum heater control | To keep constant temperature of the Photosensitive Drum. |

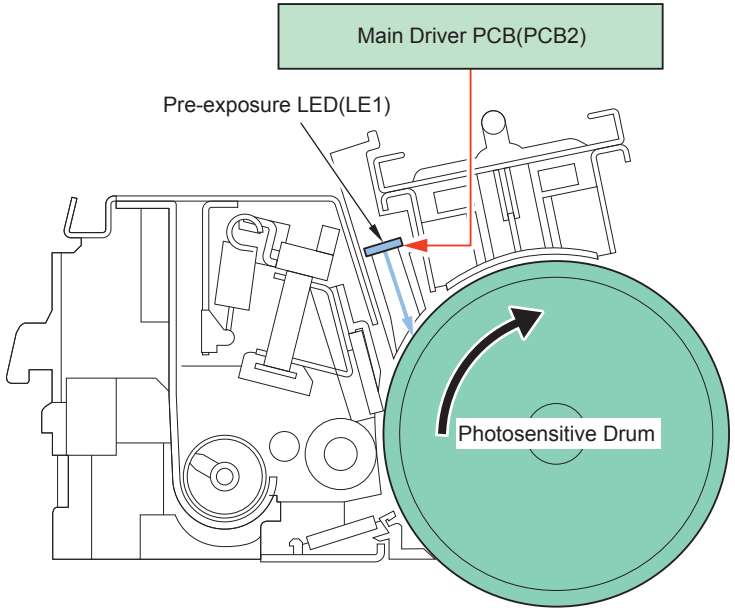
| Control name | | Description |
|---|---|---|
| Toner supply | | |
| | Toner level detection | To detect toner level in the Developing Unit and the Buffer Unit. |
| | Toner supply control | To supply toner from the Toner Container to the Developing Assembly. |
| | Toner container detection | To detect whether the Toner Container is attached to the host machine. |
| Waste toner feeding | | |
| | Waste toner full level detection | To detect whether the Waste Toner Container is full. |
| | Waste toner screw lock detection | To detect whether the Waste Toner Screw is locked. |
| | Waste toner container detection | To detect whether the Waste Toner Container is attached to the host machine. |
| Image stabilization control | | |
| | Potential control | To determine primary current (Ip), laser power (Lp) and developing bias (Vdc) according to the deterioration level of the Photosensitive Drum and the environmental change. |
| | Patch Detection | To detect the patch on the Drum by the Patch Sensor to measure the toner density. |
| | D-max control | To determine the developing contrast to keep solid density on the image constant. |
| | D-half control | To determine the gradation adjustment value based on the image density detected by the Patch Sensor. |
| | PASCAL control | To determine gradation adjustment value based on the image density scanned by the Reader. |
| | 2D shading control | To correct uneven potential on the Photosensitive Drum by laser exposure. |
| Other Control | | |
| | Startup Contrast Potential | To adjust the contrast potential (Vcont) at startup in order to maintain the density consistently. |
| | Laser APC control | To correct the laser output control value to prevent changes in surface potential by the laser output. |
| | Blank Band Control | To blow off the reversely-charged toner on the Developing Sleeve forcibly to the Drum surface in order to collect the toner into the Drum Cleaning Unit. |
| | Black Band Control | To supply toner thoroughly to the ends of the Cleaning Blade and prevent the blade from everting by forming the toner band at the Drum ends. |
| | Low Duty Discharge Control | To forcibly eject toner by forming the toner band at the Drum ends in order to avoid toner deterioration in case low duty images are continuously output. |

T-2-33

## Exposure

### Pre-exposure Control

To prevent uneven density with the print image, residual potential on the Photosensitive Drum is removed before the primary charging.
With the command by the DC Controller PCB, the Pre-exposure LED (LED 1) is emitted. By emitting the LED on the Photosensitive Drum, remove residual potential on the drum.




F-2-75

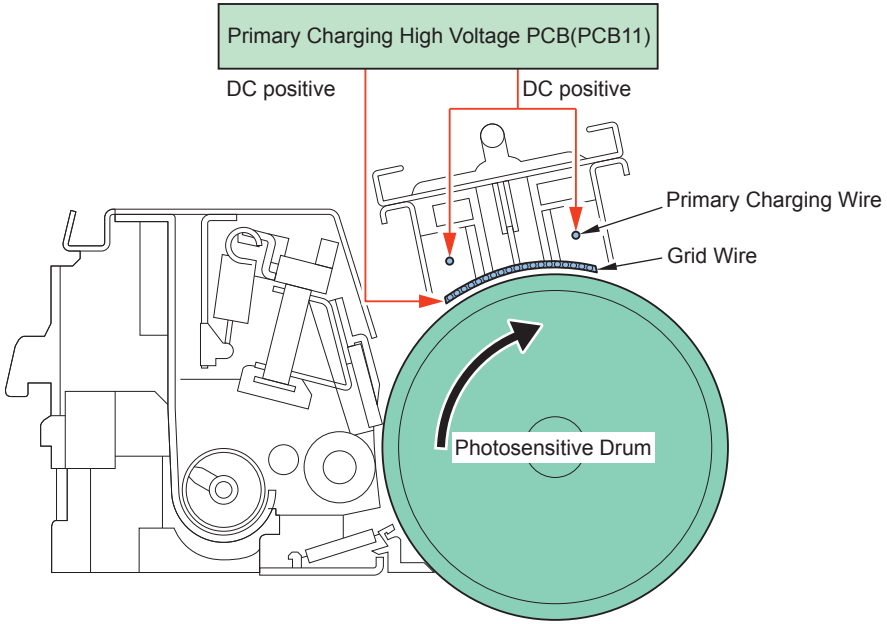
# Primary Charging

## Primary Charging Bias Control

To make the surface of the Photosensitive Drum evenly and positively charged.
The primary charging bias (DC positive), which has been generated by the Primary Charging High Voltage PCB (PCB11), is applied to the Primary Charging Wire and the Grid Plate.

- Primary charging DC bias: the bias to be applied to the Primary Charging Wire
- Grid DC bias: the bias to be applied to the Grid Plate

The primary charging bias value is specified by the potential control.
The grid bias is specified based on the estimated life and the environment.




F-2-76

## Primary Charging Wire Cleaning Control

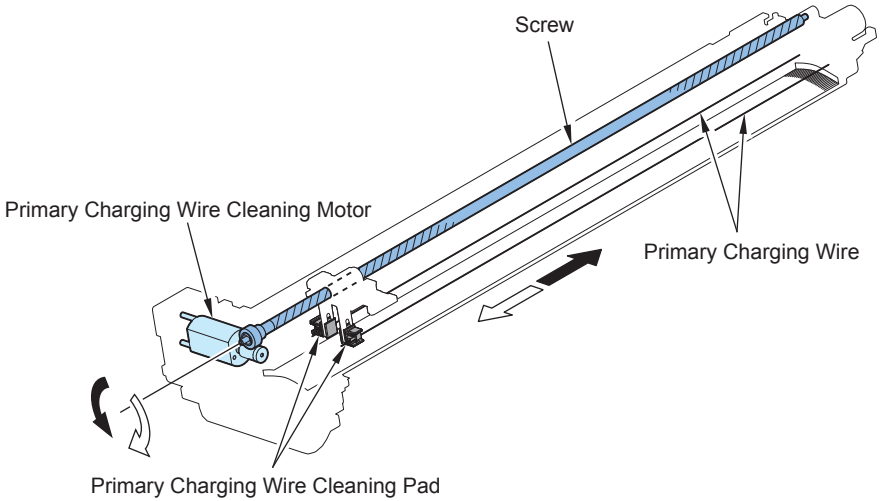
To prevent charging failure caused by soil of the Primary Charging Wire.

<Execution timing>

- Interruption at every 2000 sheets of continuous print (the value can be changed in service mode: 100 to 2000 sheets)
- After last rotation which is performed on the 1500th sheet and later since the last cleaning (1-roundtrip)
- In the case of executing “Clean Wire” in user mode (1-roundtrip)
- In the case of executing the wire cleaning in service mode (1-roundtrip or 3-roundtrip)

<Control description>

The drive of the Primary Charging Wire Cleaning Motor (M6) makes the Cleaner Screw rotate clockwise/counterclockwise, which moves the Cleaning Pad back and forth to clean the Primary Charging Wire.
Position detection of the Cleaning Pad is not performed.




F-2-77

<Related service modes>

To clean the Charging Wire (3-roundtrip)
COPIER > FUNCTION > CLEANING > WIRE-CLN
To check operation of the Charging Wire Cleaning (1-roundtrip)
COPIER > FUNCTION > CLEANING > WIRE-EX
To specify cleaning interval of the Last Rotation Charging Wire ((Default: every 2000 sheets (the interval can be changed within the range between 1000 and 5000 sheets))COPIER > OPTION > CLEANING > W-CLN-P

## Primary Charging Shutter Control

To prevent uneven potential on the Photosensitive Drum caused by discharge products (nitrogen oxide) accumulated on the Primary Charging Assembly.

NOTE:
In the environment which moisture content is lower than the one in power saving environment (temperature: 22 deg C, humidity: 75%, moisture content: 12.41g), set the Drum Heater to OFF in the sleep mode after a specified time passes. Discharge product (nitrogen compound) which is generated at the Charging Assembly when image is formed is deposited on the Drum when the time passes. When the Drum Heater is OFF, the discharge product (nitrogen compound) has a chemical reaction with the moisture in the air and generates nitric acid. This nitric acid deteriorates the surface of the Drum and causes the image failure.

<Execution timing>

- When the Drum Heater is turned OFF
- During sleep mode

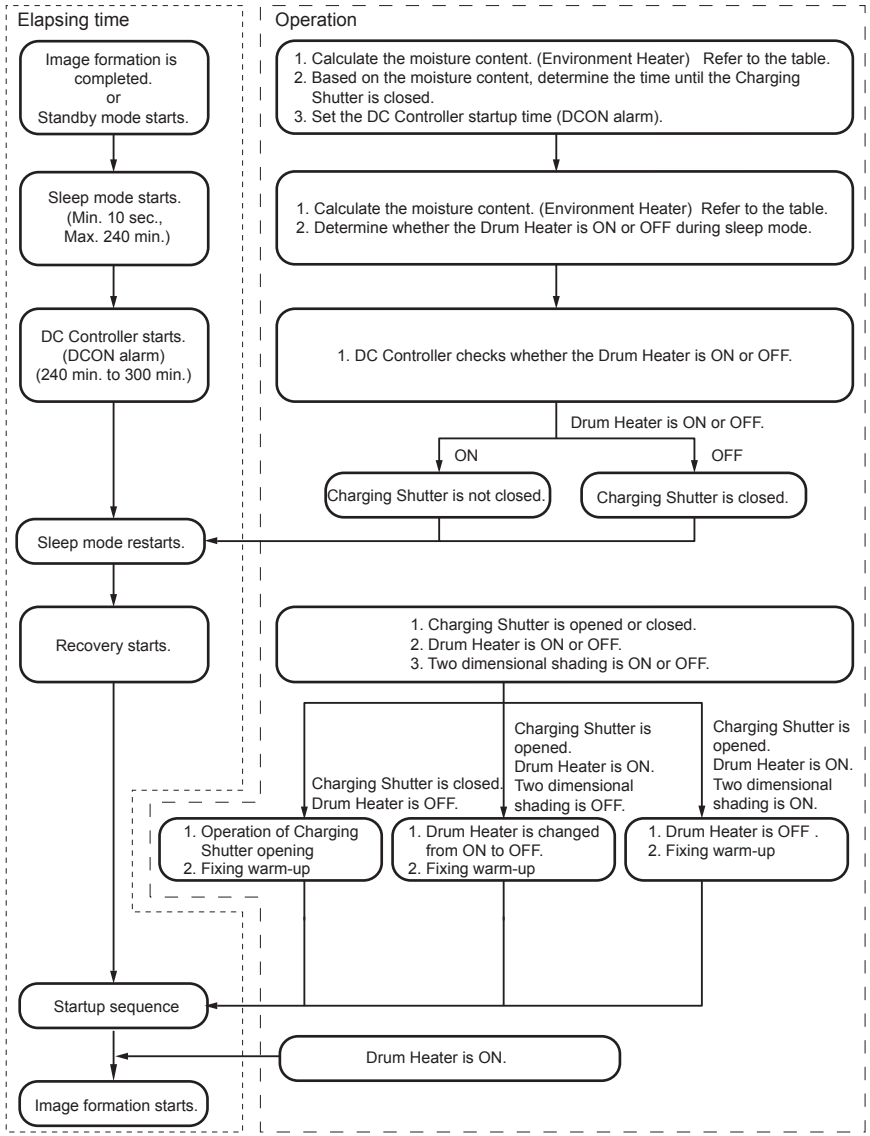
<Execution timing>

- After 4 or 5 hours since the drum was stopped*
  *The time is determined by the environment (moisture content) when the drum operation was stopped

| Environment | Moisture content | Temperature/Humidity | Drum Heater | Time |
|---|---|---|---|---|
| 1 | to 0.86 | 23 deg C 5% | OFF | 300 min. |
| 2 | to 1.73 | 23 deg C 10% | OFF | 285 min. |
| 3 | to 5.8 | 23 deg C 30% | OFF | 270 min. |
| 4 | to 8.9 | 23 deg C 50% | OFF | 255 min. |
| Energy save | to 12.41 | 22 deg C 75% | OFF | 240 min. |
| 5 | to 15 | 23 deg C 70% | ON | Not close |
| 6 | to 18 | 27 deg C 80% | ON | Not close |
| 7 | to 12.41 | 30 deg C 80% | ON | Not close |

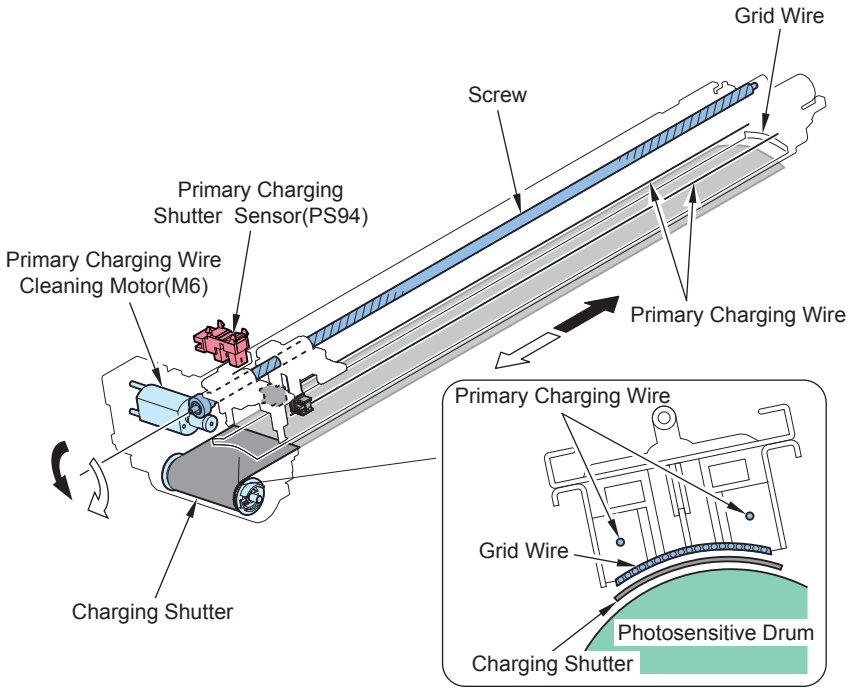
T-2-34

Shutter Open/Close Operation Sequence




F-2-78

<Control description>
The shutter is open or closed by the cleaning mechanism of the Primary Charging Wire.
The Primary Charging Shutter is made of fiber and usually taken up by the bobbin.
The drive of the Primary Charging Wire Cleaning Motor (M6) moves the Cleaning Pad to the rear and the shutter taken up by the bobbin becomes extended to make the Shutter closed.
Because the Shutter comes between the Grid Wire and the Photosensitive Drum, discharge products from the Primary Charging Assembly do not reach the Photosensitive Drum.
The Primary Charging Shutter Position Sensor (PS94) detects opening/close of the shutter.




F-2-79

<Related error code>
E060-0001 Primary Charging Shutter HP open error
E060-0002 Primary Charging Shutter HP close error

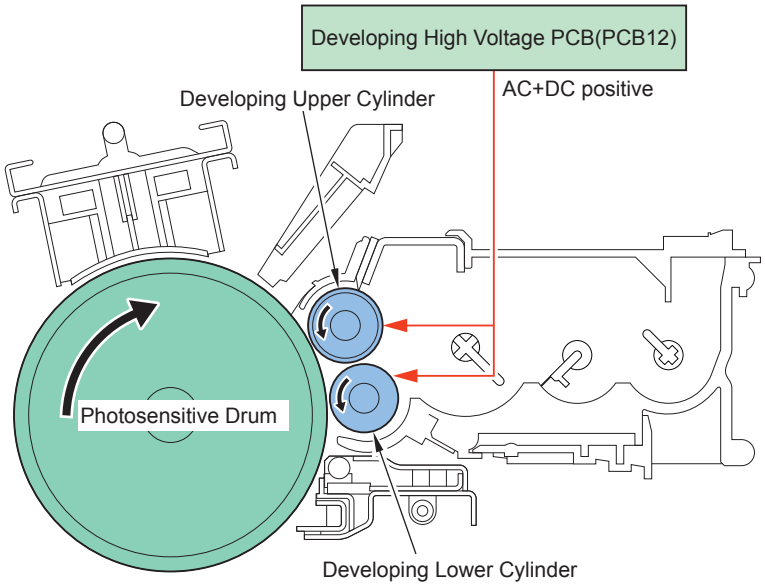
## Developing

### Developing Bias Control

To form a toner image on the Photosensitive Drum by charging toner on the Developing Cylinder.

<Control description>
The developing bias (AC, DC positive), which has been generated on the Develop High Voltage PCB (PCB12), is applied to the Developing Cylinder.

- Developing DC bias
  The bias to generate potential difference with the Photosensitive Drum.
  The bias value is determined based on the D-max control.
- Developing AC bias
  The bias to improve image quality.
  The bias value is fixed.

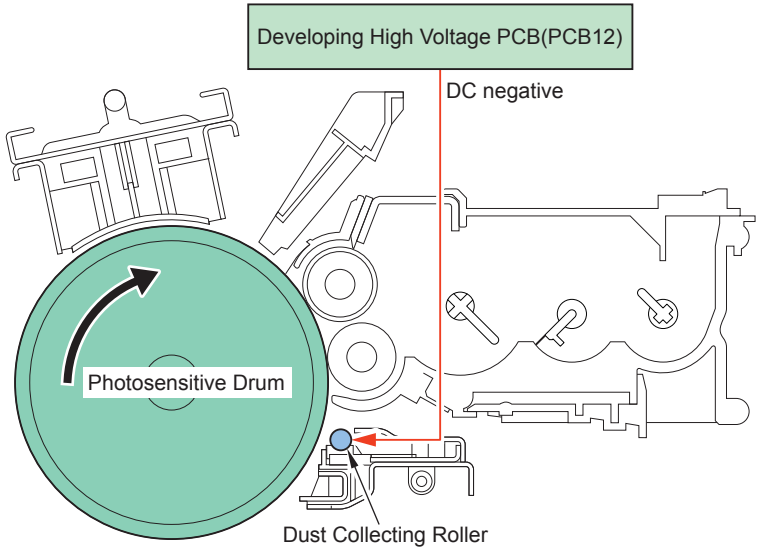



F-2-80

## Dust-collection Bias Control

To collect toner which floats over the Photosensitive Drum during developing process.

<Control description>
The dust-collection bias (DC negative), which has been generated on the Develop High Voltage PCB (PCB12), is applied to the Dust-collection Roller.
The bias value is fixed.

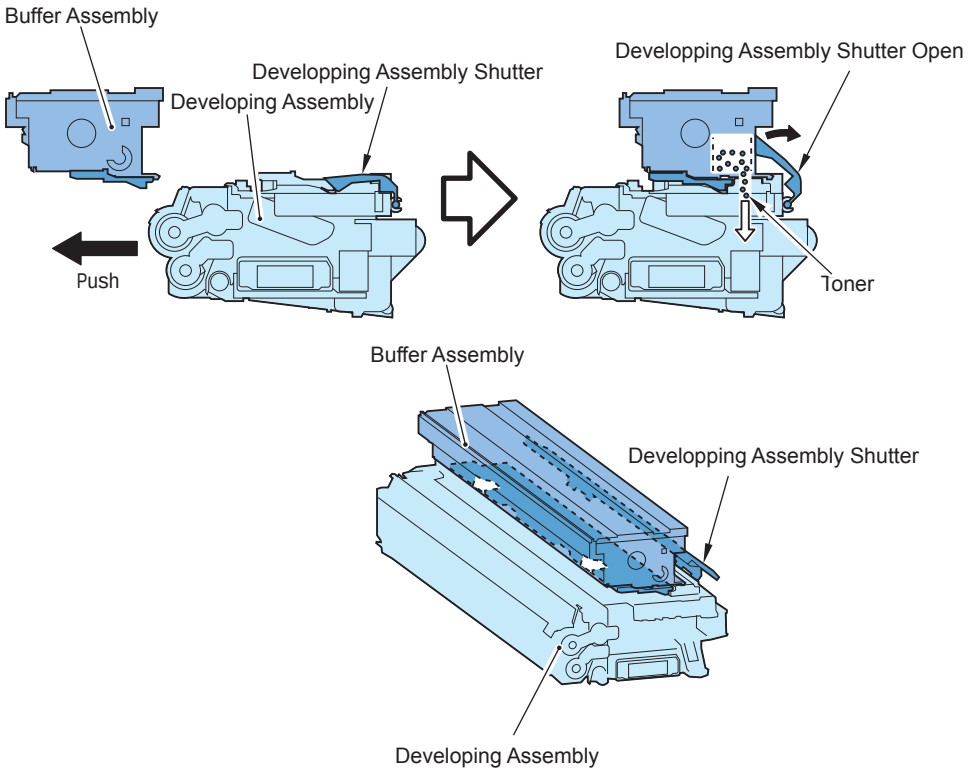



F-2-81

## Developing Supply Shutter Opening/Closing Mechanism

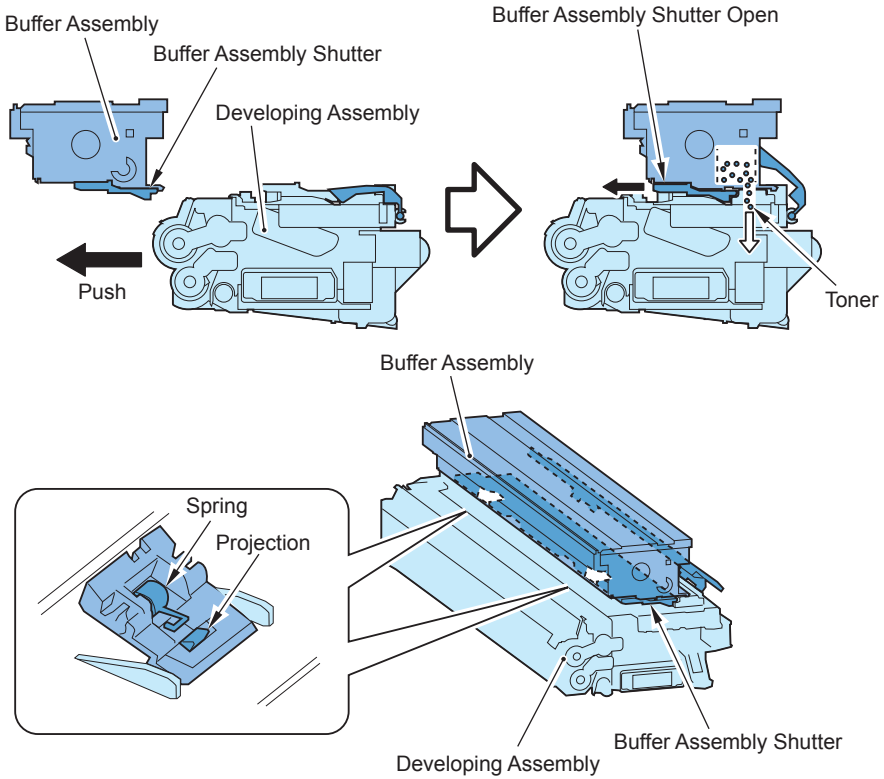
There are shutters at the Supply Mouths of the Developing Assembly and the Buffer Unit to prevent toner scattering.
The Developing Shutter and Buffer Shutter is opened/closed in conjunction with push-in and pull-out of the Developing Assembly.

<Opening and Closing Operations of the Developing Shutter>
By pushing the Developing Assembly in the main body, the Developing Shutter comes in contact with the Buffer Unit.
By pushing the assembly in farther, the Developing Shutter opens along the side of the Buffer Unit. By pulling the Developing Assembly out from the main body, the Developing Shutter closes by its own weight so the Supply Mouth is closed




F-2-82

<Opening and Closing Operations of the Buffer Shutter>
By pushing the Developing Assembly in the main body, edge of the Supply Mouth on the assembly hits to leading edge of the Buffer Shutter.
By pushing the assembly in farther, the Buffer Shutter moves to the rear so the Supply Mouth is opened.
The Shutter Arm goes down by spring pressure, and it interlocks with the protrusion on the Developing Shutter.
By pulling the Developing Assembly out, the Shutter Arm is pushed by the protrusion on the Developing Shutter, so the Buffer Shutter is closed followed by the Supply Mouth. The Shutter Arm lifts up by hitting to the bottom of the Hopper.

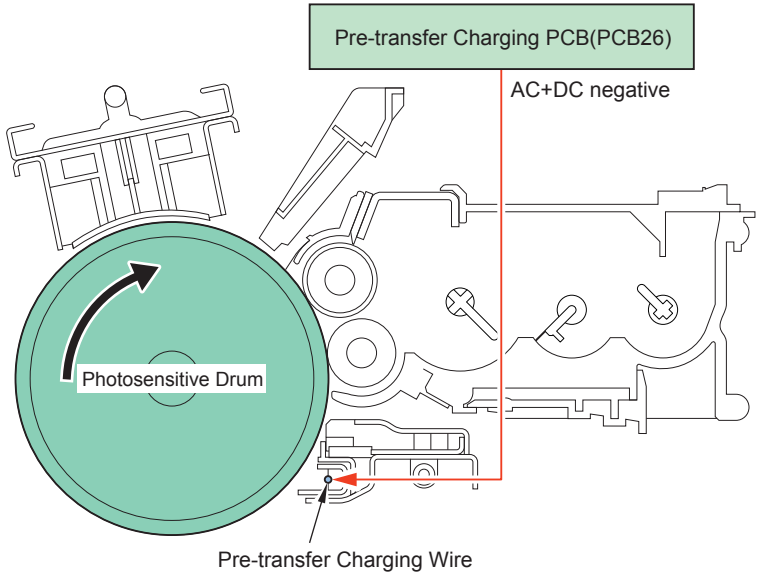



F-2-83

## Transfer

### Pre-transfer Charging Bias Control

To make the charging amount of toner on the Photosensitive Drum appropriate to improve transfer performance.
The pre-transfer charging bias (AC + DC negative), which has been generated on the Pre-transfer Charging PCB (PCB26), is applied to the Pre-transfer Charging Wire.



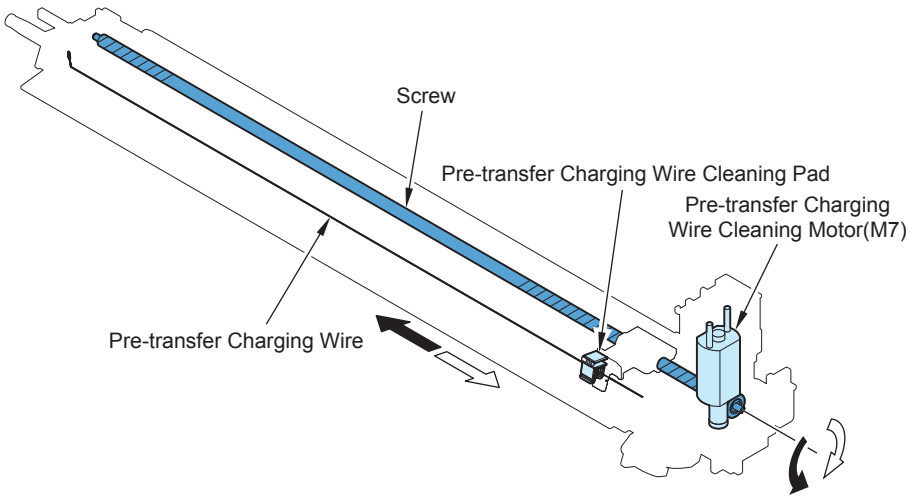

F-2-84

## Pre-transfer Charging Wire Cleaning Control

To prevent charging failure caused by soil of the Pre-transfer Charging Wire.

<Execution timing>
To be executed together with the primary charging wire cleaning control at the same time.

<Control description>
The drive of the Pre-Transfer Charging Wire Cleaning Motor (M7) makes the Cleaner Screw rotate clockwise/counterclockwise, which moves the Cleaning Pad back and forth to clean the Pre-transfer Charging Wire.
The Pre-transfer Charging Shutter Position Sensor ( ) detects position of the Cleaning Pad.




F-2-85

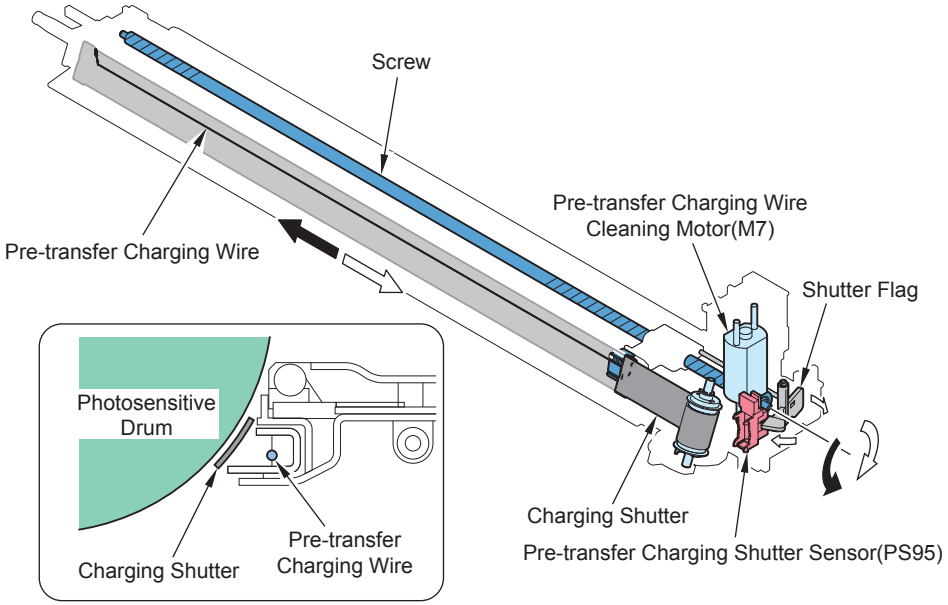
<Related service modes>
- To clean the Charging Wire (5-roundtrip)
  COPIER > FUNCTION > CLEANING > WIRE-CLN
- To check operation of the charging wire cleaning (1-roundtrip)
  COPIER > FUNCTION > CLEANING > WIRE-EX
- To specify cleaning interval of the last rotation charging wire (Default: every 2000 sheets (the interval can be changed within the range between 1000 and 5000 sheets))
  COPIER > OPTION > CLEANING > W-CLN-P

## Pre-transfer Charging Shutter Control

To prevent uneven potential on the Photosensitive Drum caused by discharge products (nitrogen oxide) accumulated on the Pre-transfer Charging Assembly.

<Execution timing>
To be executed together with the  Pre-transfer charging wire cleaning control at the same time.

<Control description>
The shutter is opened or closed by the cleaning mechanism of the Pre-transfer Charging Wire.
The Pre-transfer Charging Shutter is made of fiber and usually taken up by the bobbin.
The drive of the Pre-transfer Charging Wire Cleaning Motor (M7) moves the Cleaning Pad to the rear and the shutter taken up by the bobbin becomes extended to make the Shutter closed.
Because the Shutter comes between the Pre-transfer Charging Wire and the Photosensitive Drum, discharge products from the Primary Charging Assembly do not reach the Photosensitive Drum.
The Pre-transfer Charging Shutter Position Sensor (PS95) detects opening/close of the shutter.




F-2-86

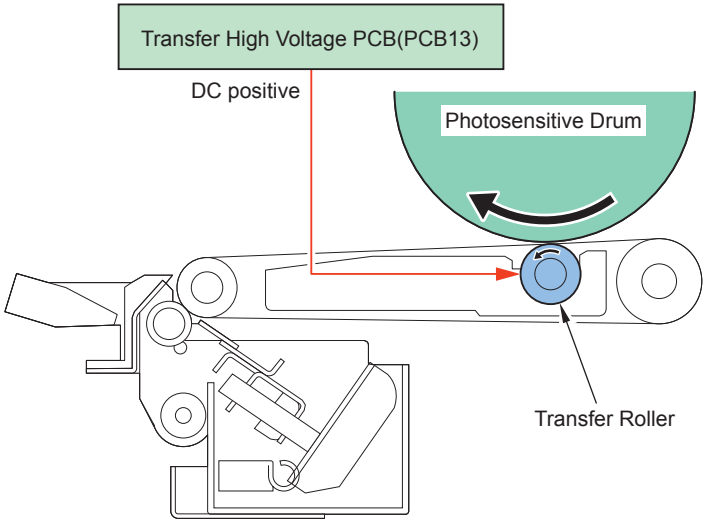
## Transfer Bias Control

To transfer toner on the Photosensitive Drum to a paper.

The transfer bias (DC positive), which has been generated on the Transfer High Voltage PCB (PCB13), is applied to the Transfer Roller.

Following shows the 3 types of transfer bias:

- Print bias: the bias to be applied during printing
- Paper leading edge weak bias: the bias to be applied to the leading edge of the paper (to prevent failure in paper separation)
- Paper interval bias: the bias to be applied between sheets
  The bias value is determined by the environment, the paper type and the mode table.



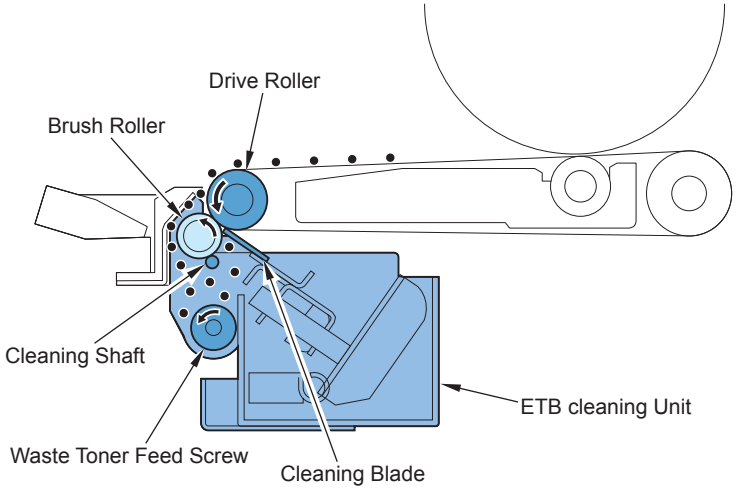

F-2-87

## ETB Cleaning Control

To prevent image failure caused by toner soil on the ETB, the residual toner on the Transfer Belt is removed.

<Control description>

1) The ETB Cleaning Blade scrapes toner on the ETB.
2) The scraped toner is fed to the Waste Toner Container.




F-2-88

<Related service mode>

- To clean the ETB (3-round idle rotation of the ETB)
  COPIER > FUNCTION > CLEANING > TBLT-CLN

## ETB Engagement/Disengagement Control

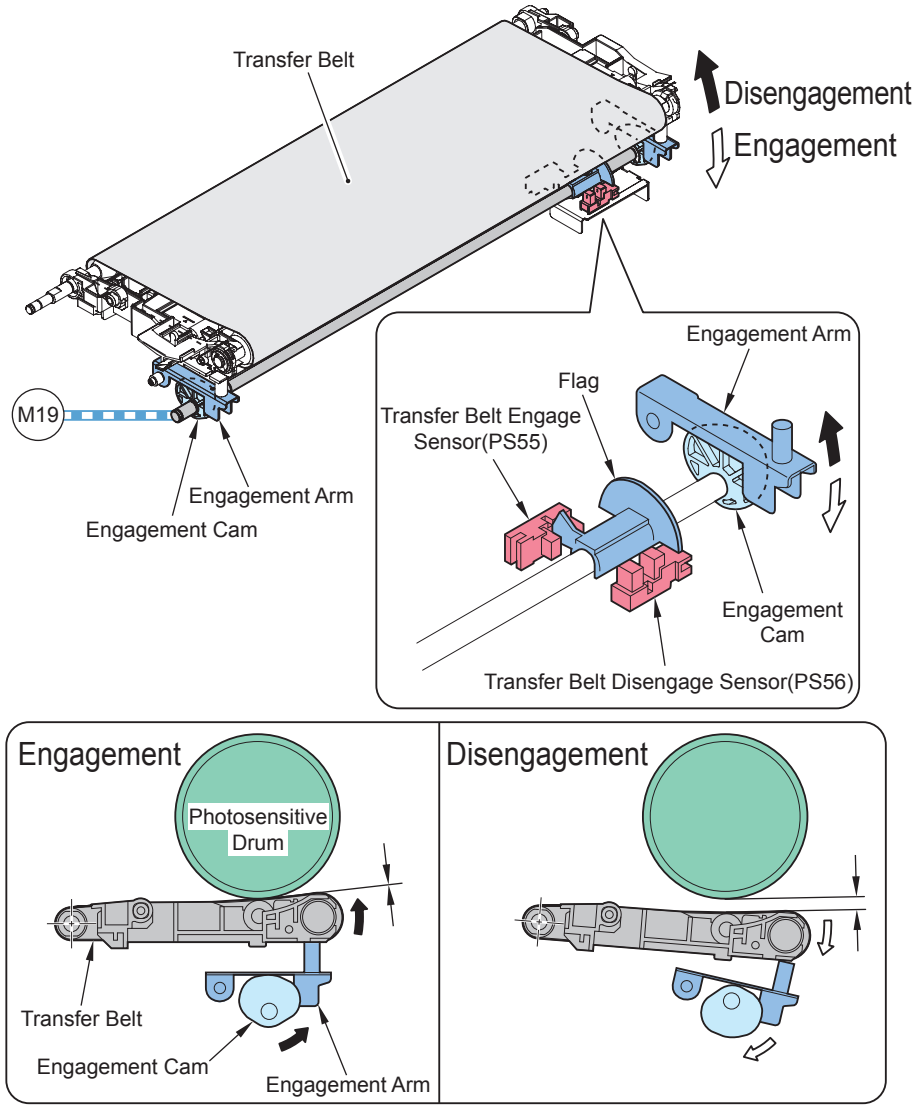
To prevent image failure caused by toner soil on the ETB, the ETB is engaged or disengaged with the Photosensitive Drum.

<Execution timing>

- To make the belt engaged: during printing
- To make the belt disengaged: any timing other than the above

<Control description>

1) Reverse rotation of the Duplex Feed Left Motor (M19) makes the Disengagement Cam rotate.
2) Rotation of the Disengagement Cam moves the Disengagement Arm up and down to make the Transfer Belt engaged/disengaged with the Photosensitive Drum.
3) Following 2 sensors detect position of the Transfer Belt.
   - Transfer Belt Engage Sensor (PS55): to detect engagement of the Transfer Belt
   - Transfer Belt Disengage Sensor (PS56): to detect disengagement (home position) of the Transfer Belt.



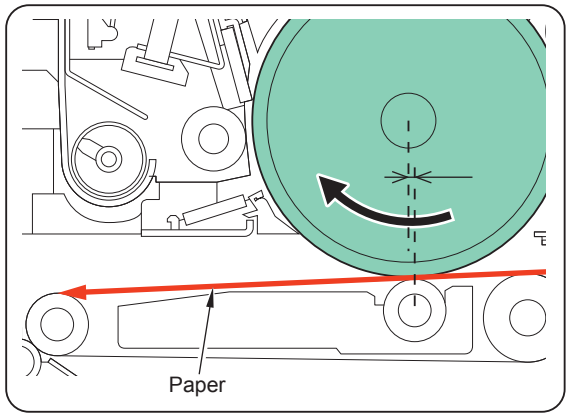

F-2-89

# Separation

## Separation Control

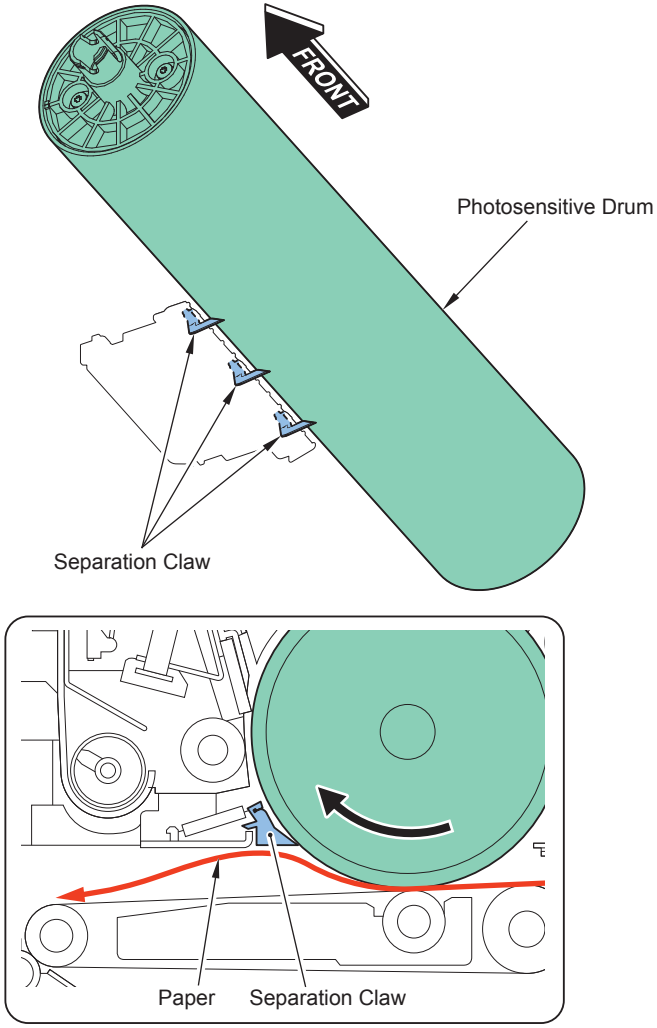
<Separation from the Drum>

Separation is performed using the curvature separation method.



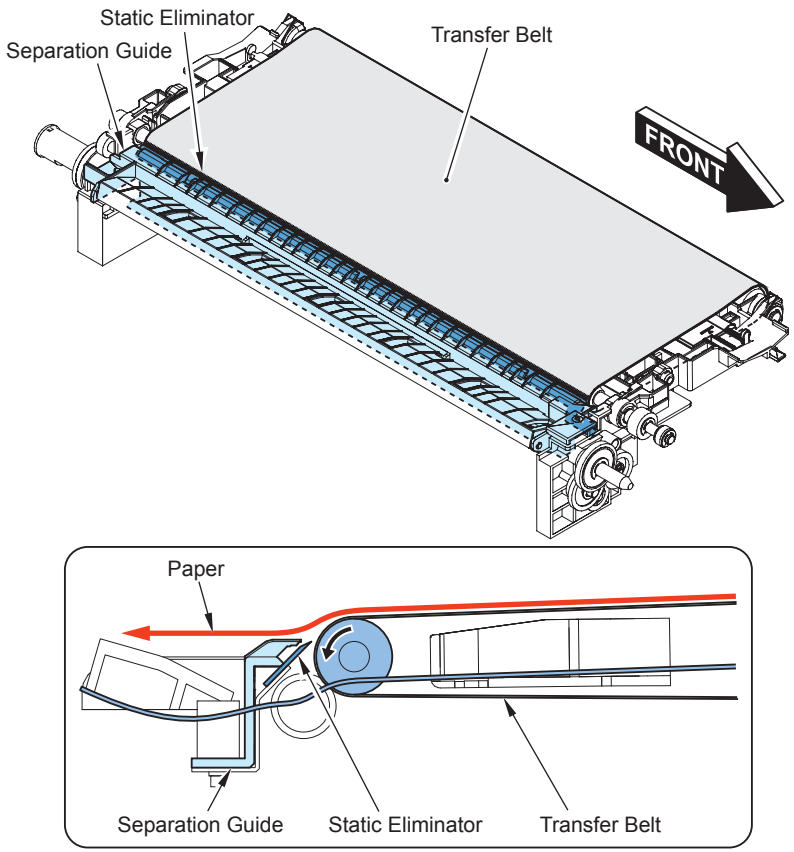

F-2-90

NOTE:
The Separation Claw separates sheets before entering the Drum Cleaning Unit.
This effectively avoids failure in paper feed (double feed, etc.)




F-2-91

<Separation from the ETB>
Separation is performed using the curvature separation method and the Static Eliminator.
There is no bias for separation.




F-2-92

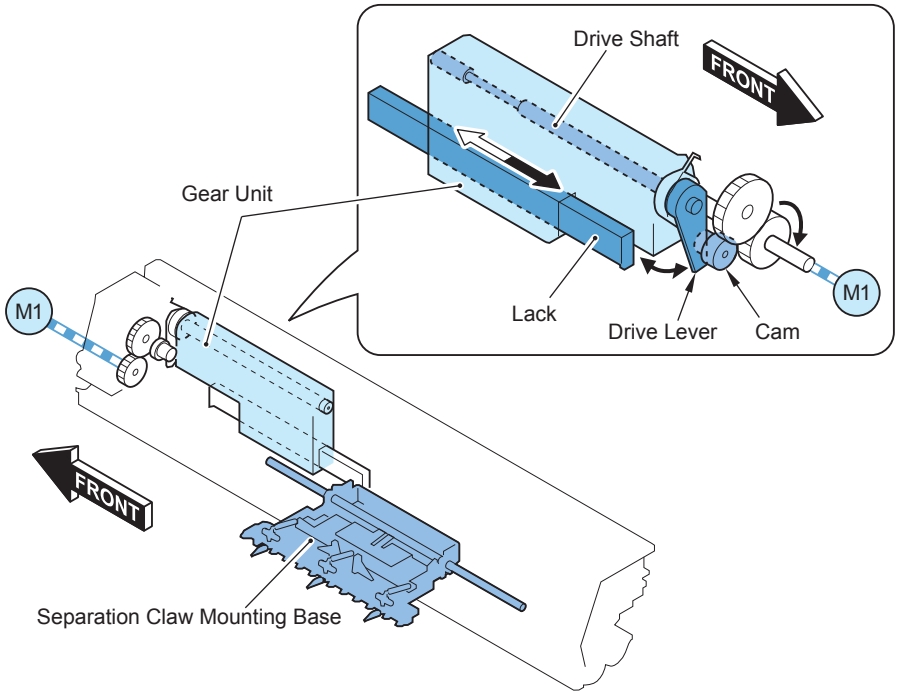
## Separation Claw Reciprocation Control

By moving the Separation Claw back and forth (reciprocation), scar on the drum caused by the Separation Claw can be prevented.

<Execution Timing>
During printing (while the Developing Motor is driving)
<Control Description>
Making the Separation Claw move back and forth by transmitting the rotation force of the Developing Motor Drive via the cam and Gear Unit.

Reciprocation width: +/-25mm

1) The drive of the Developing Drive Motor makes the cam rotate.
2) The Drive Lever moves in a pendulum motion by the rotation of the cam, which make the Drive Shaft rotates. (With the one-way bearing, the Drive Shaft rotates in only one direction.)
3) Making the Lack move back and forth by transmitting the rotating motion of the Drive Shaft via the Gear Unit. The Separation Mounting Base linked with the Lack moves back and forth.




F-2-93

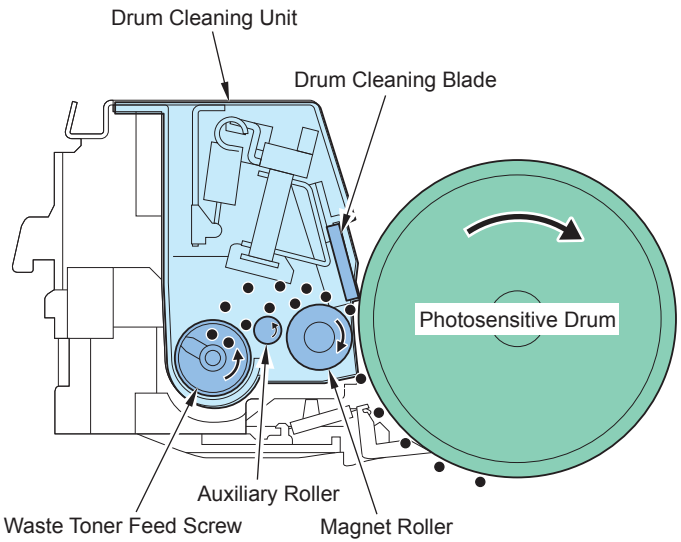
# Drum Cleaning

## Drum Cleaning Control

The blade, which is in contact with the Drum, removes residual toner and paper dust on the Photosensitive Drum.

<Control description>

1) The drive of the Main Motor (M2) makes the Magnet Roller rotate.
2) The Magnet Roller forms a thin toner coating layer on the surface of the Photosensitive Drum.
3) The Drum Cleaning Blade scrapes residual toner on the surface of the Drum.
4) The Toner Collection Feeding Screw feeds the scraped waste toner to the Waste Toner Container.




F-2-94

## Separation Bias Control

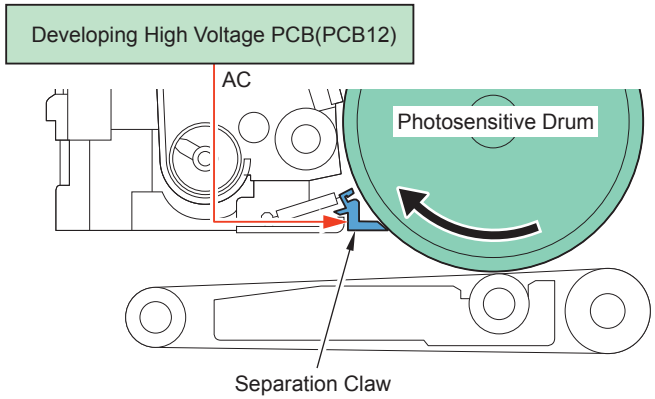
To prevent image soil caused by toner accumulated on the Drum Separation Claw, this control prevents attachment of toner on the Photosensitive Drum with the Drum Separation Claw.

<Execution timing>

When the developing bias is applied

The separation claw bias (AC), which has been generated on the Develop High Voltage PCB (PCB12), is applied to the Separation Claw so that vibration is given to the Separation Claw to prevent toner attachment.

The bias value is fixed.

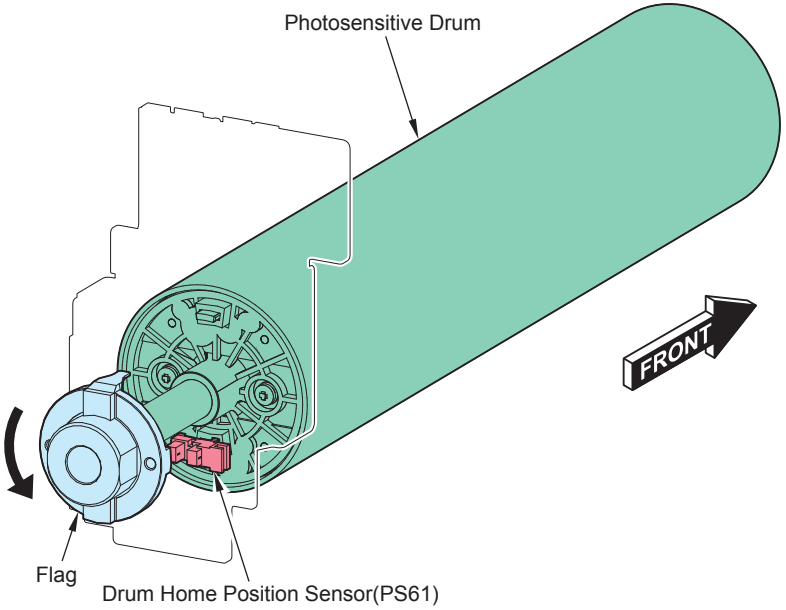



F-2-95

# Drum-related Issues

## Drum HP Detection

To detect home position of the Photosensitive Drum.
There is a flag for HP detection on the shaft of the Photosensitive Drum. Once the Photosensitive Drum starts rotating, the flag passes through the Drum HP Sensor (PS61) and the home position of the Photosensitive Drum is detected.
This control is used during the D-max control, the D-half control and the 2D shading control.

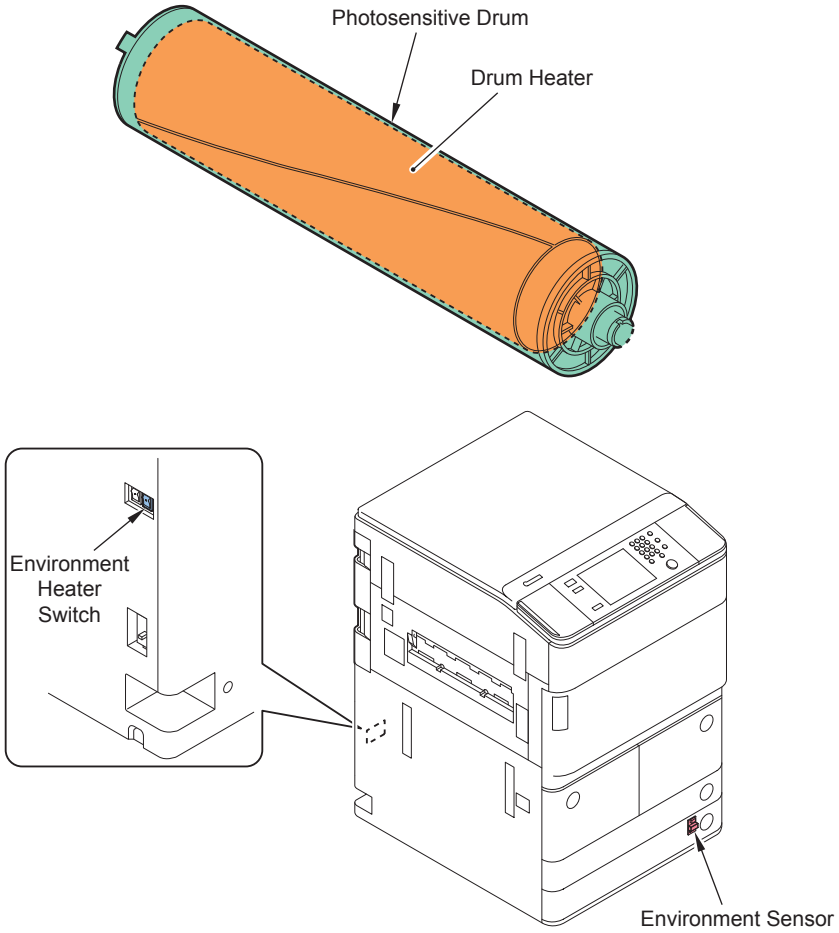



F-2-96

## Drum Heater Control

To make potential characteristic for charging or exposure stable by keeping the specified temperature of the Photosensitive Drum.
The Drum Heater is the flat heater located inside the Photosensitive Drum to keep moisture content on the surface of the Photosensitive Drum constant by turning ON the heater.

NOTE:
Temperature of the drum is detected by the Thermistor in the Drum Control PCB, and is controlled by turning ON/OFF the Drum Heater to make it 42 degC




F-2-97

<Operating condition>

Operating condition of the heater differs according to the status of the Environment Switch and the host machine.

A.2-dimensional shading OFF(defolt*1)

<Environment Switch: OFF>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | Environment control *1 | Environment control *1 | ON | ON |
| | Cassette | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-35

<Environment Switch: ON>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | Environment control *1 | Environment control *1 | Environment control *1*2 | Environment control *1*2 | Environment control *1*2 | Environment control *1*2 | OFF | OFF | Environment control *1 | Environment control *1 | ON | ON |
| | Cassette | OFF | ON | OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-36

B.2-dimensional shading ON *1]

<Environment Switch: OFF>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON *1 | ON *1 | ON | ON |
| | Cassette | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-37

<Environment Switch: ON>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | ON *1 | ON *1 | ON *1 | ON *1 | ON *1 | ON *1 | OFF | OFF | ON *1 | ON *1 | ON | ON |
| | Cassette | OFF | ON | OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-38

*1 It can be switched by COPIR > OPTION > IMG-MCON > 2D-SHADE..

*2 It can be switched by COPIR > OPTION > IMG-MCON > DRM-H-SW.

*3 When sleep mode (high energy consumption) is set, the Cassette Heater/Reader Heater cannot be turned ON although the Environment Switch and the Cassette Heater Switch are ON. When using the Cassette Heater and the Reader Heater at sleep state, set the sleep mode (low energy consumption). Settings/Registration > Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High/Low

<Environment Control>
Environment control 1: The condition of the heater at the time of turning OFF the main power continues.
Environment control 2: Whether to turn ON or OFF the heater is determined by the environment (moisture content) right before moving to sleep state, and the condition continues while the power is OFF or the machine is at sleep state.

| Environment | Moisture content | Temperature/Humidity | Drum Heater |
|---|---|---|---|
| 1 | 0.86 | 23 deg C 5% | OFF |
| 2 | 1.73 | 23deg C 10% | |
| 3 | 5.8 | 23 deg C 30% | |
| 4 | 8.9 | 23 deg C 50% | |
| 5 | 15 | 23 deg C 70% | ON |
| 6 | 18 | 27 deg C 80% | |
| 7 | 12.41 | 30 deg C 80% | |

T-2-39

Environment control 3: Basically the heater is ON. ON or OFF of the heater can be switched depending on the moisture contents when the duration time of standby mode/energy saving mode is long (4 hours at minimum).

<Related service modes>
COPIER > OPTION > IMG-MCON > DRM-H-SW: To set ON/OFF of the Drum Heater.
0: Normal mode (ON/OFF of the Drum Heater is determined when moving to sleep 1.) (Default)
1: Drum Heater ON mode *(The Drum Heater must be turned ON when moving to sleep 1 while the 2-dimensional shading-related control is OFF.)
2: Energy saving mode (The Drum Heater is OFF when moving to sleep 1.)
* The mode differs from 2-dimensional shading ON (image priority mode). This mode is for users who just want to turn ON the Drum Heater when startup time is delayed because of the increase of controls due to 2-dimensional shading ON.

COPIER > OPTION > IMG-LSR > 2D-SHADE: Image priority mode (2-dimensional shading).
ON/OFF
0: 2-dimensional shading OFF (Default)
1: 2-dimensional shading ON (The Drum Heater is turned ON at first time for the day, sleep, standby/energy saving, potential control, and 2-dimensional shading.)

# Toner Supply Area

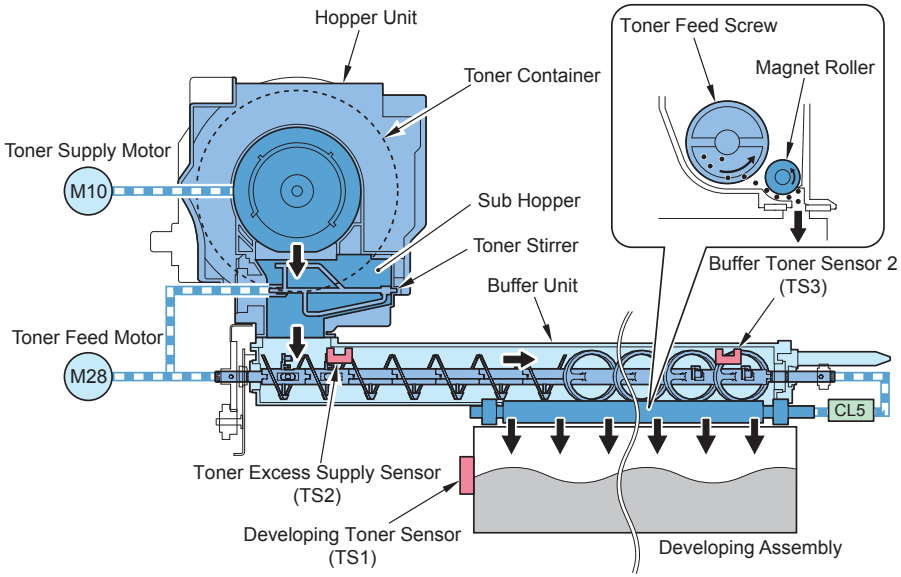
## Toner Container Detection

Toner Container detection is not performed with this machine.

## Toner Level Detection/Toner Supply Control

### Toner Supply Control

To supply toner in the Toner Container to the Developing Assembly.
The Magnet Roller helps toner supplied to the Developing Assembly uniformly in the longitudinal direction to form an even toner layer in the Developing Cylinder




F-2-98

| Title | Description | Supply timing | Operation of the host machine |
|---|---|---|---|
| Supply to the Hopper | Toner in the Toner Container is supplied to the Buffer Unit. | When the Buffer Toner Sensor (TS3) detects absence of toner | To drive the Toner Supply Motor (M10). |
| | | | To be executed until TS3 detects presence of toner. |
| Supply to the Developing Assembly | Developer in the Buffer Unit is supplied to the Developing Assembly. | When the Developing Toner Sensor (TS1) detects absence of toner | To drive the Toner Feed Motor (M28). |
| | | | To be executed until TS1 detects presence of toner. |

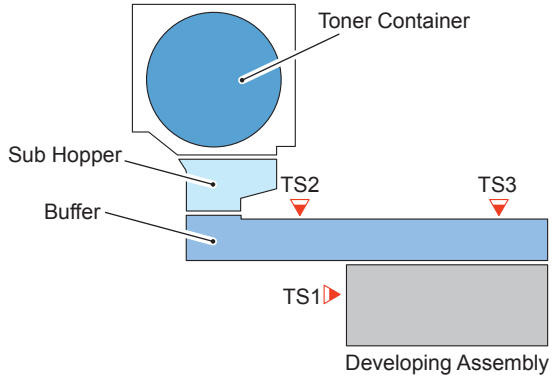
T-2-40

NOTE:
The Toner Excess Supply Sensor (TS2) detects amount of toner around the Buffer Inlet. If toner is supplied excessively from the Sub Hopper to the Buffer Unit (if there are toner clusters), toner in the Buffer may overflow.
If TS2 detects presence of toner, regardless of presence/absence detection of toner by TS3, the Toner Supply Motor (M10) is stopped so that toner supply to the Buffer is stopped to prevent toner leak

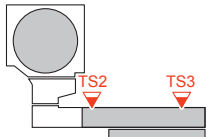
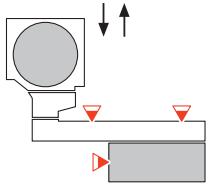
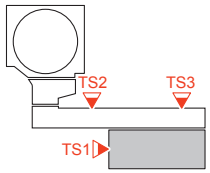
<Related error code>

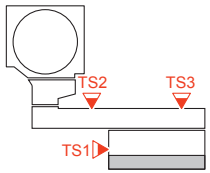
E020-0000 : Developing Assembly toner absent error
E020-0001 : Error in Developing Toner Sensor connection detection
E020-0002 : Error in Buffer Toner Sensor connection detection
E020-0003 : Error in the Toner Excess Supply Sensor connection detection
E020-0004 : Error in Magnet Roller Clutch connection detection
E020-0020 : Error in Developing Assembly Toner Sensor Cleaning Scraper displacement (toner absence)
E020-0021 : Error in Developing Assembly Toner Sensor Cleaning Scraper displacement (toner presence)

Toner Level Detection:




F-2-99

| Toner level | Status | Message | Operation |
|---|---|---|---|
| 100 to 25% |   | No | When TS3 detects absence of toner, the Toner Supply Motor (M10) is driven. Once TS3 detects presence of toner, M10 is stopped (to prevent toner leak). |
| 25 to 10% |  | No | When TS3 detects absence of toner, the Toner Supply Motor (M10) is driven. Once TS3 detects presence of toner, M10 is stopped (to prevent toner leak). |
| 10 to 5% |   | Replace the toner cartridge. (Continuous printing is enabled.) | In the case that toner presence failed to be detected 90 sec after the drive of M10 has been started, a message is displayed in the bottom of Control Panel because the system determines that there is no toner in the Toner Container. This state continues during printing and the Toner Container can be replaced during printing. After the Toner Container is replaced, the toner level returns to 100%. |

| Toner level | Status | Message | Operation |
|---|---|---|---|
| 5% or less |   | Replace the toner cartridge.<br>(Job is stopped.) | After "Replace the toner cartridge." message is displayed, and approx. 900 sheets *) are printed, toner stops to be supplied to the Developing Assembly and the message prompting to replace the Toner Container is displayed on the whole screen of Control Panel. After the Toner Container is replaced, the toner level returns to 100%. |

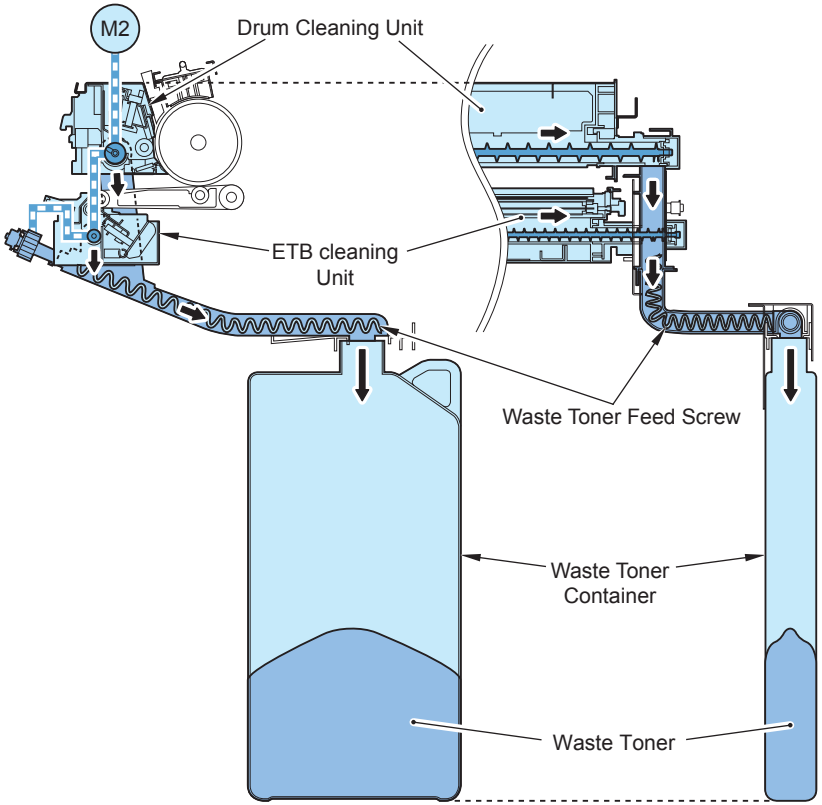
T-2-41

*) The number 900 sheets is a logical value derived from calculation; thus, it varies approx. 30%. In addition, with Service Mode > COPIER > OPTION > FNC-SW > T-RUN-LV, approx. 140 sheets can be printed (with 30% of variation).

## Waste Toner Feeding Area

### Waste Toner Full Level Detection

The waste toner of the Drum Cleaning Unit and the ETB Unit is fed to the Waste Toner Container. There is no sensor to detect toner level in the Waste Toner Container and the toner level is detected by the video count (1-count per 1 sheet with 6% image).




F-2-100

This machine performs the following controls.

1. “Black band control” in order to maintain the drum cleaning performance
2. “Low duty discharge control” in order to maintain the density stability in the case of continuous output of low duty image

Therefore the criterion of the full Waste Toner Container varies according to the environment and the image duty as shown in the following table.

<table>
<tr><th rowspan="2">Temperature/ Humidity</th><th rowspan="2">Moisture content</th><th colspan="6">Image duty (%)</th></tr>
<tr><th>0 to less than 1.0</th><th>1.0 to less than 2.0</th><th>2.0 to less than 3.0</th><th>3.0 to less than 4.0</th><th>4.0 to less than 5.0</th><th>5.0 to 6.0</th></tr>
<tr><td>23 deg C / 5%</td><td>0.86</td><td rowspan="4">250,000 pages</td><td colspan="2" rowspan="4">1,000,000 pages</td><td rowspan="4">800,000 pages</td><td rowspan="4">700,000 pages</td><td rowspan="4">600,000 pages</td></tr>
<tr><td>23 deg C / 10%</td><td>1.73</td></tr>
<tr><td>23 deg C / 30%</td><td>5.8</td></tr>
<tr><td>23 deg C / 50%</td><td>8.9</td></tr>
<tr><td>27 deg C / 70%</td><td>15</td><td rowspan="3">100,000 pages</td><td>250,000 pages</td><td colspan="3">600,000 pages</td><td rowspan="3">500,000 pages</td></tr>
<tr><td>28 deg C / 75%</td><td>18</td><td>120,000 pages</td><td>150,000 pages</td><td>300,000 pages</td><td>500,000 pages</td></tr>
<tr><td>30 deg C / 80%</td><td>21.6</td><td colspan="2">100,000 pages</td><td>150,000 pages</td><td>200,000 pages</td></tr>
</table>

T-2-42

| Status | Waste toner level | Operation |
|---|---|---|
| Warning for full level of waste toner | Approx. 83% of the full criterion | Printing can be continued |
| Full level of waste toner | Full criterion | Host machine is stopped(error display) |

T-2-43

The Drive Gear escapes when a certain load is applied to the Waste Toner Feeding Screw and an error is displayed after the Host Machine has been stopped.

## Waste Toner Feed Screw Lock Detection

To detect lock state of the Waste Toner Feed Screw.

The drive by the Developing Motor (M2) is transmitted to the Screw Gear, which makes the Waste Toner Screw rotate. When this Screw Gear becomes unable to rotate, it slides sideways by the transmitted drive force.

The Screw Gear fails to rotate once the Waste Toner Screw is locked; therefore, the transmitted drive force makes the Screw Gear slide sideways. The Waste Toner Lock Detection Switch (SW5) is placed by the side of the Screw Gear and SW5 is pressed when the Screw Gear is moved. With this mechanism, it is detected that the Waste Toner Screw is locked.

<Related error code>

E013-0001 Error in Waste Toner Lock Detection Connector disconnection

E013-0002 Error in Waste Toner Feed Screw Lock detection

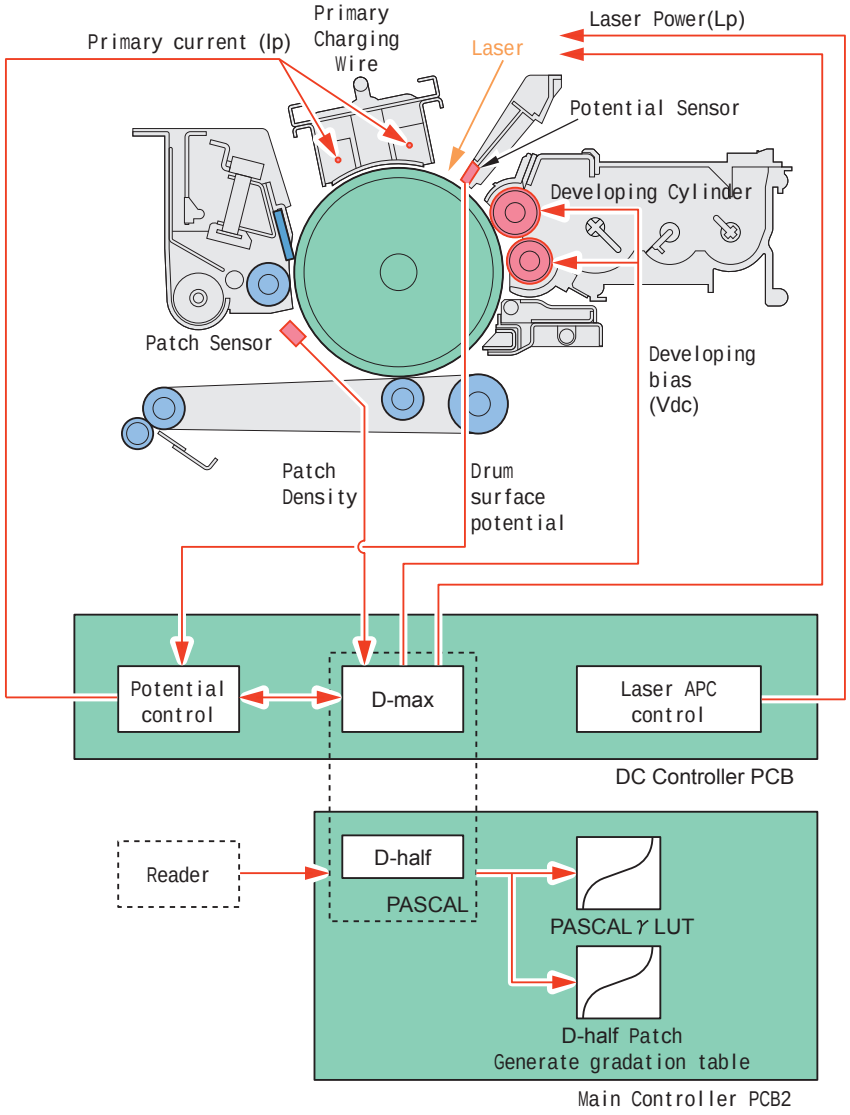
## Waste Toner Container Detection

The Waste Toner Container detection is not performed with this machine.

# Image Stabilization Control

## Overview

This control prevents image failure due to change of the environment or deterioration of the Photosensitive Drum to ensure stabilized print.




F-2-101

## Execution Timing

Execution items for image stabilization control differ according to the environment and condition of image formation parts. Following shows the control items at each sequence.

*70 deg C or lower in the fixing temperature,**60 sec.70 deg C or lower in the fixing temperature,***Fixing temperature remaining high at power OFF/ON

| Control | Standard duration (second) Approx. | Timing | | | | | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Warm-up rotation | | | | | Initial rotation | Paper interval | Interruption | | Last rotation | Arbitrary | | |
| | | At startup* | Normal startup** | power OFF/ ON*** | Door open | Jam recovery | | | Forcible interruption at 2,000 sheets | Low duty ejection | Normal | PASCAL (Full correction) | PASCAL (Quick correction) | |
| Full Potential Control | 8 | ○ | × | × | × | × | (○)*2 | × | (○)*3 | × | (○)*1 | ○ | ○ | *1 Operation Criteria<br>Last rotation after the first job right after startup first time for the day takes 10 minutes or longer<br>Last rotation after processing 1,500 sheets or more following the last potential control execution<br>Last rotation after the first job following 90 minutes or more elapsed from the last potential control execution<br>*2 Operation Criteria<br>Every initial rotation for the job that start within 10 minutes after density judgment at normal startup mode (60 seconds startup)<br>Initial rotation for the first job that starts after more than 10 minutes have passed from density judgment at normal startup mode (60 seconds startup)<br>*3 Operation Criteria<br>Forcible interruption when the accumulated value of the paper interval VL correction value exceeds 10V within 10 minutes after density judgment at normal startup mode (60 seconds startup) |
| APC Correction at Paper Interval | 0.2 | × | × | × | × | × | × | ○ *5 | × | × | × | × | × | *5 At every 20-sheet interval |
| APC Control at Warm-up Rotation | 2 | × | × | × | × | × | (○)*6 | × | × | × | × | × | × | *6 Operation Criteria<br>Initial rotation after the first job following 60 minutes or more elapsed from the last job completion |
| APC Correction at Last Rotation | 2 | × | × | × | × | × | × | × | × | × | (○)*7 | × | × | *7 Operation Criteria<br>Last rotation after the first job following 30 minutes or more elapsed from the last job completion |
| Drum Idle Rotation at First in the Day | 60.0 | ○ | × | × | × | × | × | × | × | × | × | × | × | |
| Charging Wire Cleaning | 30 | × | × | × | × | × | × | × | (○)*8 | × | (○)*8 | × | × | *8 Operation Criteria<br>Last rotation after 1,500 sheets or more processed following the last Charging Wire cleaning execution<br>Forcibly interruption at 2,000 sheets or more processed following the last Charging Wire cleaning execution |

| Control | Standard duration (second) Approx. | Timing | | | | | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Warm-up rotation | | | | | Initial rotation | Paper interval | Interruption | | Last rotation | Arbitrary | | |
| | | At startup* | Normal startup** | power OFF/ ON*** | Door open | Jam recovery | | | Forcible interruption at 2,000 sheets | Low duty ejection | Normal | PASCAL (Full correction) | PASCAL (Quick correction) | |
| D-max Control* (including the belt background correction) | 20 | (○)*9 | (○)*9 | × | × | × | × | × | × | × | (○)*9 | ○ | ○ | *9 Perform this control together at the time of potential control.<br>When specified by service technician (user) at startup (in 2-dimensional shading)<br>At last rotation after 6,000 sheets or more processed following the last D-max control execution |
| D-half Control* (including the belt background correction) | 18 | (○)*10 | (○)*10 | × | × | × | × | × | × | × | (○)*10 | ○ | ○ | *10 Operation Criteria (performed together at the time of potential control / D-max control)<br>When specified via service technician (user) at startup (in 2-dimensional shading mode)<br>At last rotation after 6,000 sheets or more processed following the last D-max control execution |
| LED Intensity Correction / Belt Background Correction | 3.5 | ○ | ○ | × | ○ | ○ | × | × | × | × | × | × | × | |
| Idle Rotation at First in the Day | 15 to 30 | ○ | ○ | ○ | ○ | ○ | × | × | × | × | × | × | × | To stabilize toner toribology after long idle time |
| Low Duty Ejection | - | × | × | × | × | × | × | × | × | ○ | ○ | × | × | - To prevent toner deterioration during continuous Low DUTY image printing |
| Blank Band Control | *11 | × | × | × | × | × | × | × | × | ○ | ○ | × | × | *11<br>When the predefined sheets were printed |
| Idle Rotation at First in the Day (H/H environment) | 15(30) | (○)*12 | ○ | × | × | × | × | × | × | × | × | × | × | *12Only when the environment is in high temperature / humidity |
| Contrast Potential Correction at Startup | 1 | × | ○ | × | × | × | × | × | × | × | × | × | × | |
| Disengagement of Transfer Unit | 1 | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | ○ | At jam recovery / after patch generation / at job completion |
| Weak Bias Control at Leading Edge | | × | × | × | × | × | ○ | ○ | × | × | × | × | × | |

T-2-44

## Potential Control

Perform the following controls according to the deterioration level of the Photosensitive Drum and the environmental change.

1. VD control
   The primary current value (Ip) is determined to become the target dark area potential (VD).
2. VL control
   The laser power (LP) is determined to become the target bright area potential (VL).
3. Vdc control
   Developing bias is determined by adding the "fogging removal potential (Vback)" (based on the environment) to the bright area potential (VL).

Execution timing

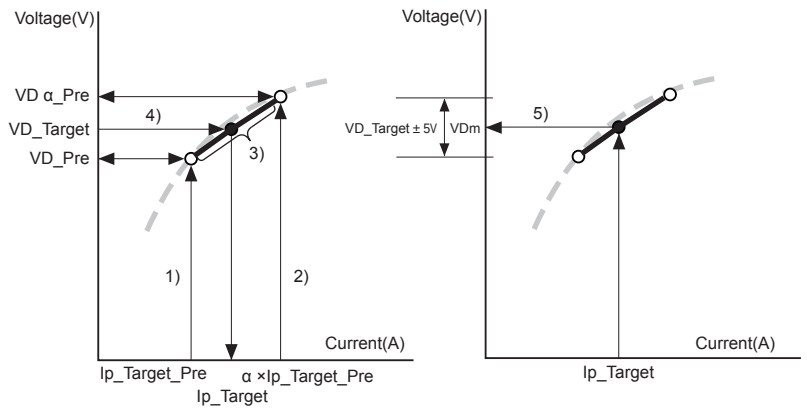
- Last rotation after the first job right after startup first time for the day takes 10 minutes or longer
- Last rotation after processing 1,500 sheets or more following the last potential control execution
- Last rotation after the first job following 90 minutes or more elapsed from the last potential control execution
- Last rotation after the first job right after startup first time for the day takes 10 minutes or longer
- Every initial rotation for the job that start within 10 minutes after density judgment at normal startup mode (60 seconds startup)
- Initial rotation for the first job that starts after more than 10 minutes have passed from density judgment at normal startup mode (60 seconds startup)
- Forcible interruption when the accumulated value of the paper interval VL correction value exceeds 10V within 10 minutes after density judgment at normal startup mode (60 seconds startup).

NOTE:
At normal startup mode (60 sec. startup), simple potential control is executed to shorten the startup time (see Auxiliary Control > Simple Potential Control)

<Control description>

1. VD control

1) The primary current (Ip_Target_Pre), which has been determined in the last potential control*1, is applied and the Potential Sensor measures drum surface potential (VD_Pre).
   *1: At the time of installation, the primary current adjusted in the factory is applied.
2) The drum surface potential (VD_Pre) and the target potential (VD_Target) are compared to apply the primary current (α x Ip_Target_Pre), which makes the target potential (VD_Target) to be in range between the drum surface potential (VD_Pre) and the drum surface potential (VDα_Pre), and then the drum surface potential (VDα_Pre) at that moment is read.
3) The 2 points of measured dark area potentials are connected with a straight line to calculate dark area potential characteristics.
4) Based on the obtained dark area potential characteristics, the primary current (Ip_Target) is calculated, which can obtain the target potential (VD_Target).
5) The calculated primary current is applied and this operation is repeated until the drum surface potential (VDm) is within the range of the target potential +/- 5V. Potential measurement is executed up to 8 times and correction is executed up to 8 times.

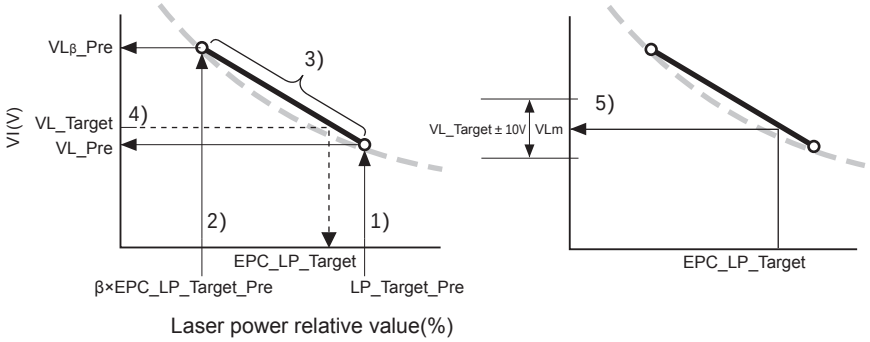



F-2-102

[When the drum surface potential (VDm) is not as follows: -5V <= target potential <= +5V ]
Potential control error (VD) "E061-0101" occurs.

2. VL control

1) The laser power (LP_Target_Pre), which has been determined in the last bright area potential control[*1], is applied and the Potential Sensor measures the drum surface potential (VL_Pre).
   *1: At the time of installation, the primary current adjusted in the factory is applied.
2) The drum surface potential (VL_Pre) and the target potential (VL_Target) are compared to apply the primary current (β x EPC_LP_Target_Pre), which makes the target potential (VL_Target) to be in range between the drum surface potential (VL_Pre) and the drum surface potential (VLβ_Pre), and then the drum surface potential (VLβ_Pre) at that moment is read.
3) The 2 points of measured bright area potentials are connected with a straight line to calculate the bright area potential characteristics.
4) Based on the obtained bright area potential characteristics, the laser power (EPC_LP_Target) is calculated, which can obtain the target potential (VL_Target).
5) The Drum is exposed with the calculated laser power and this operation is repeated until the drum surface potential (VLm) is within the range of the target potential +/- 10V. Potential measurement is executed up to 8 times and correction is executed up to 8 times.



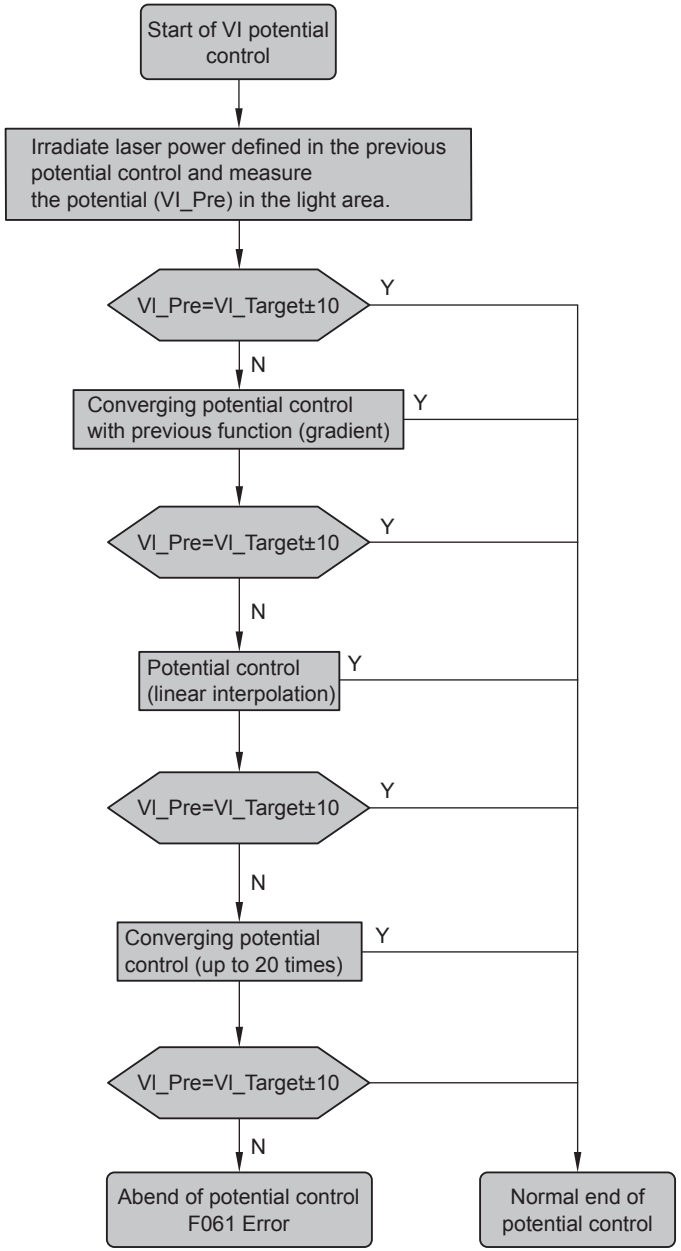

F-2-103

[When the drum surface potential is not as follows: -10V <= target potential <= +10V ]

- When the drum surface potential is as follows: -10V > target potential > -30V or +10V < target potential < +30V
  The laser power (LP) when the previous potential control was succeeded (within +/- 10V target potential) is applied. Refer to the alarm code "32-0002" for the processing when the image is influenced.
- When the target potential is as follows: target potential <= -30V or target potential >= +30V
  Potential control error (VL) "E061-0001" occurs.

NOTE:
With this machine, laser APC control is executed to correct the bright area potential between sheets and jobs (see Auxiliary Control > Laser APC Control)

Lp is actually calculated by the laser power (LP) and the bright area potential characteristics that were obtained in the last VL control because executing VL control each time takes time. When the bright area potential measured value fails to be within the range of the target potential +/- 10V, follow the workflow as described below to obtain bright area potential characteristics by the foregoing VL control to calculate LP.




F-2-104

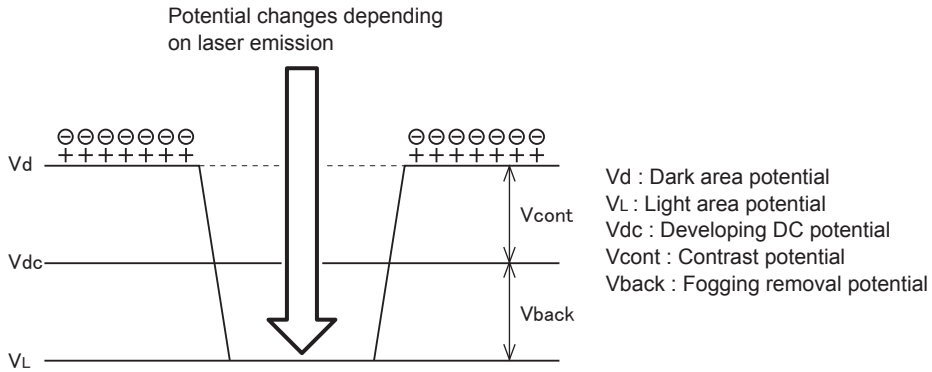
3. Determination of developing bias (Vdc)

Developing bias is determined by adding the Vback value (based on the environment table) to VL (bright area potential) determined in the foregoing control.

Developing bias (Vdc) = VL+Vback

VL: measured bright area potential determined by the potential control

Vback: the potential to remove foggy image that was determined in the environment table




F-2-105

NOTE:
This machine executes D-max control; therefore, density correction value (offset) calculated in the D-max control is also reflected when the developing bias (Vdc) is calculated.

Developing bias (Vdc) = VI + Vback + DeltaVoffset
Deltaoffset: density correction value determined by D-max control

Related error codes

E061: error in potential control

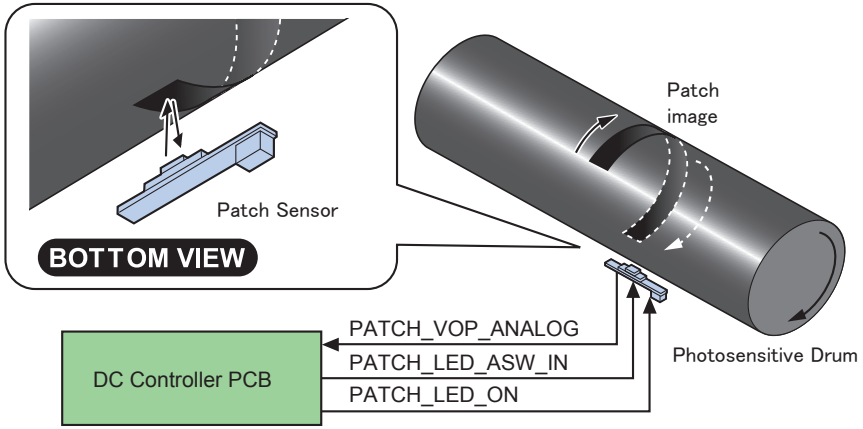
## Patch Detection

Toner density is detected by detection of the patch created on the Drum with the Patch Sensor.

Parts configuration

The Patch Sensor consists of the light-emitting part (LED) and the light-receiving part.

- Light-emitting part (LED): to emit light to the patch image (PATCH_VOP_ANALOG signal)
- Reflected light detection part: to receive light reflected from patch image (PATCH_LED_ASW_IN signal)

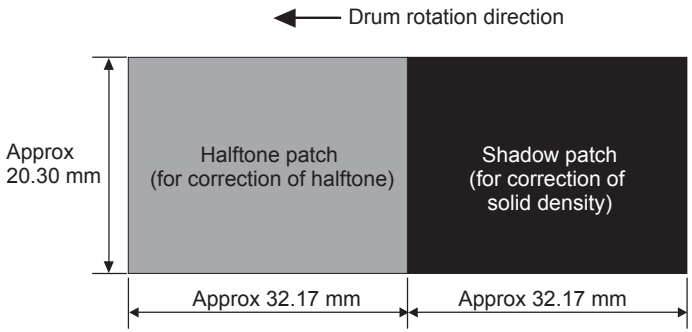



F-2-106

Operation description

1) LED light intensity correction
   Reflected light is detected by the Patch Sensor by changing LED light intensity (input voltage) (6 points) while rotating the Drum to calculate LED light intensity characteristics. LED light intensity (input voltage) is calculated by the LED light intensity characteristics, which become the target reflected light intensity.
2) Drum base correction
   LED is emitted with the light intensity (input voltage) determined by the LED light intensity correction to measure reflected light intensity for a rotation of the Drum. Using the Drum HP Sensor as a reference, the reflected light intensity and the position on the Drum are saved in the memory on the DC Controller PCB. The patch density is calculated with this drum base correction value.
3) A patch pattern is created on the DC Controller PCB to form the patch pattern on the Drum. The patch pattern differs according to the control to be executed (D-max control/D-half control).

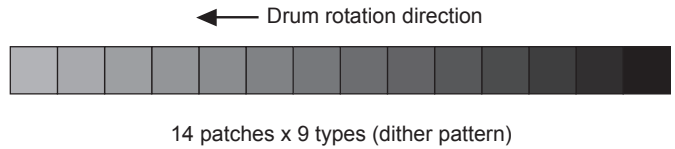
<Patch image at D-max control>




F-2-107

<Patch image at D-half control>

< Patch image >




F-2-108

## D-max Control

This control determines developing contrast to keep a constant solid image density.

Execution timing

- Last rotation after 6,000 sheets (or more) have been passed through since execution of the last D-max control.
- When service mode (COPIER>FUNCTION>MISC-P>DMAX-N) is executed
- Last rotation after 2000 sheets (or more) have been passed through since first time for the day after density judgment at normal startup mode (60 seconds startup)
- First power-on when Service Mode > COPIER>OPTION>FNC-SW>DMAX-SW is 2
- First power-on + last rotation when Service Mode > COPIER>OPTION>FNC-SW>DMAX-SW is 3

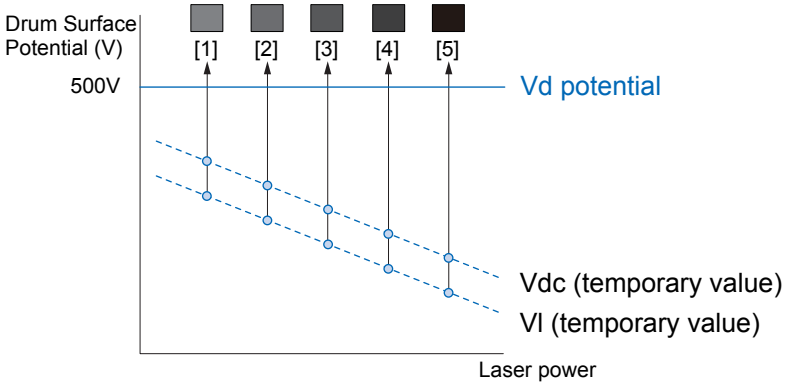
Control description

D-max control is always executed together with potential control. Following shows a series of workflow.

1) Determination of the primary current (See “Full Potential Control > VD control”.)

2) Patch image formation

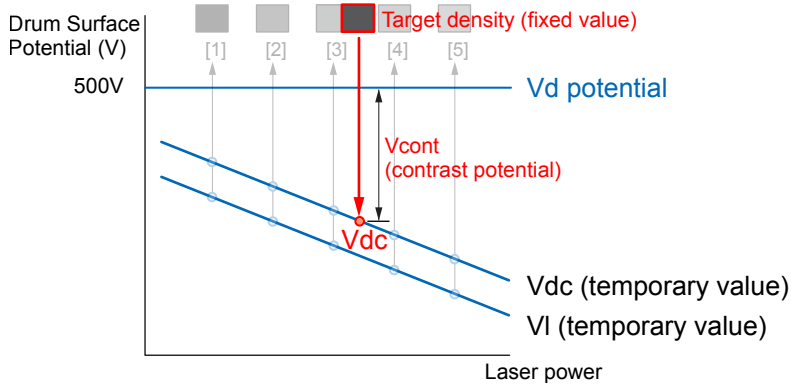
While the calculated primary current is applied, contrast potential (Vcont) (actually the laser power (Lp) and the developing bias (Vdc)) is applied to form 5 stages of D-max patches (values +/- 25 and +/- 50 with the D-max environment table value as the center value) on the Drum




F-2-109

3) Determination of contrast potential (Vcont)

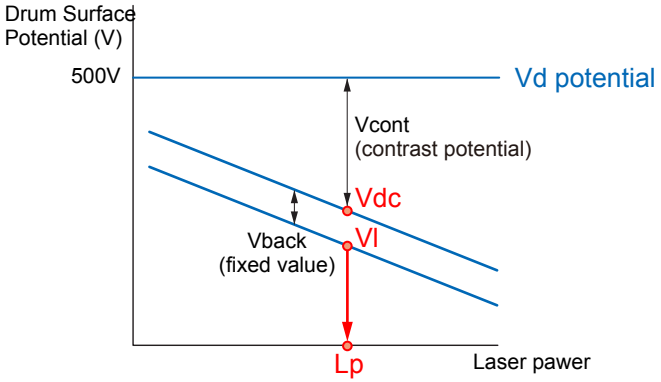
Patch image density is read by the Patch Sensor to determine the contrast potential (Vcont) (that becomes the target density) using the obtained density characteristics.




F-2-110

4) Determination of developing DC (Vdc) and bright area potential (VL)

Vdc and VL are determined from the Vcont value and the Vback value (to be determined by the environment. Fixed values)




F-2-111

5) Determination of laser power (Lp) (See “Full Potential Control > VL control”.)

VL control is executed to calculate Lp that can obtain VL

Related error codes

Related service modes

COPIER > OPTION > FNC-SW > DMAX-SW: ON/OFF setting of the D-max control and the last rotation D-half control

COPIER > FUNCTION > MISC-P > DMAX-N: forced execution of the D-max control

## D-half Control

This control determines gradation correction value based on the image density detected by the Patch Sensor

Execution timing

- Last rotation after 6,000 sheets (or more) have been passed through since execution of the last D-half control
- When PASCAL (User mode > Settings/Registration > Adjustment/Maintenance > Image Quality Adjustment > Image Stabilization Control > PASCAL (Full/Quick Adjust)) is executed
- First power-on when Service Mode > COPIER>OPTION>FNC-SW>DMAX-SW is 2
- First power-on + last rotation when Service Mode > COPIER>OPTION>FNC-SW>DMAX-SW is 3

Control description

1) Based on the gradation data sent from the Main Controller, patch images (up to 9 patterns) are formed on the Drum.
2) Patch density is detected to feed the value back to the Main Controller.
3) The Main Controller corrects the gradation data (LUT table)[*1]

*1: Gradation data (LUT table) is generated when executing Full Adjust: Auto Adjust Gradation > Full Adjust

Related service modes

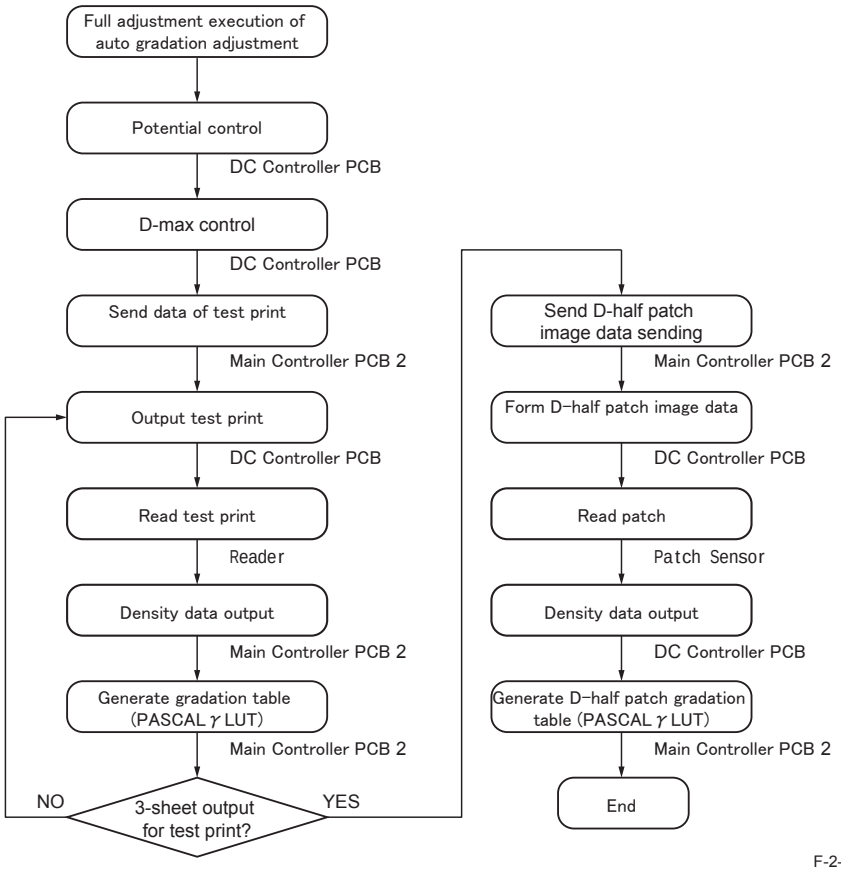
COPIER > OPTION > FNC-SW > DH-SW : To set ON/OFF of D-half control for plain paper group.

## PASCAL Control

This control stabilizes gradation density characteristics on the image.
This control is executed when the following is selected in user mode: Auto Adjust Gradation > Full Adjust
Patch pattern on the test print is scanned by the Reader to create a gradation table (PASCALγLUT).
Then, a D-half patch gradation table is created to be used as the target in D-half control.
The foregoing table corrects image gradation characteristics caused by change of environment and deterioration of the Photosensitive Drum.

Execution timing

During execution of Full Adjust: User mode > Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Image Stabilization Control > Full Adjust




F-2-112

NOTE:
Since Inbox images are binary, gradation adjustment cannot be performed after being stored in Inbox. Gradation adjustment is performed on the rasterized data before they are stored in Inbox.
When the stored image is output after a long time, gradation adjustment is not performed on the basis of the environment at the time of output, so appropriate printing results may not be able to be obtained.
If the environment changes with time, it is advisable to store the data into Inbox just before output.

## Auxiliary Control

### Startup Contrast Potential (Vcont) Correction

Contrast potential (Vcont) is corrected to keep a constant density and prevent light image caused by reduced toner charging amount in an energy-saving environment.

NOTE:
Temperature in the Developing Assembly is reduced because the Drum Heater is turned OFF at sleep state in an energy-saving environment. This operation increases moisture content in the Developing Assembly and reduces toner charging amount.

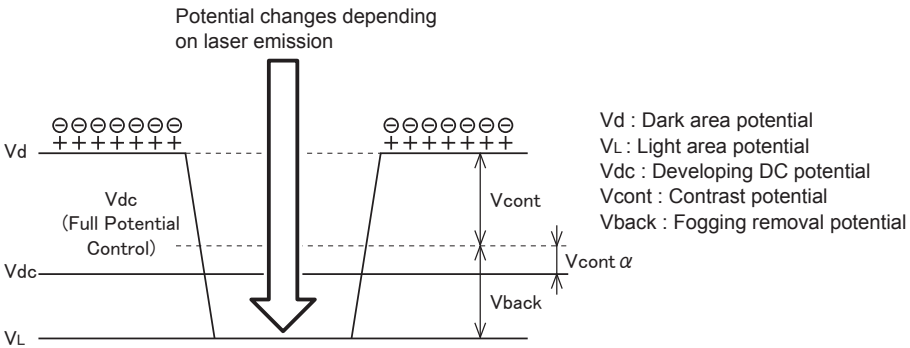
Execution timing

At the time of the normal startup mode (in the case that the two dimension shading control is OFF)

NOTE:
This control is not executed when the two dimension shading control is ON because the Drum Heater is turned ON.

Control description

1) At the time of normal image formation, contrast potential (Vcontα) based on the environment table is added to the developing bias (Vdc (full potential control value)) determined by the full potential control to correct developing bias.
   Vdc=Vdc (potential control value) –Vcontα
2) The corrected contrast potential (Vcont) is reset (making Vcontα 0) when the next full potential correction is executed.




F-2-113

## Laser APC Control

This control corrects laser output control value to prevent change of surface potential by laser output.

Correction type

A. Between-sheet APC control: to keep constant bright area potential (VL) without reducing productivity during continuous jobs.

B. Initial rotation APC to determine VL according to the laser and drum temperature characteristics.

C. Last rotation APC control: to determine VL according to the laser and drum temperature characteristics.

Execution timing

A. Between-sheet APC control: at every paper interval of a job.

B. Initial rotation APC control: to be executed during initial rotation of the first job after the machine has been left unattached for 60 minutes or more since execution of the last job.

C. Last rotation APC control: to be executed during last rotation of the first job after the machine has been left unattached for 30 minutes or more since execution of the last job.

Control description

A. Between-sheet APC control

1) Bright area potential is measured at every sheet interval by the Potential Sensor.

2) Average sheet interval VL_ave of the measured paper interval VL potential (for 20 sheet intervals) is calculated.

3) Laser power correction value is determined by the difference between the measured potential VL (measured at the time of potential control) and the average paper interval VL_ave in addition to the last bright area potential characteristics (gradient (γ)).

Correction formula

LP_after=LP_before- (VL-Vl_ave) × γ

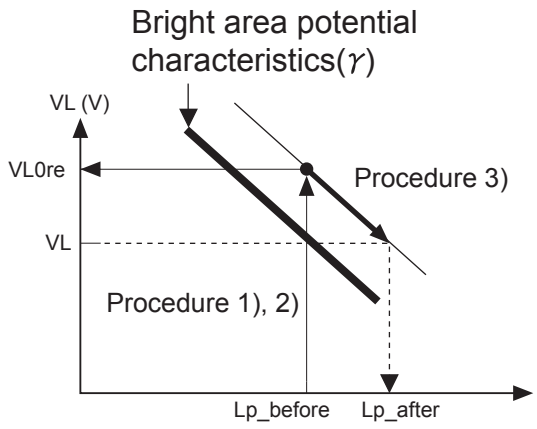
LP_after: laser power after correction

LP_before: laser power before correction

VL: measured VL determined at the time of potential control

VL_ave: average paper interval VL_ave

γ: gradient (control coefficient): gradient reciprocal of LP_Vl straight line in the range including VL target




F-2-114

B. Initial rotation APC control

1) Bright area potential VL is measured during initial rotation to correct laser power. The primary current value and developing bias value are fi

2) Correction is executed by following the same way as between-sheet APC control.

C. Last rotation APC control

This correction follows the same way as initial rotation APC control

## Two Dimension Shading Control

Uneven potential on the Photosensitive Drum is corrected by laser exposure.

Execution timing

At the time of laser exposure (only when the two dimension shading control is ON. Default: OFF)

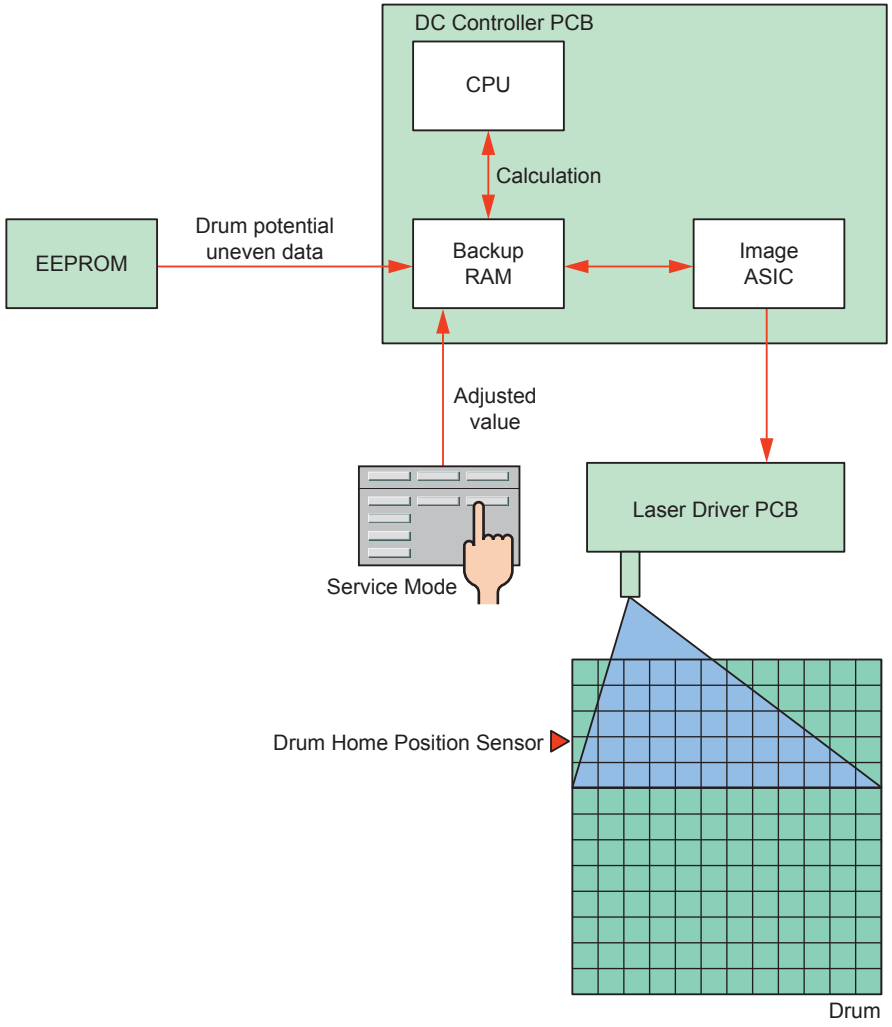
Control description

1) Potential data on the Drum surface is saved in EEPROM on the DC Controller PCB in the format supporting two-dimension coordinate (measured when the Drum was manufactured).
2) When the power is turned ON, EEPROM data is compared to RAM data. If there is any difference in the data, the EEPROM data is stored in the backup RAM.

NOTE:
Whether the control is enabled can be checked with COPIER>DISPLAY>2D-SHD>2D-STS.
If 0 is displayed, check DRM-LOT number. When 0 is displayed, it means that the drum has not been registered; thus, execute FUNCTION/2D-SHADE/2D-READ to register the drum.

3) Potential data on the Drum surface is sent to the image ASIC and the image data is synchronized with the Drum home position, and then the uneven potential data is converted into light intensity to be sent to the Laser Driver PCB.
4) The Laser Driver PCB is exposed to remove uneven potential on the Drum.

NOTE:
For Drum provided as a service part, EEPROM which stores potential unevenness data is included. Therefore, the EEPROM needs to be replaced when the Drum is replaced. As the life of the Drum advances, uneven density can occur when the halftone image is output despite correction of the drum uneven potential. In such a case, uneven density can be corrected by specifying a particular position in service mode. See Troubleshooting for procedure.
FCOT (First Copy Time) is reduced to detect home position of the Drum by turning ON the two dimension shading.




F-2-115

Related service modes

COPIER>DISPLAY>2D-SHD>2D-STS : Display of 2D shading ON/OFF
COPIER>DISPLAY>2D-SHD>DRM-LOT : Display of Drum Lot number
COPIER>DISPLAY>2D-SHD>CHK-SUM : Display of checksum calculation result
COPIER>FUNCTION>2D-SHADE>M-LINE1/LINE2 : 2D shading horizontal scan correction
COPIER>FUNCTION>2D-SHADE>S-LINE1-4 : 2D shading vertical scan correction
COPIER>FUNCTION>2D-SHADE>SHD-P1-3 : 2D shading pattern output
COPIER>OPTION>IMG-LSR>2D-SW : Read 2D shading ROM

## White Band Control

Oppositely-charged toner on the Developing Sleeve is forcibly applied on the Drum and collected by the Cleaning Unit.

NOTE:
Large-grained toner is less likely to be charged compared to small-grained toner and can be positively charged (opposite charging) in rare cases. Such oppositely-charged toner fails to be developed but remains on the Developing Sleeve, which causes image failure.

Execution timing
Last rotation after every job

Control description
Developing bias Vdc is increased once the image trailing edge passes through the developing position.
Vback is increased and the oppositely-charged toner on the Developing Cylinder is moved onto the Drum.

Related service modes
COPIER>FUNCTION>MISC-P>WB : Reverse toner forcible eject: blank band
COPIER>ADJUST>MISC>TBSIS-WB : Setting of blank band ejection time

## Black Band Control

This control maintains the cleaning performance by providing sufficient amount of toner to the edge of the Cleaning Blade.

NOTE:
Friction coefficient between the Blade and the Drum is increased unless sufficient amount of toner is applied on the Drum Cleaning Blade, which causes ride-up of the Blade. Although toner is properly applied to the center of the Blade by normal cleaning operation, toner is supplied insufficiently to the edge of the Blade.

Execution timing
- Last rotation after the specified number of sheets*1 has been fed since execution of the last black band control.
- When low duty discharge control is executed.

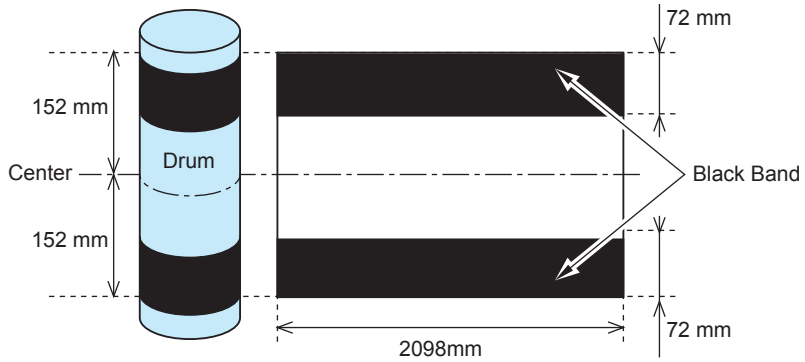
*1: This value can be changed in service mode.

| Moisture content | Interval (sheets) |
|---|---|
| 12g or more | 2,000 |

T-2-45

Control description

1) Black band described below is created on the Drum.
2) Black band is scraped by the Drum Cleaning Blade and toner is properly applied on the Cleaning Blade at that moment.
3) This control turns off the transfer high voltage and makes the Transfer Belt disengaged so that image is not applied on the Transfer Belt.




F-2-116

Related service modes

COPIER>OPTION>IMG-DEV>BB-CNT:Set Bk band output intvl: Cleaning Blade
COPIER>OPTION>CLEANING>CLN-ADJ:ON/OFF of cleaning black band sequence
COPIER>OPTION>CLEANING>CLN-SW:ON/OFF of cleaning black band sequencel
COPIER>FUNCTION>MISC-P>BB : Toner forcible eject (black band)

## Low Duty Discharge Control

In the case of continuous output of low duty image, this control consumes toner at non-image area to maintain the density stability.

Execution timing

While the video count for every page is accumulated, in the case that the average image duty is less than the threshold*1, the ongoing job is interrupted at the time of last rotation of a job or the ongoing job is interrupting in the middle of the job to discharge the toner according to the average image duty.

*1: Threshold is determined by the following environment table. The value can be changed in service mode

| Moisture content | Temperature/Humidity | Threshold |
|---|---|---|
| 0.86 | 23deg C/5% | 1% |
| 1.73 | 23deg C/10% | 1% |
| 5.8 | 23deg C/30% | 1% |
| 8.9 | 23deg C/50% | 1% |
| 15 | 23deg C/70% | 2% |
| 18 | 28deg C/80% | 3.5% |
| 21.6 | 30deg C/80% | 5% |

T-2-46

Control description

1) Video count on every page is retrieved.
2) The obtained video count is converted into A4 size and the value is accumulated.
3) Once the accumulated value reaches the threshold, the following patch is created on the Drum to discharge deteriorated toner.

Related service modes

COPIER>OPTION>IMG-DEV>LWDTY-SW ON/OFF of low duty ejection Default ON
COPIER>OPTION>IMG-DEV>LWDTYADJ Set low duty ejection threshold value

# Servicing

## Periodically Replaced Parts

| Parts Name | Parts Nunber | Piece | Expected life* | COUNTER (PRDC-1) | Remarks |
|---|---|---|---|---|---|
| Primary Charging Wire | FB4-3687 | 2 | 50** | PRM-WIRE | With spring FL3-4558 |
| Primary Charging Wire cleaner | FL2-0462 | 2 | 50** | PRM-CLN | |
| Primary Charging Wire cleaner holder | FL2-2720 | 2 | 50** | PRM-CLN | |
| Grid Wire | FY1-0883 | AR | 50 | PRM-GRID | |
| Pre-transfer Charging Wire | FB4-3687 | 1 | 50** | PO-WIRE | With spring FL3-4559 |
| Pre-transfer Charging Wire cleaner | FL2-0462 | 1 | 50** | PO-CLN | |
| Pre-transfer Charging Wire cleaner holder | FL2-2720 | 1 | 50** | PO-CLN | |

T-2-47

*Unit: 10,000 sheets

**: In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets

## Consumable Parts

| Parts Name | Parts Nunber | Piece | Expected life* | COUNTER (DRBL-1) | Remarks |
|---|---|---|---|---|---|
| Primary Charging Assembly | FM3-7288 | 1 | 150 | PRM-UNIT | |
| Pre-transfer Charging Assembly | FM4-3149 | 1 | 150 | PO-UNIT | |
| Pre-exposure Scraper | FC9-9153 | 2 | 50 | EXP-SCRP | |
| Drum Cleaning Blade | FC8-7085 | 1 | 100 | CLN-BLD | Use by reversing at every 500000 sheets |
| Drum Front Side Seal/ Drum Rear Side Seal | FC8-7086 | 1each | 50 | BS-SL-F BS-SL-R | |
| Drum Separation Claw | FB4-8018 | 3 | 50 | SP-CLAW | In a high temperature/ humidity environment (30 deg C/80%), it is 250000 sheets |
| Developing Assembly | FM4-5429 | 1 | 150** | DVG-CYL | |
| ETB | FC8-7160 | 1 | 50 | TR-BLT | |
| Transfer Roller | FC8-7159 | 1 | 50 | TR-ROLL | |
| Brush Roller | FC9-9022 | 1 | 50 | T-CN-BRU | |
| ETB Cleaning Blade | FC6-1647 | 1 | 50 | T-CLN-BD | |

T-2-48

*Unit: 10,000 sheets

**: In a high temperature/humidity environment (30 deg C/80%), it is 500000 sheets

## Periodical Servicing List

| Parts/Area Name | Expected life* | Remarks |
|---|---|---|
| Toner Receptacle Tray | As needed | Remove toner on the tray. |
| Primary Charging Assembly Grid Wire | 25 | Clean with lint-free paper moistened with water. |
| Primary Charging Assembly Shield Plate | 25 | Clean with lint-free paper moistened with water. |
| Pre-transfer Charging Assembly Shield Plate | 50 | Clean with lint-free paper moistened with water. |
| Pre-transfer Charging AssemblyDust Collection Roller | 50 | Clean with lint-free paper moistened with alcohol. |
| Pre-transfer Charging Assembly Roller electrode area | 50 | Clean with lint-free paper moistened with alcohol. |
| Pre-transfer Charging AssemblyToner collection area | 50 | Remove toner in the toner collection area. |
| Drum Cleaning Unit Plate | 50 | Clean with lint-free paper moistened with alcohol. |
| Pre-exposure Scraper | As needed | Clean with lint-free paper moistened with alcohol. |
| Drum Cleaning Unit Toner collection area | 50 | Crumb toner clusters. |
| Drum Sliding Assembly | As needed | Apply lubricant at the Drum Sliding Assembly when abnormal sound is heard at the time of operation. |
| Drum Surface | 30 | Using lint-free paper, clean the drum with the drum cleaning powder (FY9-6024). |
| Drum Edge | 25 | Clean with lint-free paper moistened |
| Separation Claw Mounting Base | 50 | Clean with lint-free paper moistened with alcohol. |
| Patch Sensor | 50 | Clean in the single direction with a wet and tightly-wrung cotton swab. (Be sure to clean the surface of the sensor thoroughly.) Do not use alcohol when cleaning. |
| Process Unit Rear Guide | 50 | Clean with lint-free paper moistened with alcohol. |
| Developing Roller | 50 | Clean with lint-free paper moistened with alcohol. |
| Lower side of Cylinder. | 50 | Clean with lint-free paper moistened with alcohol. |
| Developing Sleeve Holder | 50 | Clean with lint-free paper moistened with alcohol. |
| The host machine surface below the Developing Assembly | As needed | Remove toner which was scattered at removal of Developing Assembly. |
| ETB Drive Roller | 50 | Clean with lint-free paper moistened with alcohol. |
| ETB Idler Roller | 50 | Clean with lint-free paper moistened with alcohol. |
| Waste Toner Container | 50 | Clean when the message is displayed. |

T-2-49

*Unit: 10,000 sheets

## When Replacing Parts

When replacing the Periodically Replaced Parts and Consumable Parts, be sure to clear the Parts Counter (COPIER > COUNTER > PRDC-1/DRBL-1)

### Primary Charging Wire

<Procedure of parts replacement>

see "Replacing the Primary Charging Wire," on p. 4-96.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PRM-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)
3) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
4) Execute the potential control (COPIER>FUNCTION>DPC>DPC). Turn OFF and then ON the main power. (The potential control is executed at startup.)
5) Execute the potential control. (COPIER>FUNCTION>DPC>DPC)
6) Turn OFF and then ON the main power switch.

### Primary Charging Assembly

<Procedure of parts replacement>

see "Removing the Primary Charging Assembly," on p. 4-89.

<Procedure of adjustment>

1) Output a halftone image using the service mode.
   - TEST > PG > TYPE : 5
2) Execute the following procedure according to the density difference on the front and rear sides of the test print image.
   - When the front side test print image is dark, execute step 3.
   - When the rear side test print image is dark, execute step 4.
   - When there is no uneven density, execute step 5 and the following.

When the front side test print image is dark

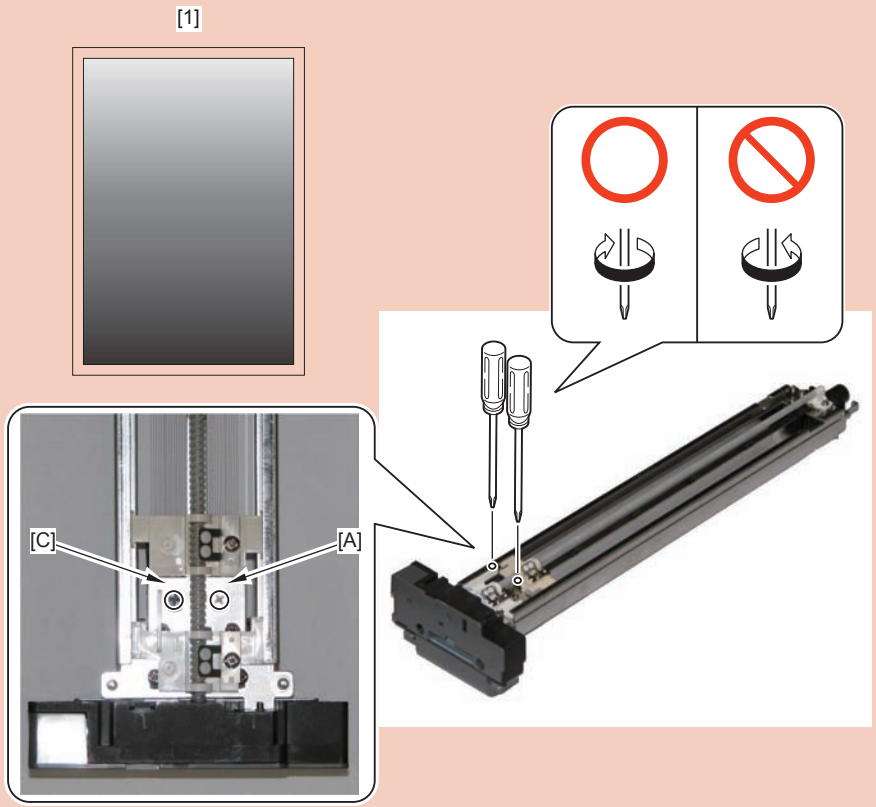
NOTE:
- When the front side test print image is dark [1], execute step 3 until the density becomes even. When the density becomes even, execute step 5 and the following.
- When the adjustment screw is turned clockwise, the Charging Wire goes down and up (gap between grid and Charging Wire becomes narrow and wide). As a result, the density of output image becomes light.

CAUTION:
Be sure to adjust the dark side (density of the test print image) to be the light side.

3) Make the resin screws [A] and [C] a full turn clockwise. While referring to the replacement procedure of the Primary Charging Assembly, install it to the main body, output a test print and check the image.

CAUTION:

Since uneven density might occur, be sure to adjust by turning the 2 adjustment screws with the same amount.




F-2-117

When the rear side test print image is dark

NOTE:

- When the rear side test print image is dark [2], execute step 4 until the density becomes even. When the density becomes even, execute step 5 and the following.
- When the adjustment screw is turned clockwise, the Charging Wire goes down and up (gap between grid and Charging Wire becomes narrow and wide). As a result, the density of output image becomes light.

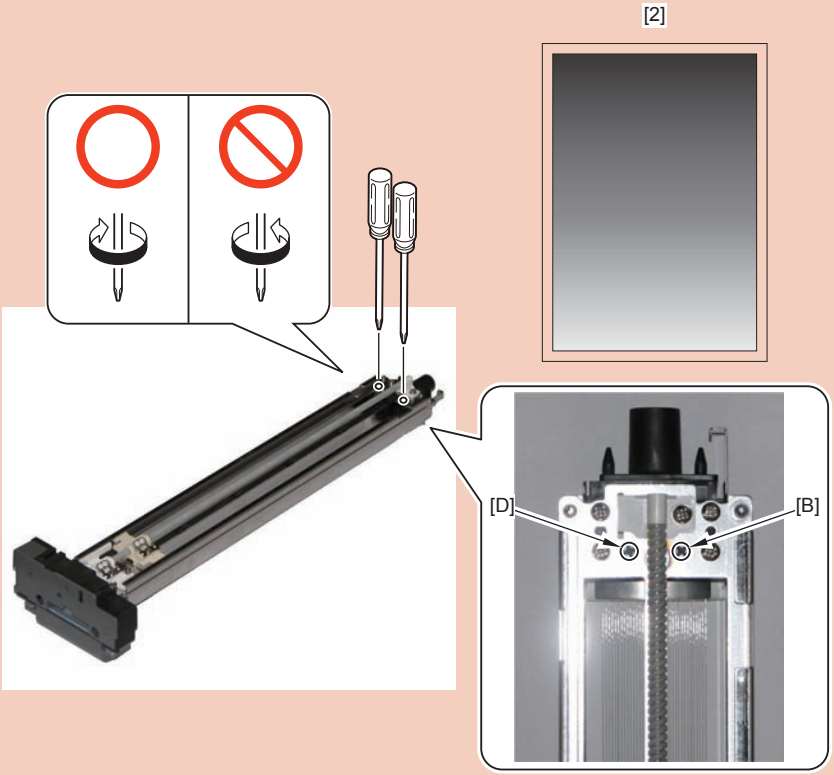
CAUTION:

Be sure to adjust the dark side (density of the test print image) to be the light side.

4) Make the resin screws [B] and [D] a full turn clockwise. While referring to the replacement procedure of the Primary Charging Assembly, install it to the main body, output a test print and check the image.

CAUTION:

Since uneven density might occur, be sure to adjust by turning the 2 adjustment screws with the same amount.




F-2-118

5) Clean the Charging Wire using the service mode.
(FUNCTION > CLAENING > WIRE-CLN) Time required: Approx. 30 sec.
6) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
7) Execute the potential control. (COPIER>FUNCTION>DPC>DPC
8) Execute the density correction using the user mode.
("Settings/Registration" > "Adjustment/Maintenance" > "Adjust Image Quality" > "Correct Density")

## Pre-transfer Charging Assembly

<Procedure of parts replacement>

see "Removing the Pre-transfer Charging Assembly," on p. 4-100.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>PO-UNIT)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)

## Pre-transfer Charging Wire

<Procedure of parts replacement>

see "Replacing the Pre-transfer Charging Wire," on p. 4-104.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PO-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)

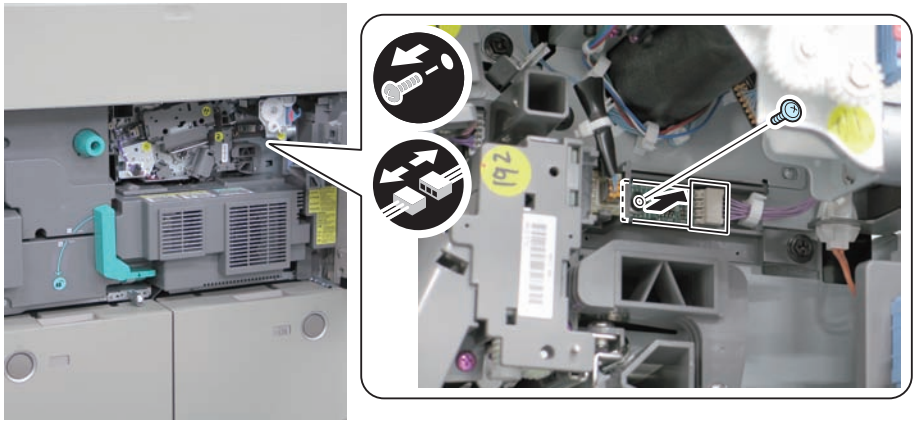
## Drum

<Procedure of parts replacement>

see "Removing the Photosensitive Drum," on p. 4-116.

<Procedure of adjustment>

1) Remove the EEROM.
- 1 Screw
- 1 Connector



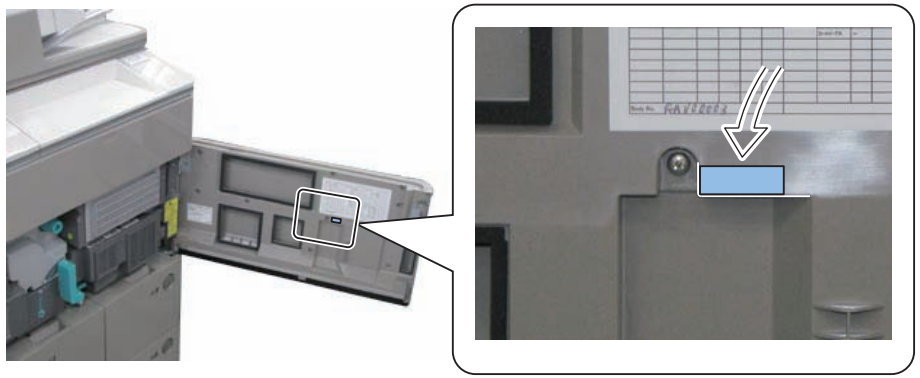
F-2-119

3) Replace the ROM connected to the host machine with the drum ROM included in the drum.

CAUTION:

If the ROM is not replaced, the replaced drum and the drum-unique data stored in the ROM are not matched. As a result, the 2D shading is not functioned normally.

4) Affix the ID Label included in the drum to the inside of the Front Cover.



F-2-120

5) Activate the drum replacement mode. (COPIER>FUNCTION>INSTALL>DRM-INIT)

6) Check the 2-dimensional shading ROM. (COPIER>FUNCTION>2D-SHADE>2D-READ)

6) Execute Auto Adjust Gradation.

## Drum Side Seals(Front and Rear)

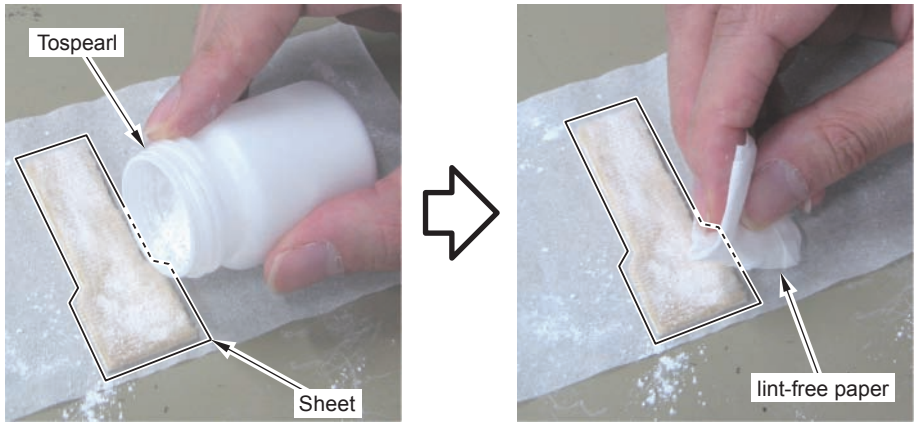
<Procedure of parts replacement>

see "Removing the Side Seal," on p. 4-121.

<Procedure of adjustment>

1) Applying Tospearl

Apply Tospearl on the surfaces of the Drum Side Seals (Front and Rear) and adhere it uniformly with lint-free paper. In order to reduce adhesion of toner at both ends of the Photosensitive Drum




F-2-121

## Developing Assembly, Developing Cylinder

<Procedure of parts replacement>

- see "Removing the Developing Assembly," on p. 4-122.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>DVG-CYL)
2) Supplying Developing Assembly toner. (COPIER>FUNCTION>INSTALL>TONER-S)

## Potential Control PCB Unit

<Procedure of parts replacement>

see "Removing the Potential Control PCB Unit," on p. 4-157.

<Procedure of adjustment>

1) Adjust the Potential Sensor offset. (COPIER > FUNCTION > DPC > OFST)

## ETB

<Procedure of parts replacement>

- see "Removing the ETB Unit," on p. 4-127.
- see "Removing the ETB," on p. 4-129.

<Procedure of adjustment>

1) Clear the ETB control counter. (COPIER>FUNCTION>CLEAR>TR-BLT)
Parts counter (COPIER>COUNTER>DRBL-1>TR-BLT) is also cleared coincidentally.

## Patch Sensor

<Procedure of parts replacement>

see "Removing the Patch Sensor," on p. 4-143.

<Procedure of adjustment>

1) Adjust the intensity of the Patch Sensor. (COPIER>FUNCTION>MISC-P>P-LED)

## Waste Toner Container

<Procedure of parts replacement>

see "Removing the Waste Toner Container," on p. 4-135.

<Procedure of adjustment>

1) Set the new Waste Toner Container.
2) Clear the waste toner counter. (COPIER>COUNTER>MISC>WST-TNR)

# Major Adjustments

None

# Troubleshooting

## Trailing Edge Shock Imaget

[Location]
ETB

[Cause]
Lines occur on the image due to shock when distortion on the belt is released while rotation speed between the ETB and drum differs

[Condition]
When replacing the ETB

[Field Remedy]
1) Output a halftone image with the following conditions and check the output image
COPIER>TEST>PG>TYPE 6
Select the cassette which the following paper is set: COPIER>TEST>PG>PG-PICK A3 (LDR) or larger.

With shock image: go to step 2
Without shock image: End

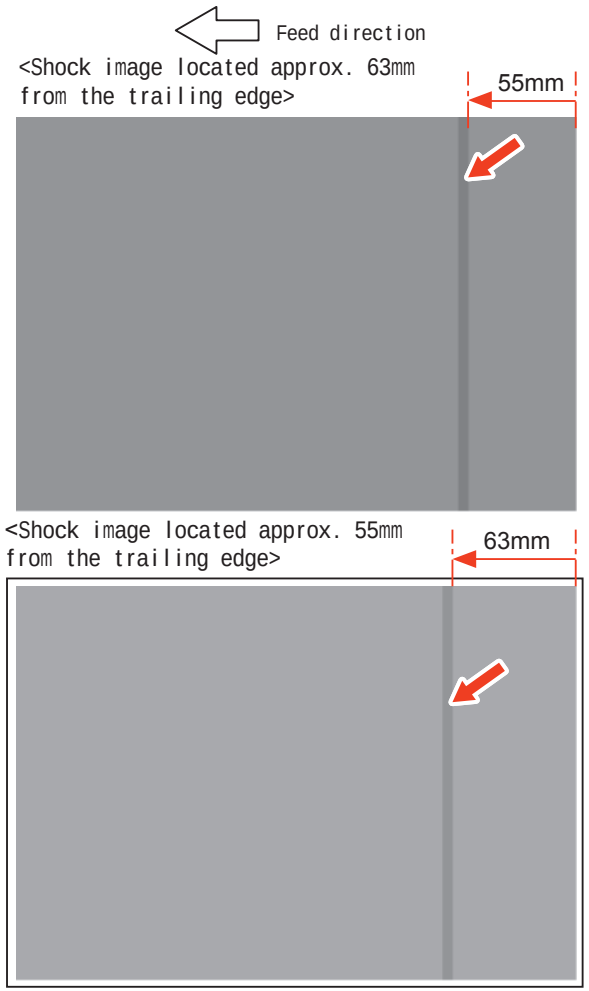
2) Measure a distance from the trailing edge of the shock image.

3) Adjust using the following service mode. COPIER > ADJUST > FEED-ADJ > TBLT-SPD: Adjust the Transfer Belt speed

Shock image is located approx. 55mm from the trailing edge: Adjust the value by +10 gradually.
Shock image is located approx. 63mm from the trailing edge: Adjust the value by -10 gradually

4) Output a halftone image with the condition described in step 1 again and check the image.
With shock image: go to step 3.
Without shock image: End

[Image Sample]




F-2-122

## Uneven density correction by 2D shading

To correct uneven image density caused by uneven potential on the surface of the Drum.

NOTE:
This machine performs two dimensional shading which replaces uneven potential of the Photosensitive Drum to the exposure amount to correct. (Default: two dimensional shading is disabled.) As the data of Drum's uneven potential, the data measured at the shipment of the Drum is used.

CAUTION:

This adjustment is executed when the preferred image is not output even if the Primary Charging Wire height adjustment and secure watermark adjustment * are performed.

* Secure watermark adjustment: Function Settings>Common>Print Settings>Secure Watermark Settings>Adjust Background/Character Contrast

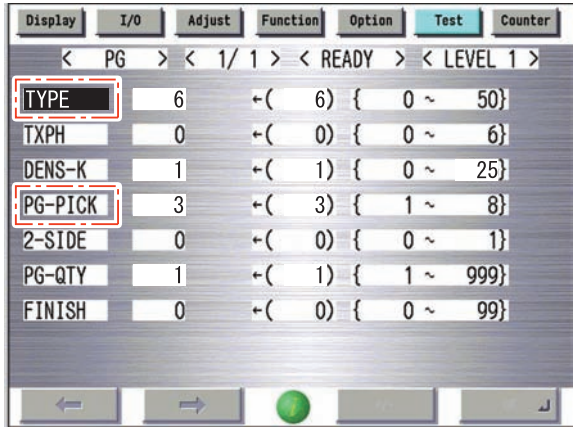
1) Check that the two dimensional shading is enabled.
COPIER>OPTION>IMG-LSR>2D-SHADE 1: Enabled

2) Turn OFF and then ON the main power switch.

CAUTION:

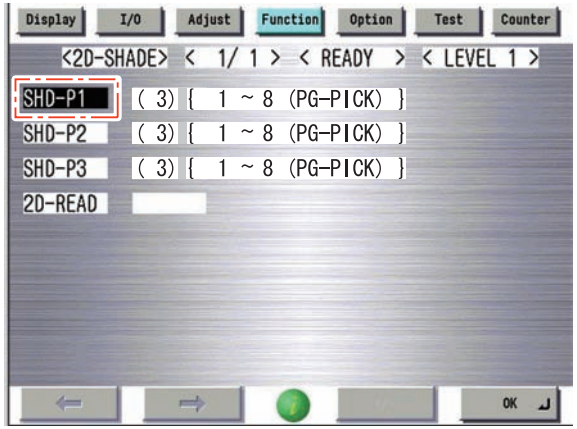
Be sure to turn OFF and then ON the main power switch after step 1. Uneven density may be reduced by the two dimensional shading correction at the startup.

3) Output a halftone image with the following conditions and check if uneven density occurs.
COPIER>TEST>PG>TYPE 6
Select the cassette which the following paper is set: COPIER>TEST>PG>PG-PICK A3 (LDR) or larger.
When uneven density is seen: Go to step 4.
When uneven density is not seen: Procedure is ended.




F-2-123

4) Output a test pattern for two dimensional shading.
COPIER>FUNCTION>2D-SHADE>SHD-P1
4-1) Set the cassette.Select the cassette which A3 (LDR) or larger paper is set. Select "SHD-P1" and cassette using "numeric keypad".
4-2) Output 3 sheets of the test pattern.



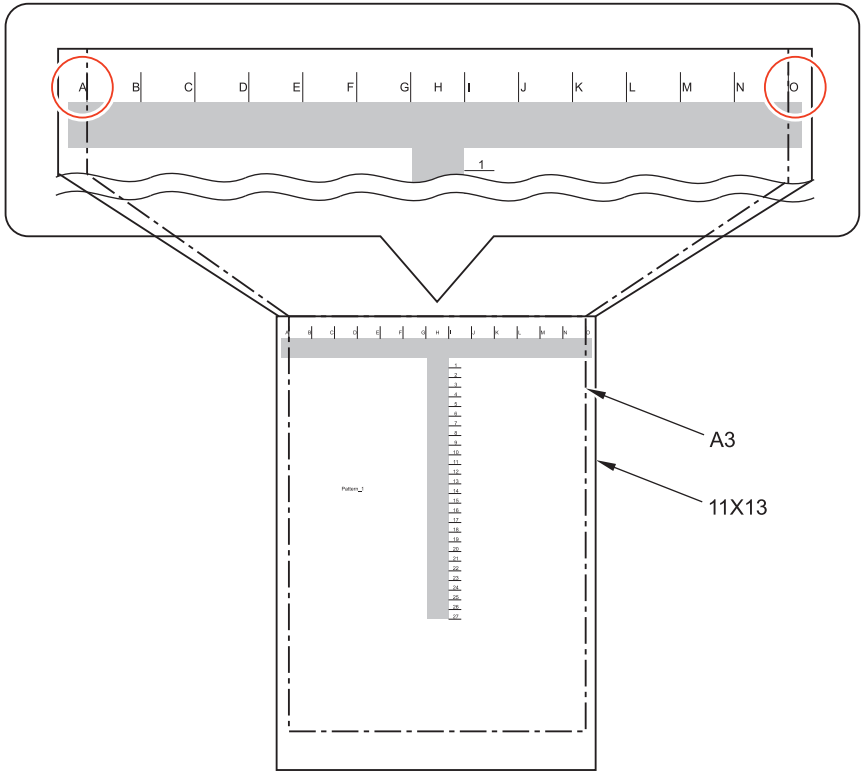

F-2-124

CAUTION:

It is difficult to judge whether uneven potential of the Photosensitive Drum causes uneven density of the output image, so output 3 sheets of the test print and adjust the area where all 3 sheets have the same symptom.

(If the same symptom is seen on the same spot of all 3 sheets, it is possibly caused from the Drum.)

<Test pattern>




F-2-125

NOTE:
For the test print, the following 3 types can be output, but basically set SHD-P1 to output. The following shows the use case of each test print.
COPIER>FUNCTION>2D-SHADE>SHD-P1
: When the image which uneven density occurs is the halftone image with light density
COPIER>FUNCTION>2D-SHADE>SHD-P2
: When the image which uneven density occurs is the halftone image with dark density
COPIER>FUNCTION>2D-SHADE>SHD-P3
: In case of the secure watermark image with uneven density

5) Check (T-shaped) halftone area of the output test print visually and adjust the area of uneven density.

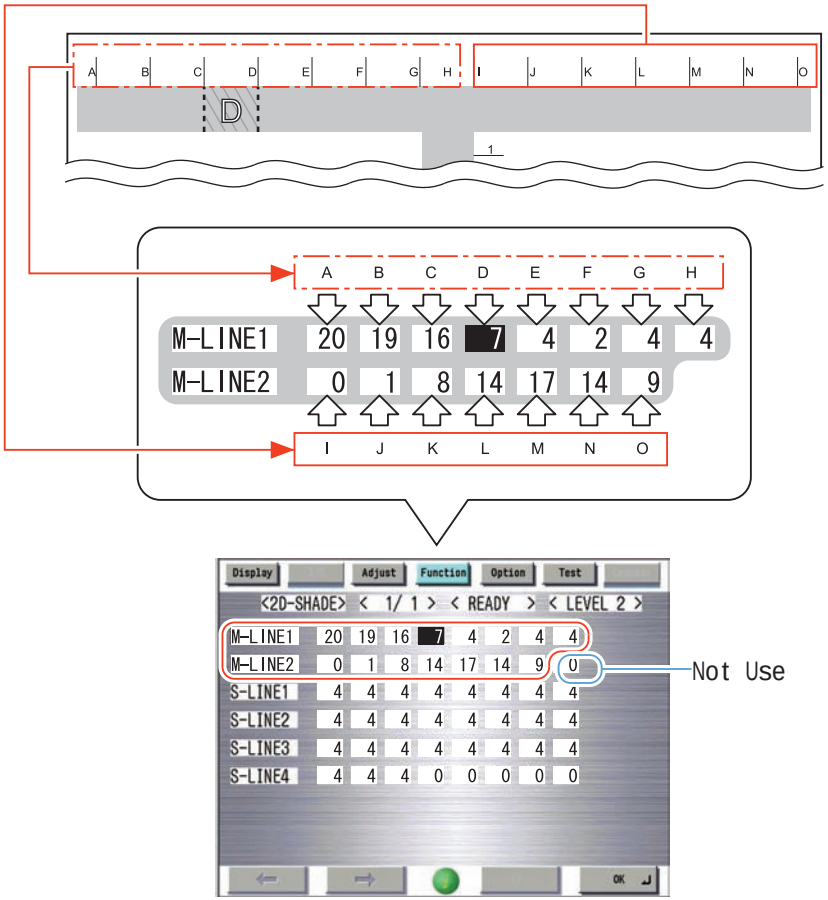
5-1) Take a note to write down the values of the following service mode.
When the adjustment cannot be performed appropriately, these values are required to return to the initial values.
COPIER>FUNCTION>2D-SHADE>M-LINE1 (Level 2)
COPIER>FUNCTION>2D-SHADE>M-LINE2 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE1 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE2 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE3 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE4 (Level 2)

5-2) Adjust the target horizontal scanning direction (A to O) which uneven density is seen.
After selecting "M-LINE1/M-LINE2", select the target horizontal scanning window (A to O), and enter the numerical value using "numerical keypad".
COPIER>FUNCTION>2D-SHADE>M-LINE1 (Level 2) Horizontal scanning direction A to H
COPIER>FUNCTION>2D-SHADE>M-LINE2 (Level 2) Horizontal scanning direction I to O

CAUTION:

- Be sure to switch the screen after entering the value. Unless the screen is switched, the numerical value is not reflected. (Actually, the value is not reflected on the screen, but it is retained internally.)
- When the horizontal scanning direction (H line) is adjusted, the adjustment value of the vertical scanning direction (1 to 27) is also changed.
- As the value is larger, the density becomes lighter. As the value is smaller, the density becomes darker.
- Enter the adjustment value in a unit of +/- 30 gradually, output the test pattern and make adjustment while checking the test pattern. If the value is changed dramatically, the image error (while line) may occur.
- Be sure to make adjustment in order of horizontal and vertical scanning directions. If the adjustment is executed in the inverse order, it may not be executed correctly.
- Entering 96 or larger value can generate an error in potential control (E061).
In the case of an error, adjust the setting value between 0 and 95

5-3) After the adjustment, output a test print and check the image.
When uneven density is seen: Go to 5-3).
When uneven density is not seen: Procedure is ended.




F-2-126

5-4) Adjust the target vertical scanning direction (1 to 27) which uneven density is seen.
After selecting "S-LINE1 to 4", select the target vertical scanning window (1 to 27), and enter the numerical value using "numerical keypad".
COPIER>FUNCTION>2D-SHADE>S-LINE1 (Level 2) Vertical scanning direction 1 to 8
COPIER>FUNCTION>2D-SHADE>S-LINE2 (Level 2) Vertical scanning direction 9 to 16
COPIER>FUNCTION>2D-SHADE>S-LINE3 (Level 2) Vertical scanning direction 17 to 24
COPIER>FUNCTION>2D-SHADE>S-LINE4 (Level 2) Vertical scanning direction 25 to 32

CAUTION:

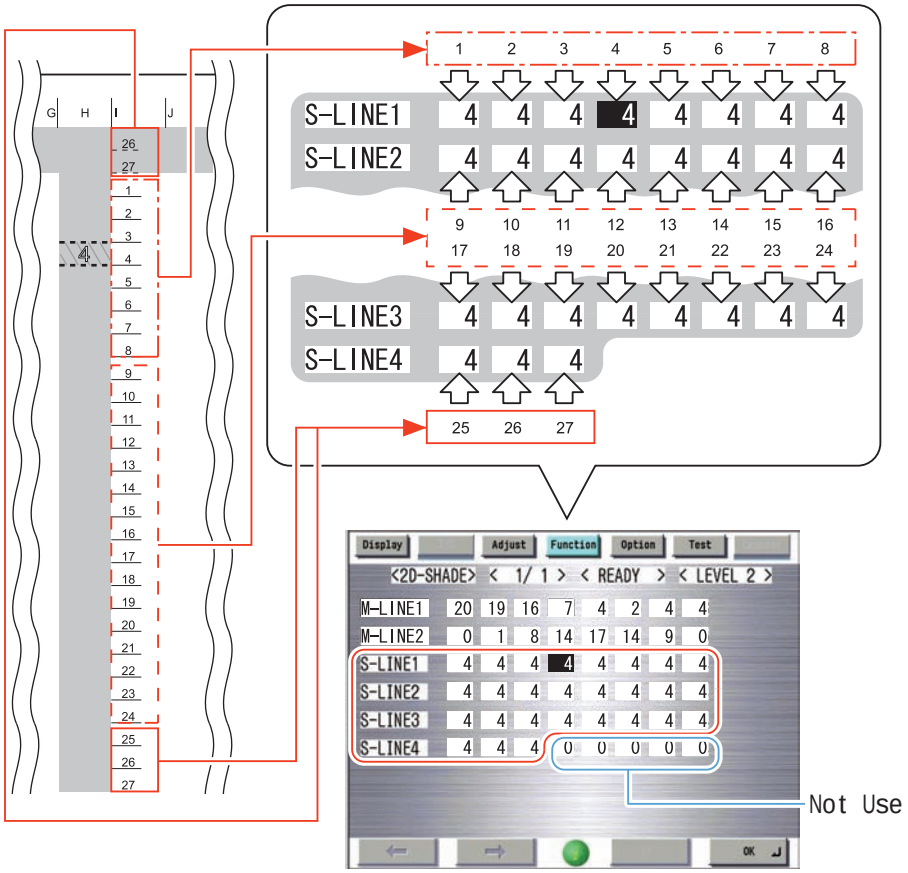
- Be sure to switch the screen after entering the value. Unless the screen is switched, the numerical value is not reflected. (Actually, the value is not reflected on the screen, but it is retained internally.)
- When the vertical scanning direction (25 and 26 lines) is adjusted, the adjustment value of the horizontal scanning direction (A to P) is also changed.

As the value is larger, the density becomes lighter. As the value is smaller, the density becomes darker.
Enter the adjustment value in a unit of +/- 30 gradually, output the test pattern and make adjustment while checking the test pattern. If the value is changed dramatically, the image error (while line) may occur.

5-5) After the adjustment, output a test print and check the image to complete the procedure.

CAUTION:

If the image cannot be adjusted correctly even with this adjustment procedure, reenter the values written in step 5-1.




F-2-127

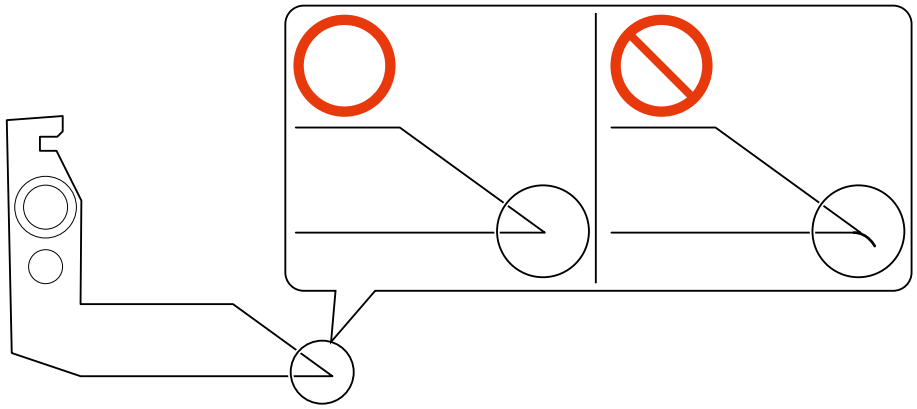
## Separation Failure Jam due to Deformation of Separation Claw

[Location]

Drum Separation Claw

[Cause]

When the paper enters to the drum at separation failure, the Separation Claw may be deformed. When the Separation Claw is deformed, the paper is easily caught by the leading edge of the Separation Claw when the paper (especially curled paper) is fed, and a jam (Jam Code: 0205) is likely to occur.



F-2-128

[Condition]

Job after a jam which occurs when the paper enters to the drum

When using curled paper (when using backside of printed paper, etc.)

[Field Remedy]

Replace the Separation Claw.

NOTE:

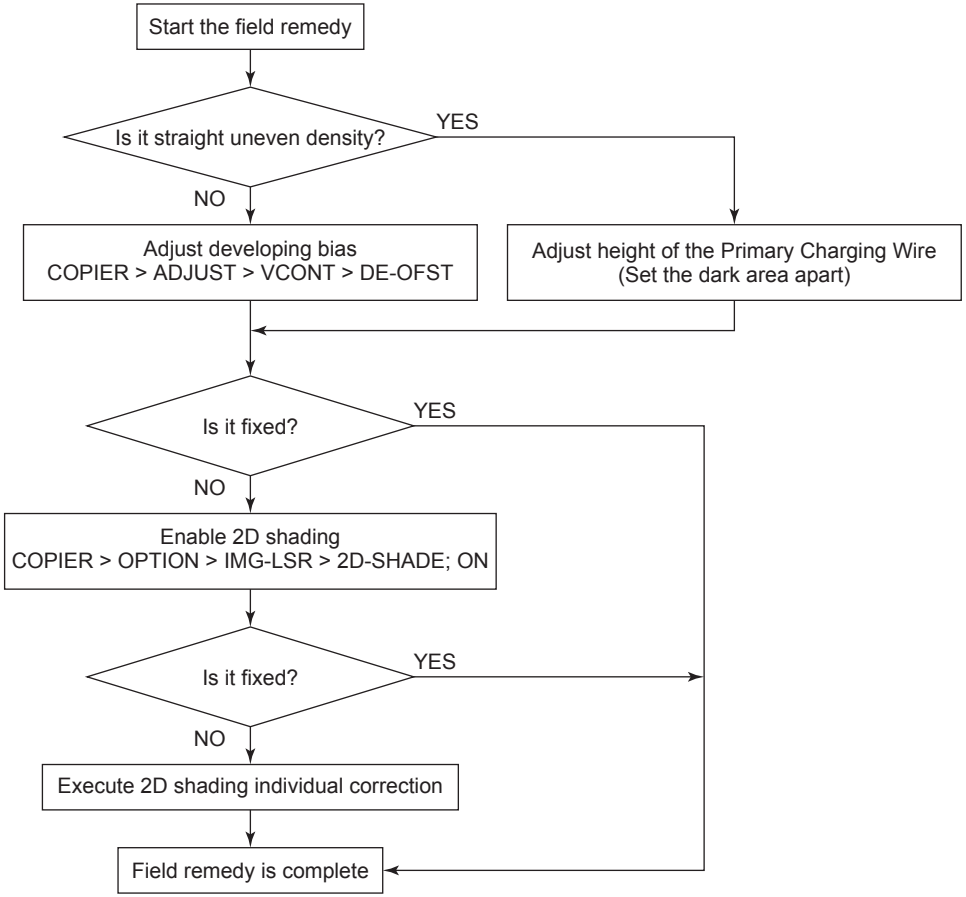
Replace the Separation Claw when a separation failure jam occurs even once..

## Uneven density

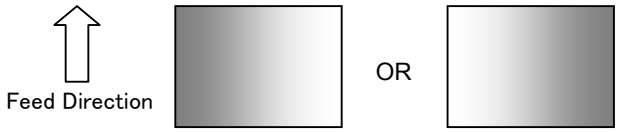
[Cause]

Uneven density occurs on the image because of uneven developing performance or change in drum characteristics due to wear.

[Field Remedy]

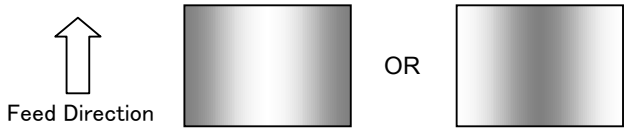



F-2-129




F-2-130

In the case of dark/light image at either the left or right side on the image in horizontal direction, adjust height of the Primary Charging Wire and check the output result. When making adjustment, execute the work while keeping the wire at dark area apart.




F-2-131

If it is not a straight uneven density, change the value of the following service mode in decrement of -10 and check the output result.

COPIER > ADJUST > VCONT > DE-OFST

(Setting value: default 0, -10, -20, …-50)

CAUTION :

Executing the above setting can generate smeared image or foggy image.

After switching the mode to enable 2D shading in the following service mode, turn OFF/ON the main power and check the output result.

(For detailed procedure, see “Troubleshooting > Uneven density correction by 2D shading > Step 1) to 3) (Refer to page 6-7)

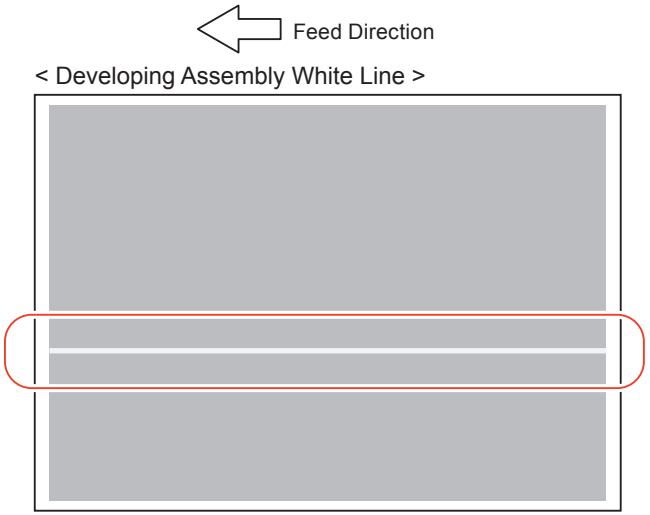
COPIER > OPTION > IMG-LSR > 2D-SHADE  Setting value: 1 (ON)

Output the test pattern for 2D shading and adjust the uneven density area individually.

(For detailed procedure, see “Troubleshooting > Uneven density correction by 2D shading > Step 4) to 5) (Refer to page 6-7)

## White line (foreign matter between Developing Sleeves)

Sample image



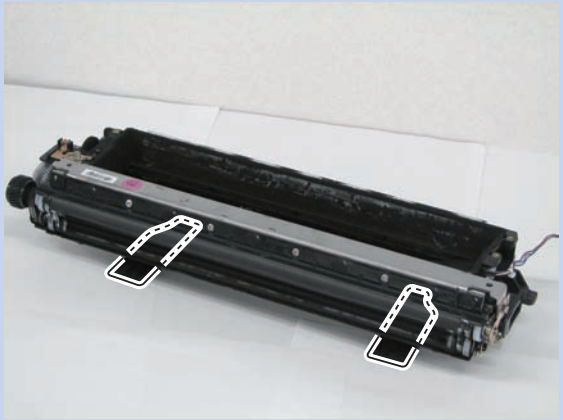

F-2-132

[Location]
Developing Assembly

[Cause]
A line appears in toner coating when imperceptible foreign matter is caught between the 2 sleeves of the Developing Assembly. This can cause image failure of a white line in vertical scanning direction.

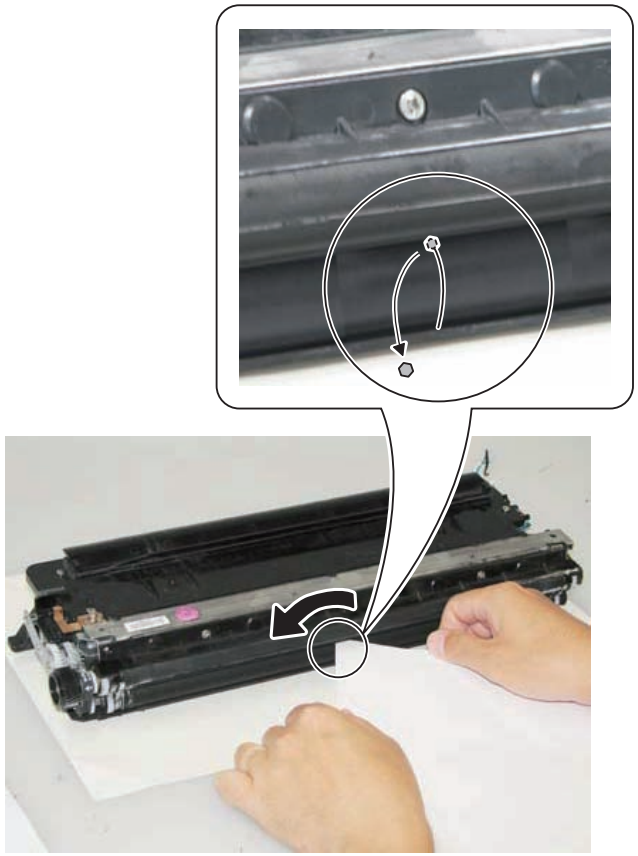
[Field Remedy]
1) Remove the Developing Assembly.

NOTE:
Be sure to place paper on a clean place and take out the foot of the Developing Assembly before placing the Developing Assembly.



F-2-133

2) Remove foreign matter caught between the sleeves.
Insert a corner of the paper between the sleeves and scrape out and remove foreign matter from the side.

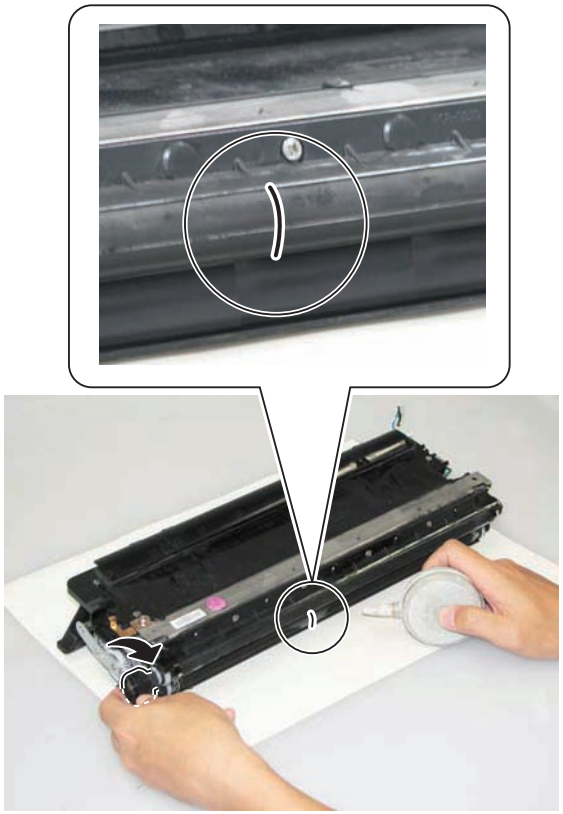


F-2-134

NOTE:
The location of foreign matter can be easily identified by using a blower to blow excess toner between the sleeves.
Be sure to use plain paper with around 75 g/m$^2$. (Too thick paper may not be fit into the gap. Too thin paper can be folded or ripped.)
If it is difficult to insert paper, turn the gear clockwise and counterclockwise for 2 teeth so that it gets easier to insert paper between the sleeves. Do not turn the gear counterclockwise for half round or more (otherwise, it can cause image failure due to collected toner between the sleeve and the blade or between the sleeves)

3) Clean excess toner on the upper and lower sleeves.
Toner can be excessively attached because the toner is pushed to the sleeve when scraping out the foreign matter. Perform cleaning in the following steps because excess toner can cause uneven density.

3-1) While rotating the sleeve, blow the toner with the blower and then check for excess toner.

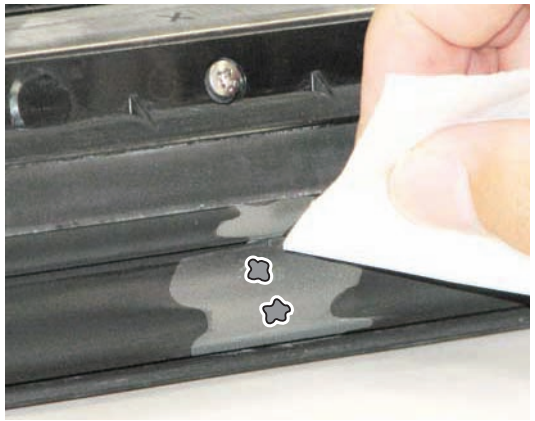


F-2-135

3-2) Pile up 3 sheets of lint-free paper and clean excess toner with the lint-free paper.

NOTE:
Do not apply force and lightly wipe out the excess toner. Rubbing the toner part can cause the rubbed part to be dark image.

3-3) Check if the toner blown by the blower is attached to the Developing Roller; if the toner is attached, wipe it with lint-free paper.
(Otherwise, the toner is fused to the Roller that causes banding)



F-2-136

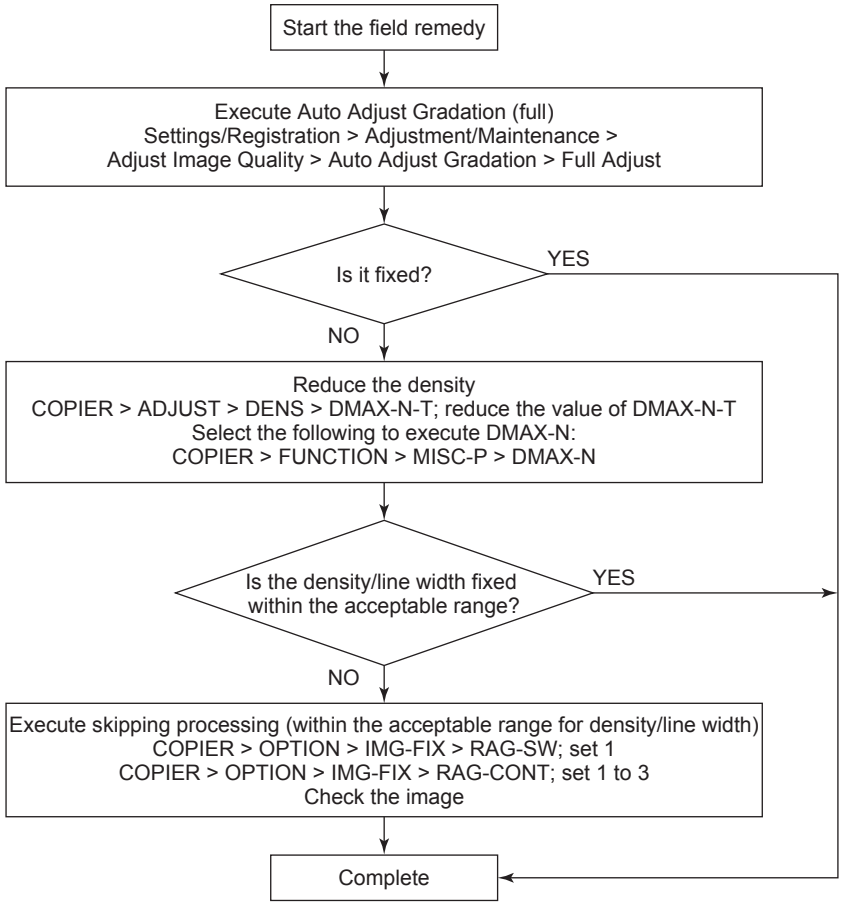
## Smeared image

[Cause]

Excess toner is transferred on the paper that causes toner collapse at the time of fixing, which can generate smeared image on the image. The following are assumed causes of smeared image:

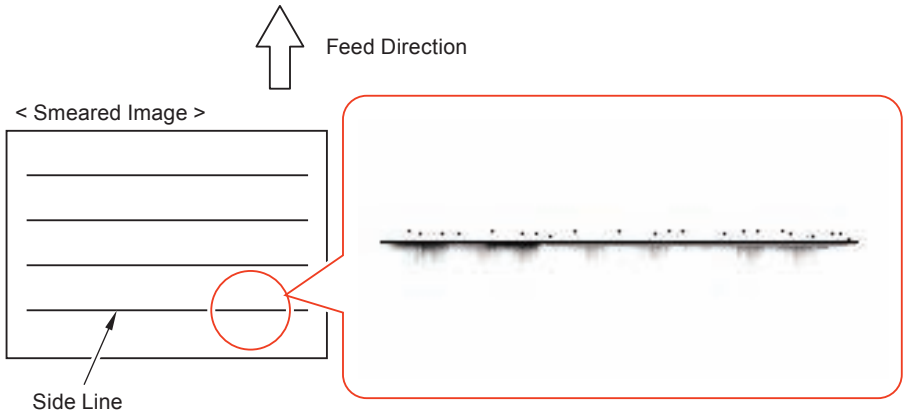
- When the paper type is changed
- Toner deterioration
- Rapid change in environment (High temperature <- -> Low temperature)

[Field Remedy]




F-2-137

[Image]




F-2-138

Select the following to execute Full Adjust: “Settings/Registration > Adjustment Maintenance > Adjust Image > Auto Adjust Gradation < Full Adjust”; and check the output result.

1) COPIER > ADJUST > DENS > DMAX-N-T; reduce the value of DMAX-N-T from 895 (default) by -30.
2) Select the following to execute DMAX-N: COPIER > FUNCTION > MISC-P > DMAX-N; and then check the output result.

If the symptom is not improved, further reduce the value in step 1) by -30 and then execute step 2).

CAUTION :
Changing the above setting can cause reduced density or thinner line

If the smeared image is not improved within the acceptable range for density and line width, execute skipping process in the following procedure:

1) COPIER > OPTION > IMG-FIX > RAG-SW; change the value to 1
2) COPIER > OPTION > IMG-FIX > RAG-CONT; change to 1 and check the output result.
3) If the symptom is not improved, change the value in step 2) to 2, 3…and check the output result.

CAUTION :
Changing the above setting can cause minor skipping in the text part.

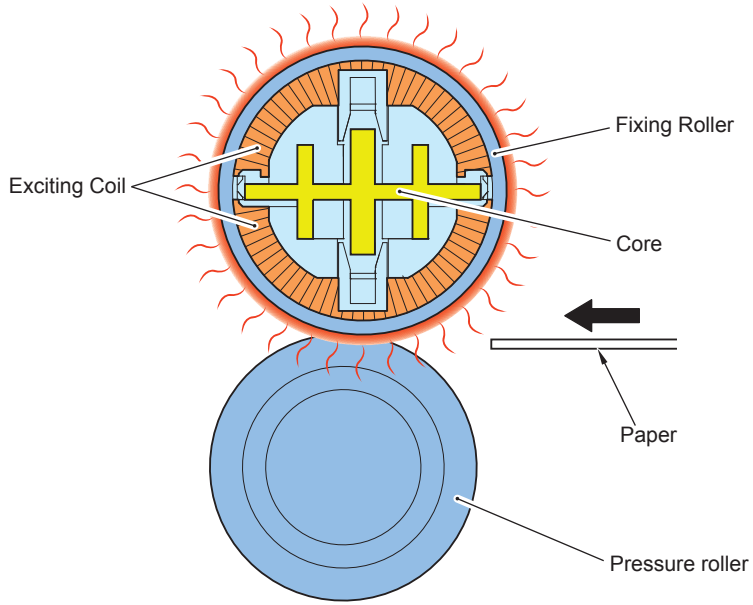
# Fixing

## Overview

### Characteristics

1) Whole-circumference IH heating method

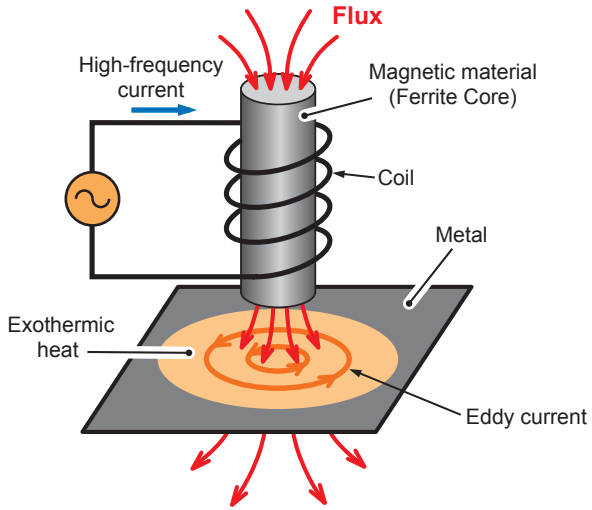
This machine uses the IH heating method to heat the whole circumference of the Fixing Roller. This method enables to shorten the warm-up time and high-speed printing.




F-2-139

<IH (Induction Heating) method>

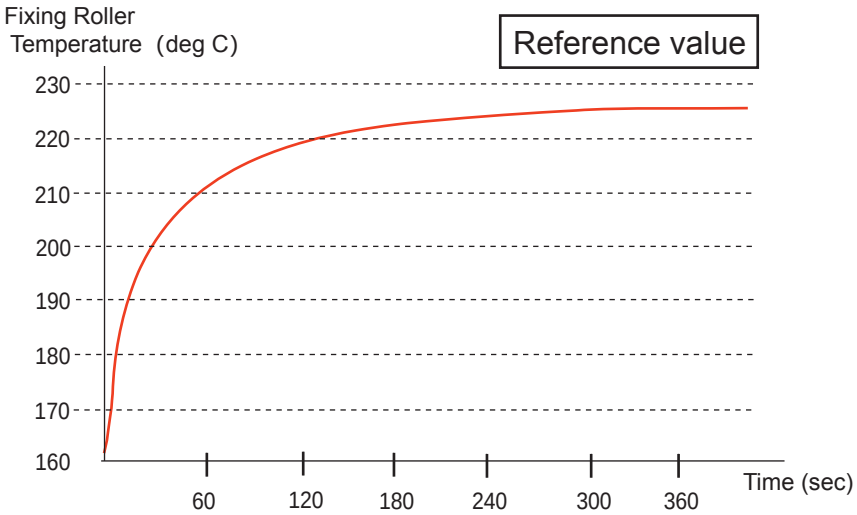
Supplying high frequency current to the coil inside the Heater Unit generates a high frequency magnetic field around the coil. By this magnetic field, an eddy current (induction current) runs through the Fixing Roller and the Fixing Roller generates electricity by itself.




F-2-140

2) Using magnetic shunt alloy to prevent temperature rise at the edge of the Fixing Roller

This machine uses degaussing alloy as a material of the Fixing Roller to prevent temperature rise at the edge of the Fixing Roller (There is no control to cool the edge). Magnetic shunt alloy becomes less likely to generate electric current by electromagnetic induction because of its characteristic of losing magnetic property once it reaches a certain temperature (Curie temperature). This principle restricts excessive temperature rise of the Fixing Roller.




F-2-141

3) Making the Fixing Assembly as a unit
Maintenance performance has been improved by separating the Fixing Unit from the Host Machine to be assigned as a unit.

4) Saving energy
Improved toner allows reduction of fixing temperature that enables less energy onsumption.

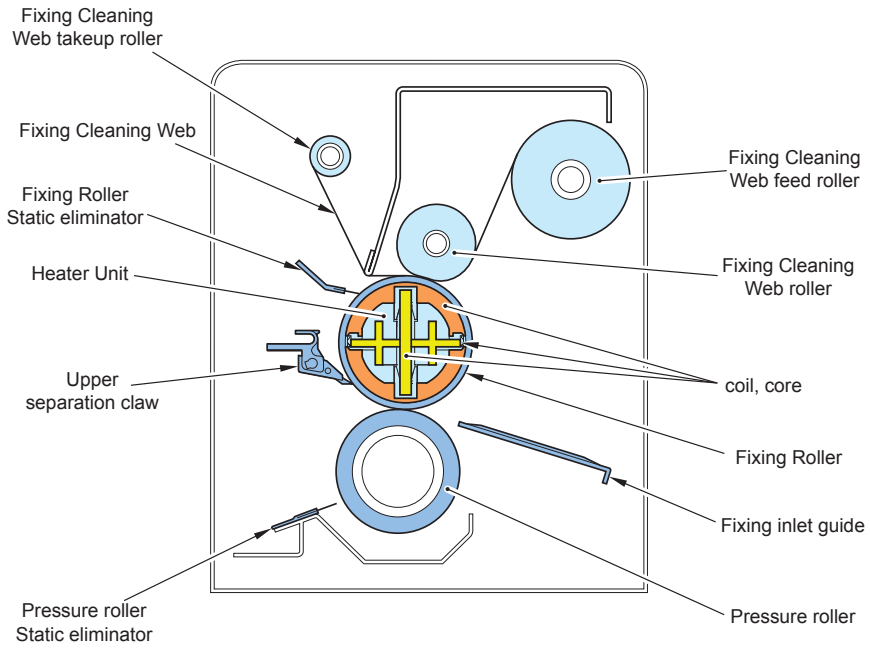
## Specifications

| Item | | Function/method |
|---|---|---|
| Fixing method | | Whole-circumference IH fixing method |
| Fixing Heater | | IH heater |
| Fixing Roller | | O/D: 40mm |
| Pressure Roller | | O/D: 38mm |
| Control temperature | | To be reduced accordingly from 195 deg C (at standby) |
| Fixing drive control | | Switching the print speed and warm-up speed (low speed) |
| Thermistor | Fixing inlet side | Main Thermistor (contact type)<br>The center of the Fixing Roller, Reciprocating width: 12mm<br>Temperature control, Failure detection |
| | | Sub Thermistor (contact type)<br>The rear of the Fixing Roller, No reciprocation<br>Failure detection |
| | Fixing outlet side | Sub Thermistor (contact type)<br>The rear of the Fixing Roller, No reciprocation<br>Failure detection |
| Thermal Switch | | 2 pc. (non-contact type) |
| Protective function | | Yes (detection by the Thermistor and the Thermal Switch) |
| Separation mechanism | | Upper Separation Claw: contact type, Reciprocating width: 3mm |
| Static Eliminator | | Fixing Roller/ Pressure Roller |
| Cleaning mechanism | | Fixing Cleaning Web |
| Inlet guide height control | | No |
| Bias application | | No |
| Control to prevent temperature rise at the edge | | No |
| Disengagement mechanism | | No |
| idle rotation during standby | | YES |
| Other controls | | See “Controls” described later. |

T-2-50

# Parts configuration

## Cross-section view

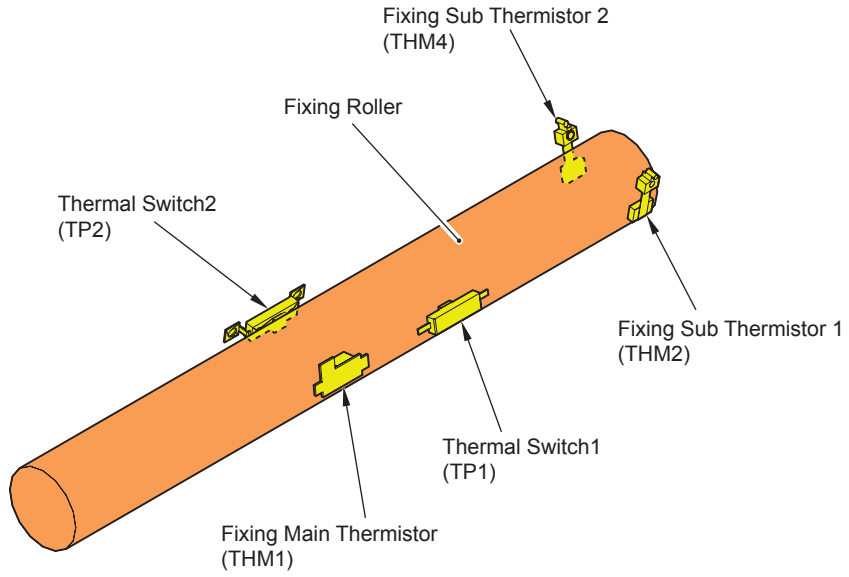



F-2-142

| Parts name | Function/method |
|---|---|
| Fixing Roller | Heating toner and paper<br>To prevent abnormal temperature rise at the edge by using the degaussing alloy material |
| Pressure Roller | Pressing and feeding paper |
| Heater Unit | Whole Circumference IH Heater<br>To heat the whole circumference of the Fixing Roller |
| Coil Core | |
| Fixing Cleaning Web | To remove residual toner on the surface of the Fixing Roller |
| Fixing Cleaning Web Roller | |
| Fixing Cleaning Web Take-up Roller | |
| Fixing Cleaning Web Feed Roller | |
| Upper Separation Claw | To separate paper from the Fixing Roller (to prevent paper-wrapping)<br>Reciprocating width: 3mm |
| Fixing Inlet Guide | Paper Feed Guide to the Fixing Assembly |
| Fixing Roller Static Eliminator | To prevent leak, static offset and noise |
| Pressure Roller Static Eliminator | |

T-2-51

## Thermistor, Thermal Switch

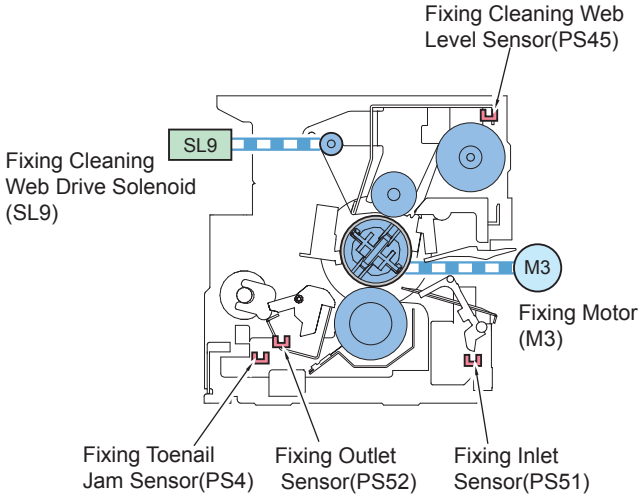



F-2-143

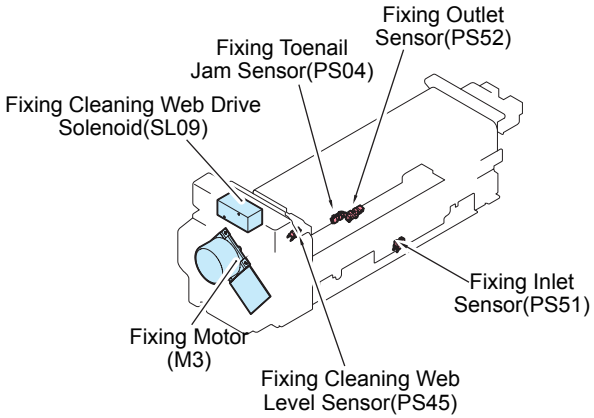
| Code | Parts name | Function/method |
|---|---|---|
| THM1 | Fixing Main Thermistor | Contact type<br>temperature control, failure detection |
| THM2 | Fixing Sub Thermistor 1 | Contact type<br>To detect failure with the coil at the fixing inlet side |
| THM4 | Fixing Sub Thermistor 2 | Contact type<br>To detect failure with the coil at the fixing outlet side |
| TP1 | Thermal Switch1 | Non-Contact type (200 -/+ 5 deg C)<br>To prevent abnormal temperature rise(the fixing inlet side) |
| TP2 | Thermal Switch2 | Non-Contact type (200 -/+ 5 deg C)<br>To prevent abnormal temperature rise(the fixing outlet side) |

T-2-52

## Drive configuration




F-2-144



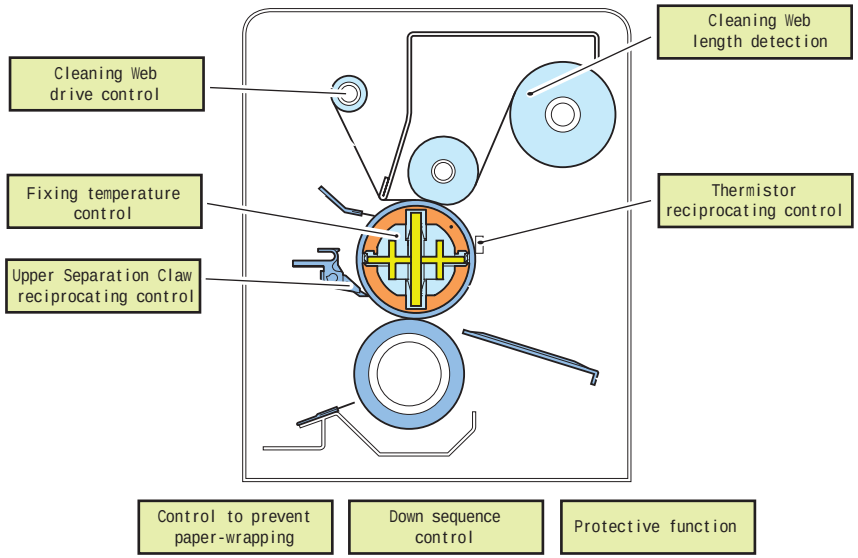

F-2-145

| Code | Parts name | Function/method |
|---|---|---|
| M3 | Fixing Motor | To control drive of the Fixing Motor |
| SL9 | Fixing Cleaning Web Drive Solenoid | To control drive of the Cleaning Web |
| PS4 | Fixing Toenail Jam Sensor | To prevent scratches on Fixing Roller due to jam |
| PS45 | Fixing Cleaning Web Level Sensor | To detect length of the Cleaning Web |
| PS51 | Fixing Inlet Sensor | To detect paper wrapping and stationary |
| PS52 | Fixing Outlet Sensor | |

T-2-53

# Controls

## Overview




F-2-146

| NO | Control/Function | Overview |
|---|---|---|
| 1 | Fixing temperature control | To control temperature of the Fixing Roller to prevent fixing failure |
| 2 | Down sequence control | In the case of large difference between the target temperature and the detected temperature, this control drops productivity to prevent fixing failure and image failure. |
| 3 | Paper anti-wrapping control | To prevent failure of the Fixing Assembly caused by wrapping of paper around the Fixing Roller and the Pressure Roller. |
| 4 | Thermistor reciprocating control | To prevent scar on the Fixing Roller by the Main Thermistor, this control moves the Main Thermistor back and forth. |
| 5 | Upper Separation Claw reciprocating control | To prevent scar on the Fixing Roller by the Upper Separation Claw, this control moves the Upper Separation Claw back and forth. |
| 6 | Cleaning Web drive control | To prevent fixing offset, this control removes residual toner on the surface of the Fixing Roller. |
| 7 | Cleaning Web level detection | To detect level of the Cleaning Web. |
| 8 | Protective function | To detect error by Thermistor.<br>To detect error by Thermoswitch. |

T-2-54

## Fixing temperature control

### Overview

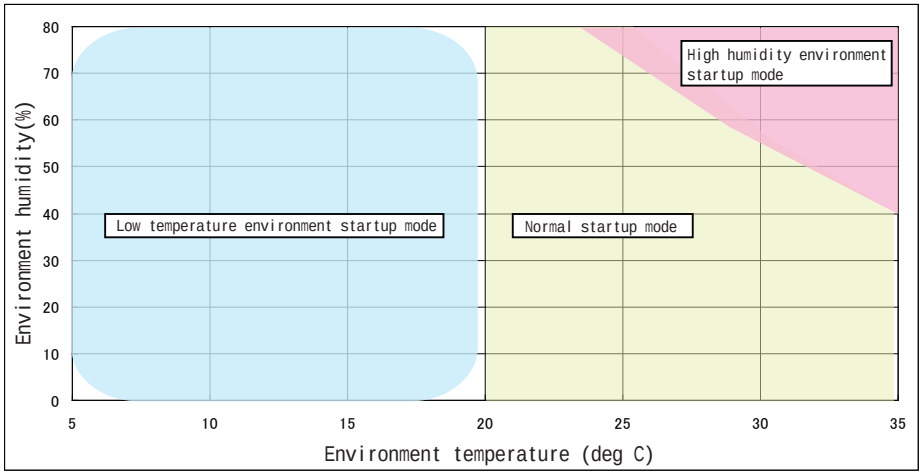
To prevent fixing failure, temperature control of the Fixing Roller is executed with the following timing.

| NO | Temperature control | Overview |
|---|---|---|
| 1 | Temperature control during startup | To control temperature to reach the standby temperature.<br>To be switched from the following 4 modes according to the environment temperature/ humidity and the temperature of the Fixing Roller:<br>• Normal startup mode<br>• Low temperature environment startup mode<br>• High humidity environment startup mode<br>• Recovery mode |
| 2 | Temperature control during standby | To control temperature so that printing can be performed immediately after receiving the print request signal |
| 3 | Temperature control during printing | To control temperature by the temperature table according to the paper type and the paper basis weight. |
| 4 | Other temperature adjustments | Following shows other temperature adjustments<br>• To control temperature for reducing power consumption. |

T-2-55

## Temperature control during startup

Temperature is controlled to reach the standby temperature.




F-2-147

<Normal startup mode>

In the case of reaching the target temperature within 60 seconds due to quick temperature rise of the Fixing Roller, the target temperature is maintained to be shifted to the ready state once the potential control is completed.

| Conditions | | | Target temperature | Target temperature reaching time |
|---|---|---|---|---|
| Environment temperature | Environment humidity | Fixing Roller temperature | | |
| 20 deg C or more | Low humidity environment(within 13g of absolute moisture content) | 70 deg C or less | 190 deg C | 60 sec |

T-2-56

NOTE:
In the case of selecting the fixing improvement mode in the following service mode, the machine does not enter the startup state for 60 seconds and waits until the specified time.
COPIER> OPTION> BODY> FSPD-S1 :Selection of fixing improvement mode

<Low temperature environment startup mode>

After it reaches the target temperature, the target temperature is maintained until completion of the potential control, and then the machine enters ready state.

| Conditions | | | Target temperature | Target temperature reaching time |
|---|---|---|---|---|
| Environment temperature | Environment humidity | Fixing Roller temperature | | |
| Less than 20 deg C | - | 70 deg C or less | 195 deg C | 90 sec (reference value) |

T-2-57

<High humidity environment startup mode>

After it reaches the target temperature, the target temperature is maintained until completion of developing idle rotation as well as completion of the potential control, and then the machine enters ready state.

| Conditions | | | Target temperature | Target temperature reaching time |
|---|---|---|---|---|
| Environment temperature | Environment humidity | Fixing Roller temperature | | |
| - | humidity environment(13g or more of absolute moisture content) | 70 deg C or less | 190 deg C | 90 sec (reference value) |

T-2-58

<Recovery mode>

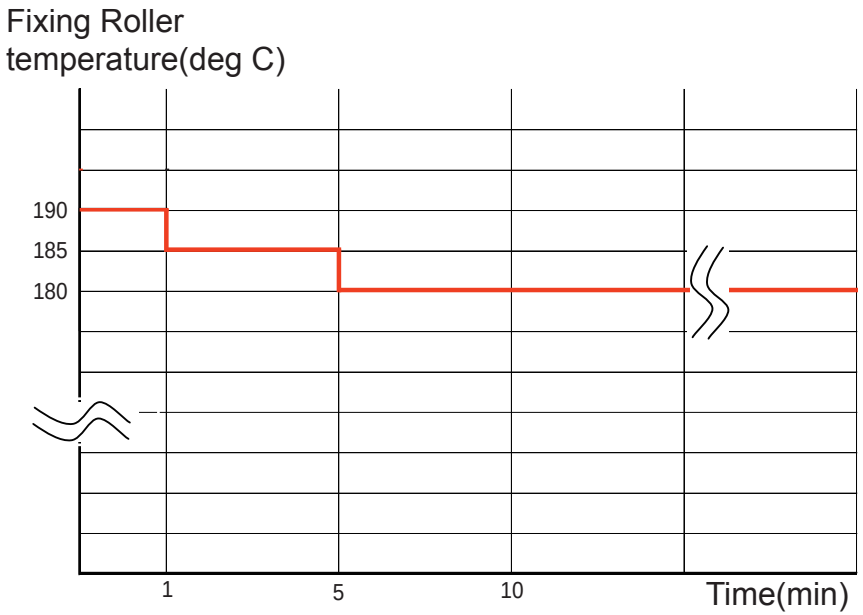
The machine enters ready state once it reaches the target temperature.

| Conditions | | | Target temperature | Target temperature reaching time |
|---|---|---|---|---|
| Environment temperature | Environment humidity | Fixing Roller temperature | | |
| - | - | 70 deg C or more | 195 deg C | 60 sec or less |

T-2-59

## Temperature Control for Standby

To provide measures against temperature rise of the coil/Main Body and save energy consumption, the target temperature is reduced step by step on a specified time basis until it reaches a certain temperature.




F-2-148

The control temperature depends on the environment temperature/country. The details on the control temperature are shown below.

- Normal environment(20 degC or higher)

| Destination | Time (minute) | | | |
|---|---|---|---|---|
| | 0 to 1 | 1 to 5 | 5 to 10 | 10 and longer |
| All | 195 | 195 | 190 | 190 |

T-2-60

- Low temperature environment Lower than 20 degC

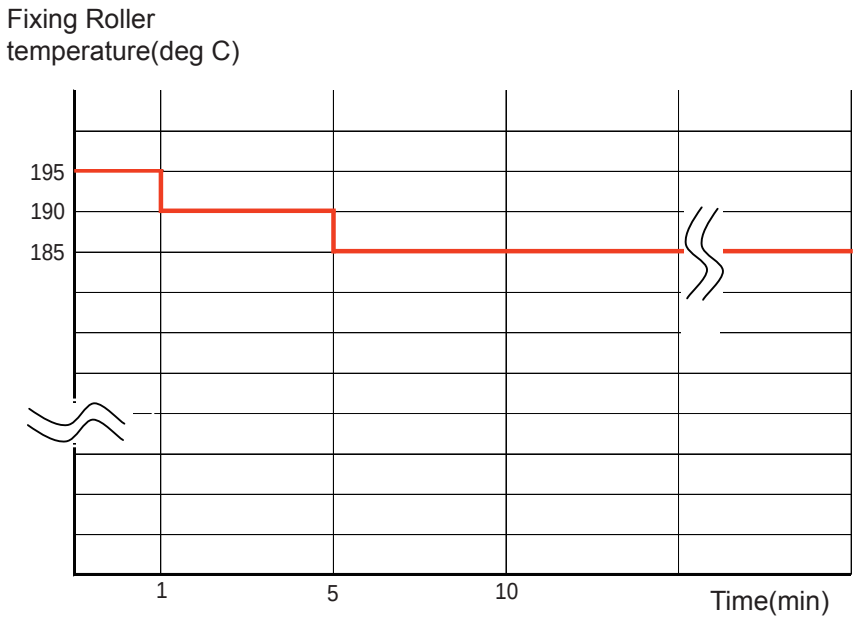
| Destination | Time (minute) | | | |
|---|---|---|---|---|
| | 0 to 5 | 5 to 10 | 10 to 20 | 20 and longer |
| All | 195 | 195 | 195 | 185 |

T-2-61

NOTE:
When restoring from the recovery mode, temperature control is conducted from the 2nd line of temperature control table.

## Temperature control during printing

The target temperature is reduced step by step on a specified time basis until it reaches a certain temperature.
This control reduces energy consumption to prevent temperature rise of the Fixing Roller.




F-2-149

The control temperature depends on the environment temperature/country/paper type. The details on the control temperature are shown below.

NOTE:
The following is the details of paper types shown in the following tables.

| Paper type | Detail | Paper weight (g/m$^2$) |
|---|---|---|
| A | Plain paper, recycled paper, color paper, pre-punched paper | 64 to 90 |
| B | Heavy paper (plain paper, recycled paper, color paper, pre-punched paper) | 91 to 256 |
| | Transparency, label paper, tracing paper, tab paper, postcard | All paper weight |
| C | Bond paper | All paper weight |
| D | Thin paper (plain paper, recycled paper, color paper, pre-punched paper) | 52 to 63 |

T-2-62

- Normal environment 20 deg C or higher

| Destination | Paper Type | Time (minute) | | | |
|---|---|---|---|---|---|
| | | 0 to 1 | 1 to 5 | 5 to 10 | 10 and longer |
| 100V machine<br>120V machine | Plain paper | 195 | 195 | 195 | 190 |
| | Heavy paper | 195 | 195 | 195 | 195 |
| | Bond paper | 215 | 215 | 215 | 215 |
| | Thin paper | 175 | 175 | 175 | 175 |
| 230V machine | Plain paper | 195 | 195 | 195 | 190 |
| | Heavy paper | 195 | 195 | 195 | 195 |
| | Bond paper | 200 | 200 | 200 | 200 |
| | Thin paper | 175 | 175 | 175 | 175 |

T-2-63

- Low temperature environment  Lower than 20 deg C

| Destination | Paper Type | Time (minute) | | | |
|---|---|---|---|---|---|
| | | 0 to 5 | 5 to 10 | 10 to 20 | 20 and longer |
| 100V machine<br>120V machine | Plain paper | 200 | 200 | 198 | 198 |
| | Heavy paper | 200 | 200 | 200 | 200 |
| | Bond paper | 215 | 215 | 215 | 215 |
| | Thin paper | 185 | 185 | 185 | 185 |
| 230V machine | Plain paper | 200 | 200 | 198 | 198 |
| | Heavy paper | 200 | 200 | 200 | 200 |
| | Bond paper | 200 | 200 | 200 | 200 |
| | Thin paper | 185 | 185 | 185 | 185 |

T-2-64

## Other temperature adjustments

<Energy Saver mode>

By pressing the energy saver key on the Control Panel, energy consumption is reduced by reducing the control temperature when the Fixing Unit is at standby state according to the energy saving rate.

NOTE:
To be recovered to the normal mode according to the recovery mode.

NOTE:
The energy saving rate can be changed from "Settings/Registration > Preferences > Timer/Energy Settings > Change Energy Saver Mode".
(Default: -10%)

<Low power mode>

To save energy, in the case that no operation has been executed for a certain period of time, this machine is automatically to be in Low Energy Mode. Power distribution to the Fixing Unit is turned OFF in Low Energy Mode.

NOTE:
To be recovered to the normal mode according to the temperature control at warm-up.

NOTE:
The time to change to the low power mode can be changed from "Settings/Registration > Preferences > Timer/Energy Settings > Auto Sleep Time".
(Default: 1 min.)

## Related Error Code

E000: Fixing Assembly low temperature error
E001: Fixing Assembly high temperature error
E002: Fixing Assembly temperature rise error
E003: Fixing Assembly temperature decrease error
E004: Fixing Power Supply error

CAUTION:

When any of the above Error Codes, E000 to E0004, is displayed, the error code display will not be cleared even though the Main Power Switch is turned OFF. In such a case, cancel the error by the following service mode and turn OFF and then ON the power.

COPIER>FUNCTION>CLEAR>ERR:Clear of error code

## Related Service Mode

Selection of fixing improvement mode
COPIER> OPTION> IMG-FX> FSPD-S1

Setting of paper wrinkle prevention mode
COPIER> OPTION> IMG-FIX> FX-WNKL

# Down sequence control

## Overview

In the case of great difference between the target temperature and the detected temperature at the start of printing or during printing, productivity is dropped to prevent fixing failure or image failure.

## Execution timing

- During printing
- At the start of printing and when the paper type is switched

## Control description

This control has the 3 types of down sequences according to the execution timing.

1) In the case of decrease in fixing temperature (during printing)
   When the fixing temperature drops during the job, the productivity is dropped or the job is stopped to prevent fixing failure.

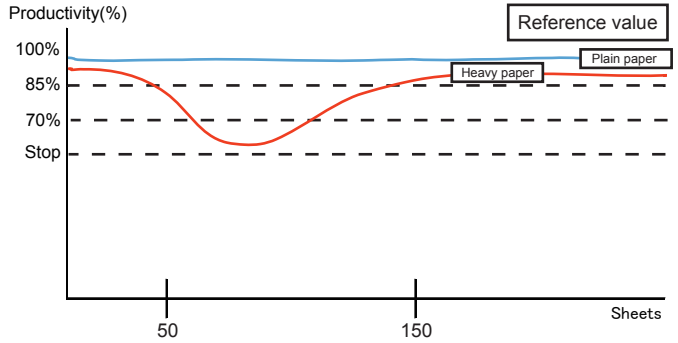
<Plain paper>

In case of plain paper, the fixing temperature of 100% productivity maintains, so the down sequence does not start.

> NOTE:
> In case of the default print temperature, 100% productivity is maintained.
> When the print temperature is reduced by the service mode, the down sequence may be started according to the use environment.

<Heavy paper>

Right after the startup (including restoration from the sleep mode), a whole Fixing Assembly is not warm enough, so the down sequence may be started. However, as printing continues sequentially, the temperature of the Fixing Assembly is increased and reaches to the temperature of the 100% productivity




F-2-150

2) When printing is started and the paper type is switched

Because fixing temperature differs according to the paper type, switching the paper type causes downtime.

Up to 60 seconds downtime is expected with this machine (switching from heavy paper to thin paper). The following shows estimated downtime.

| pattern of paper type switching | downtime (reference value) | Remarks |
|---|---|---|
| Plain paper -> Heavy paper | 5 sec | - |
| Thin paper -> Heavy paper | 10 sec | - |
| Heavy paper -> Plain paper | - | Switching the temperature control is conducted, but print operation continues, so downtime does not occur. |
| Heavy paper -> Thin paper | 60 sec | - |
| Bond paper -> Heavy paper | - | Switching the temperature control is conducted, but print operation continues, so downtime does not occur. |
| Bond paper -> Plain paper | - | |
| Bond paper -> Thin paper | 60 sec | - |
| Thin paper -> Bond paper | 80 sec | - |
| Plain paper -> Bond paper | 30 sec | - |
| Heavy paper -> Bond paper | 10 sec | - |

T-2-65

3) When the quality priority mode is specified

Due to the temperature rising at the edge of the Fixing Roller, image failure may occur on halftone printing. To prevent image failure, user can enable the following mode from "Settings/Registration".

Settings/Registration > xxxx > xxxx

With this mode, idle rotation is executed to keep constant temperature on the Fixing Roller when above the certain level of temperature difference between the center and the edge of the Fixing Roller is detected. During idle rotation, paper feed is stopped, so the productivity is reduced.

NOTE:
When the quality priority mode is specified, productivity may be extremely reduced depending on use conditions (paper size, paper type, and print image). In such a case, the level of production reduction can be changed by the following service mode.

.

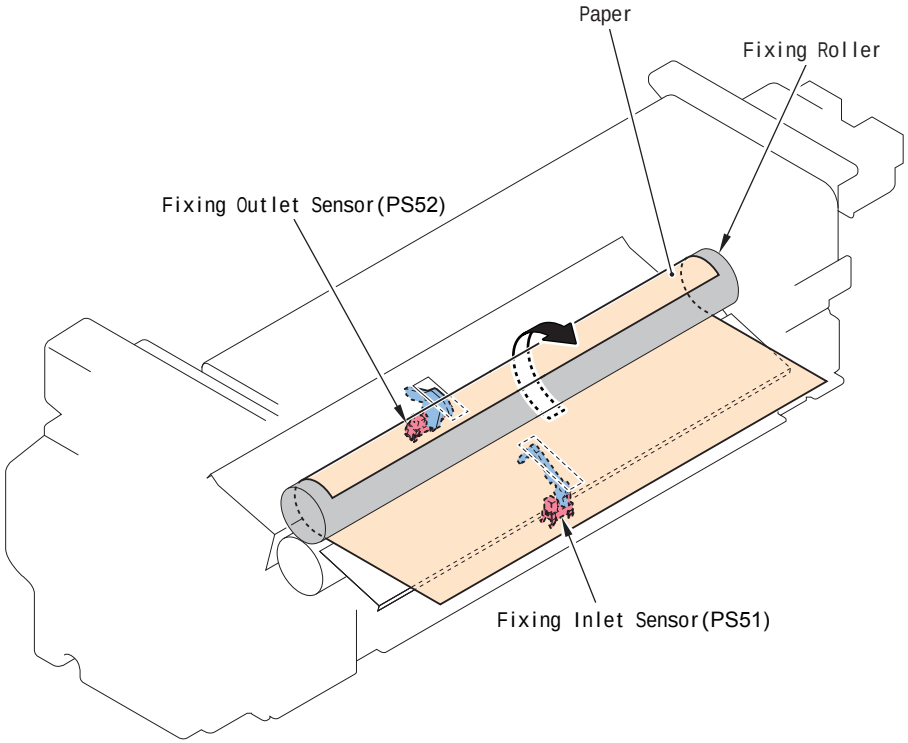
## Related Service Mode

- To change temperature threshold of down sequence with special paper
  COPIER> OPTION> IMG-FX> FIX-TEMP
  0 : Fixing priority, 1: Normal, 2: Productivity priority
- Set fixing/productivity: Plain paper A3+
  COPIER> OPTION> IMG-FX>FIX-TMP2
- Set fixing/productivity: Spcl ppr A3+
  COPIER> OPTION> IMG-FX>FIX-TMP3
- Set Img Quality Priority level:user mode
  COPIER> OPTION> IMG-FX>FX-IMGLV
- Curl reduction modes
  COPIER> OPTION> IMG-FX> TEMP-TBL2: to change control temperature for thin paper
  COPIER> OPTION> IMG-FX> TEMP-TBL: to change control temperature for plain paper
  COPIER> OPTION> IMG-FX> TEMP-TBL3: to change control temperature for heavy paper
  COPIER> OPTION> IMG-FX> TEMP-TBL4: to change control temperature for bond paper

## Paper Anti-wrapping Control

### Overview

With this control, failure of the Fixing Assembly caused by paper wrapping around the Fixing Roller and the Pressure Roller is prevented.




F-2-151

### Control description

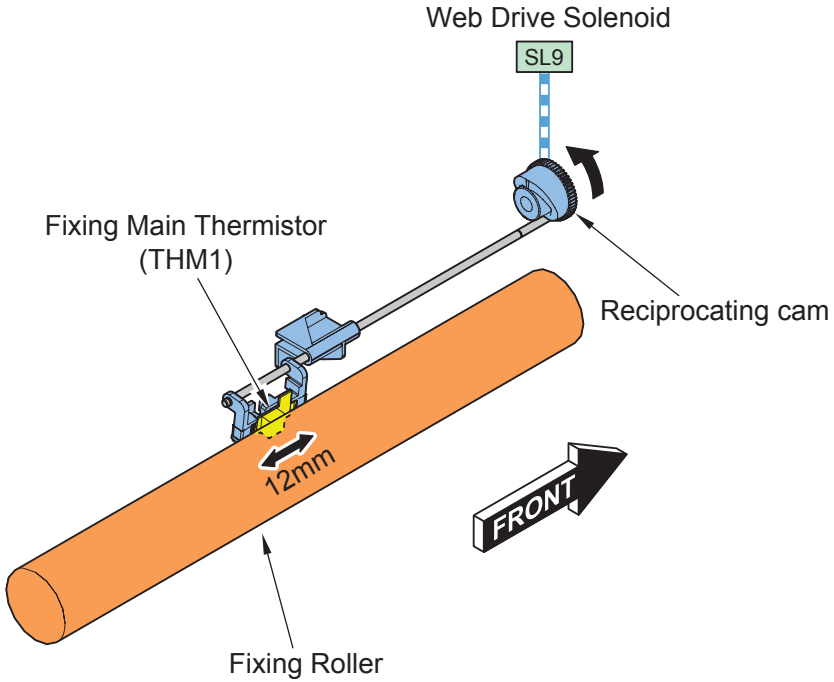
In the case of delay jam at the fixing outlet, the DC Controller determines paper wrapping if the paper remains in the Fixing Assembly and executes the following.

- The brake is applied to the Fixing Motor to immediately stop operation of the Fixing Motor (to minimize the paper wrapping level)
- Power distribution to the coil is stopped (to ensure safety).
- A jam is displayed.(Jam Code:0111)
- Cleaning of the Fixing Roller is executed (5 times of web cleaning)

NOTE:
Paper presence in the Fixing Assembly is determined by the paper detection log with the Fixing Inlet Sensor (to see whether the paper passes through the Sensor).

## Thermistor reciprocating control

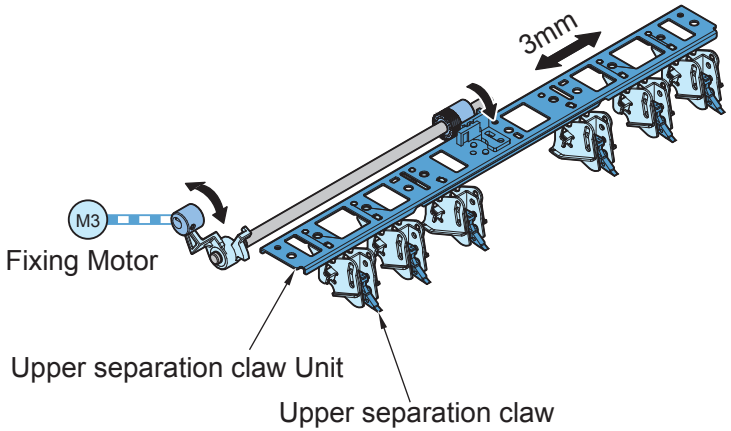
To prevent scar on the Fixing Roller by the Fixing Main Thermistor (THM01), the Fixing Main Thermistor is moved back and forth by 12mm in the shaft direction of the Fixing Roller.
The drive of the Fixing Cleaning Web Drive Solenoid (SL09) is transmitted to the Reciprocating Cam.




F-2-152

## Upper separation claw reciprocating control

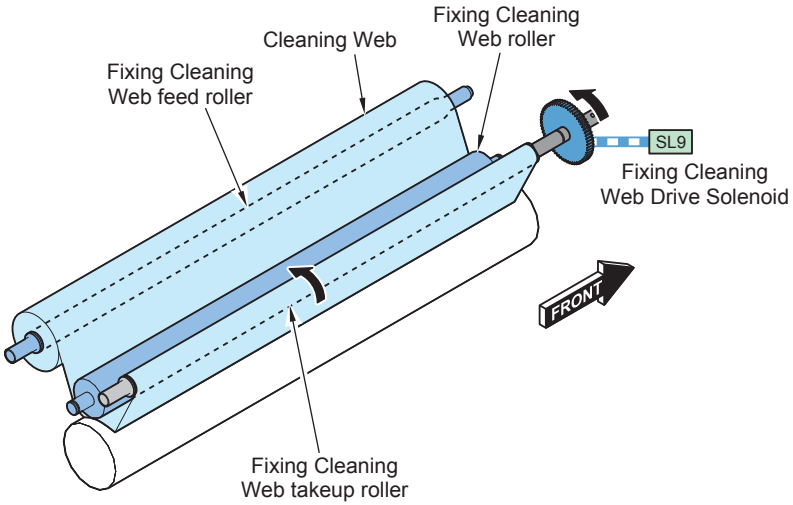
To prevent scar on the Fixing Roller by the Upper Separation Claw, the Upper Separation Claw is moved back and forth by 3mm in the direction of the Fixing Roller.




F-2-153

## Cleaning web drive control

To prevent fixing offset, the residual toner on the surface of the Fixing Roller is removed with the Cleaning Web.




F-2-154

The take-up length of the Cleaning Web is determined by the paper size and the number of sheets (in 1 job).

| Paper size | 1st sheet | 2nd sheet | 3rd sheet | 4th sheet or later |
|---|---|---|---|---|
| Small<br>The size with less than 220mm length in feeding direction (LTR or less) | 1-time | 1-time | 0-time | Repeat wrapping amount of the 1st to the 3rd sheet |
| Middle<br>The size between 237mm and 364mm in feeding direction (B5R to LGL/B4) | 1-time | 1-time | 1-time | |
| Large<br>The size with 220mm or more length in feeding direction (B5R or more) | 2-time | 1-time | 1-time | |

T-2-66

When the paper is stationed in the Fixing Unit due to a jam or an error, the Fixing Web Drive Solenoid is turned ON for 5 times at the time of recovery.

### Related Error Code

Error in connection of the Fixing Web Solenoid

005-0001

### Related Service Mode

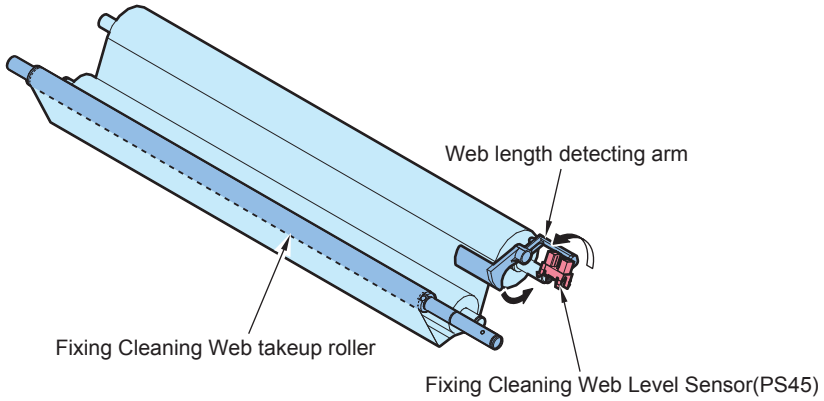
To switch the number of times to turn ON the Fixing Web Drive Solenoid

COPIER > OPTION > BODY > CBLTINVL

0: Normal [default]
1: 1.5 times of the normal mode
2: 0.5 times of the normal mode
3: 0.75 times of the normal mode

## Cleaning web length detection

When the length of the Cleaning Web is reduced, the Web Level Detection Arm is moved in the direction of the arrow to block the light path of the Fixing Cleaning Web Level Detection Sensor (PS45). When the Fixing Web Drive Solenoid has been turned ON for 4 times after the detection by this sensor, a fixing web length warning message is displayed on the Control Panel.




F-2-155

After the display of the fixing web length warning message, the number of turning ON the Fixing Cleaning Web Drive Solenoid is to be counted.
The Error Code “E005-0000” is displayed once the counter value reaches 2000 (3000 sheets of copy/print in A4 size)

In the case of replacing the Fixing Cleaning Web, be sure to clear the Fixing Web Counter by the following Service Mode

Fixing Cleaning Web take-up counter after the level warning
COPIER >COUNTER >MISC >FIX-WEB
Fixing Cleaning Web take-up counter
COPIER >COUNTER >DRBL-1>FX-WEB

### Related Error Code

Error in absence of the Fixing Web
E005-0000:After the advance notice detection for the absence of the Fixing Web, the web has continued to be pulled for 2000 times.

## Protective function

### Detecting an Error Using the Thermistor

In the event of the following, the machine will set the DC power (12 V) used to drive the AC relay (found on the fixing heater power supply PCB), thereby stopping the AC power to the fixing heater.

- the main thermistor (THM1)/sub thermistor1 (THM2)/sub thermistor2 (THM4) has detected overheating.
- the difference between temperature of each thermistors has deviated from a specific value.

### Detecting an Error Using the Thermal Switch

In response to a deviation in temperature (200 +/-5 deg C), bimetal contact of the thermal switch (TP1; non-contact type/TP2; non-contact type) will open to cut the power supply line (12 V) used to drive the AC relay on the fixing heater power supply PCB, thereby stopping the AC power to the fixing heater.

Once the contact point of the Thermal Switch is open, it will not be recovered even though the high temperature becomes to be normal temperature. Be sure to eliminate the cause of the error, and then replace the Thermal Switch.

# Servicing

## Periodically Replaced Parts

| No | Parts name | Parts Number | Piece | Expected life | Remarks |
|---|---|---|---|---|---|
| 1 | Main Thermistor Unit | FK2-7692-000 | 1 | 500,000 sheets | |
| 2 | Sub Thermistor | FK2-7693-000 | 2 | 500,000 sheets | |

T-2-67

## Consumable Parts

| No | Parts name | Parts Number | Piece | Expected life | Remarks |
|---|---|---|---|---|---|
| 1 | Fixing Cleaning Web | FC5-2286-000 | 1 | 500,000 sheets | |
| 2 | Fixing Roller | FL3-3602-000 | 1 | 600,000 sheets | |
| 3 | Fixing Roller Insulating Bush | FC9-8069-000 | 2 | 600,000 sheets | |
| 4 | Pressure Roller | FM4-3158-000 | 1 | 600,000 sheets | |
| 5 | Pressure Roller Static Eliminator (front) | FE2-3452-000 | 1 | 600,000 sheets | |
| 6 | Pressure Roller Static Eliminator (rear) | FE2-3453-000 | 1 | 600,000 sheets | |
| 7 | Fixing Roller Thrust Retainer | FC6-3501-000 | 2 | 500,000 sheets | Be sure to replace it together with the Fixing Roller. |
| 8 | Upper separation claw | FB5-3625-000 | 6 | 500,000 sheets | |

T-2-68

## Periodical Servicing List

| Parts/Area Name | Piece | Operation Interval | Remarks |
|---|---|---|---|
| Fixing inlet guide | 1 | 500,000 sheets | Clean with lint-free paper moistened with alcohol. |
| Fixing Right Stay | 1 | | Clean with lint-free paper moistened with alcohol. |
| Dowel | 4 | | Clean with lint-free paper moistened with alcohol. |
| Dowel Holder | 4 | | Clean with lint-free paper moistened with alcohol. |
| Fixing oil pan | 1 | | Dry wipe |
| Upper separation claw | 6 | | Clean with lint-free paper moistened with alcohol. |
| Fixing RollerStatic eliminator | 1 | | Dry wipe |
| Fixing inlet Sensor Flag | 1 | | Clean with lint-free paper moistened with alcohol. |
| Inner Delivery Roller | 4 | | Clean with lint-free paper moistened with alcohol. |

T-2-69

# When Replacing Parts

## Fixing Roller

<Procedure of parts replacement>

see "Removing the Fixing Roller, Insulating Bush and Thrust Stopper," on p. 4-177.

<Procedure of adjustment>

1) Grease Application
   Apply approx. 20mg of grease (MOLYKOTE HP-300; CK-8012) to inner circumference and outer circumference of the Bushing so that all circumferences are covered with white film; otherwise, abnormal noise can occur (squeaking).
2) Clear the counter
   COPIER >COUNTER > DRBL-1 > FX-UP-RL

## Main Thermistor

- Clear the counter
  COPIER >COUNTER > PRDC-1 >FIX-TH1

## Sub Thermistor1,2

- Clear the counter
  COPIER >COUNTER > PRDC-1 >FIX-TH2

# Troubleshooting

## Paper wrinkle

<Location>

Fixing Roller, Pressure Roller

<Cause>

Right after the startup, temperature is different between the center and the edge of the Fixing Roller (temperature: center > edge).

Because a slippery solid black image does not match to the nip shape when it is fed, the center of paper is pulled toward the feeding direction, causing paper wrinkle.

<Condition>

Timing: Approx. 20 sheets immediately after the startup first time for the day

Paper size: Paper size larger than B4

<Field Remedy>

Normally, when printing to paper larger than A3 or LDR size paper at the start of printing in a high humidity environment, control temperature is increased by performing idle rotation. Paper wrinkle which occurs at this time can be decreased, but first copy time becomes longer. In other cases, idle rotation is not performed.

If paper wrinkle occurs on paper larger than B4, increase the setting value from 2 in increments of 1 until paper wrinkle is alleviated.

If paper wrinkle occurs on B4 size paper, increase the setting value from 4 in increments of 1 until paper wrinkle is alleviated.

COPIER>OPTION>BODY>FX-WNKL

[Setting values]

0: OFF

1: When paper is larger than A3/LDR size paper in a high humidity environment, idle rotation is performed for up to 20 seconds. (Default)

2: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 10 seconds, whereas it is performed for up to 20 seconds when paper size is 304.8×457.2 mm (12"×18")/330.2×482.6 mm (13"×19").

3: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 20 seconds, whereas it is performed for up to 40 seconds when paper size is 304.8×457.2 mm (12"×18")/330.2×482.6 mm (13"×19").

4: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 20 seconds.

5: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 40 seconds.

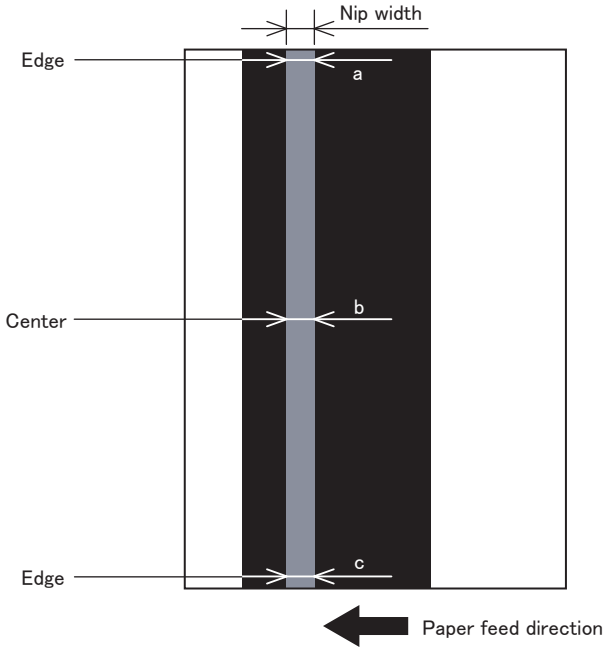
6: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 60 seconds.

## Checking nip width

In the case of paper wrinkle or fixing failure, check that the fixing nip width is within the specified range. Note that the fixing nip width of this equipment cannot be adjusted in the field.

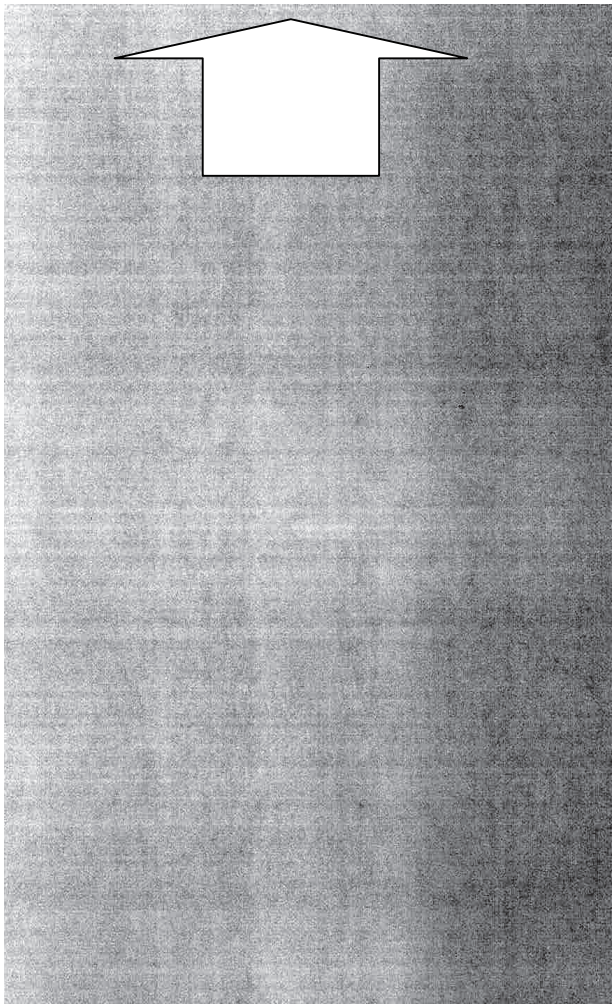
1) Print approx. 20 sheets of A4 size paper.
2) Set A4 size plain paper/recycled paper on the Multi-purpose Tray.
3) COPIER > Function > FIXING > NIP-CHK
   A sheet is stopped once in a state held by the Fixing Nip area, and is delivered approx. 20 seconds later.
4) Measure the nip width of delivered sheet.
   If the nip widths are as follow it is judged as normal: 7.0 to 8.0 mm at the center (b), and difference between front(a) and rear(b) is within 0.5 mm.

In the case of failure, check if there are any damaged parts (*), and replace the damaged parts (if any).
* Gear, Bearing, Fixing Roller, Pressure Roller and Fixing Assembly




F-2-156

## Image failure due to the temperature rising at the edge of the Fixing Roller (crepe mark)



F-2-157

<Location of Trouble>

Fixing Roller, Pressure Roller

<Cause>

This is the symptom which image error like crepe mark occurs when temperature at the edge of the Fixing Roller rises.

When the temperature rising at the edge occurs, the edge of the Pressure Roller made with rubber expands, giving the following influences on papers.

- Feed speed at the edge is increased, compared with the speed at the center.
- Tension is applied in the direction of both edges.

As it get close to the trailing edge, fixing is performed while a paper is distorted, causing an image error.

<Conditions>

Although all images have a possibility to have the error because the cause is temperature rising at the edge, the symptom is mainly significant with halftone images. The following shows estimated error occurrence with halftone image.

- When printing 200 sheets or more of small size paper continuously (approx. 1000 sheets in A4 size)
- When printing a large size sheet right after printing 100 sheets or more of small size paper continuously

<Field Remedy>

1) Go through the following: Settings/Registration > XXX > XXX; and turn ON the item.

By doing so, image error (crepe mark) will not occur.

With this setting, temperature difference between the center and the edge of the Fixing Roller is detected, and start idle rotation when temperature rising at the edge tends to occur.

During idle rotation, paper feed is stopped to keep constant temperature on the Fixing Roller, so the productivity is reduced.

2) Switching the image priority mode level.

When the image priority mode is specified, productivity may be extremely reduced depending on use conditions (paper size, paper type, and print image).

In such a case, change the level of production reduction by the following service mode.

COPIER >OPTION >IMG-FIX > FIX-IMGLV

[Setting values] 0: xxx, 1: xxx, 2: xxx

# Pickup / Feed System

## Overview

### Overview

- Improved productivity (75ppm -> 105ppm)
  This feature is enabled by using highly-sensitive Scanner Sensor.

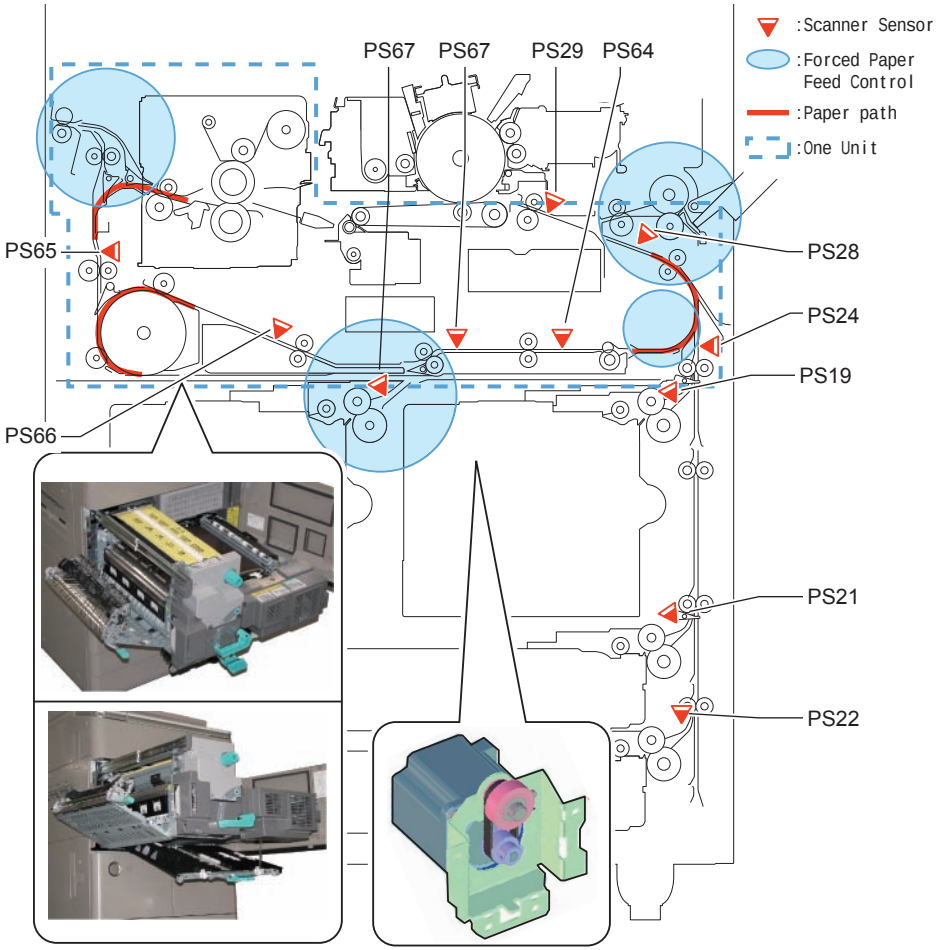
- Supported media (heavy paper) (52g/m2 -> 256g/m2)
  This feature is enabled by making gentler curve of the pre-registration path, reverse path and duplex merging path.
  This feature is enabled by increasing pressure of the Pickup Roller.

- Support of large size: 13” x 19” inch (330.2mm x 482.6mm)
  This feature is enabled by broadening the feeding path width.

- Improved jam processing performance
  This feature is enabled by making the Fixing/Feed Assembly and the Duplex Assembly as one unit as well as making the Delivery Unit and the Door of the Fixing Assembly as one unit.
  This feature is enabled by using forcible paper feed control that feeds paper to the position where the jammed paper is easily removed in the case of paper jam.

- Increased pickup capacity of the Multi-purpose Tray (50 sheets -> 100 sheets)
  Simple retard method is used for pickup.
  Stacking capacity has increased from 50 sheets to 100 sheets thanks to the pickup tray that moves up and down.

- Reduced noise
  This feature is enabled by using a belt-type motor.




F-2-158

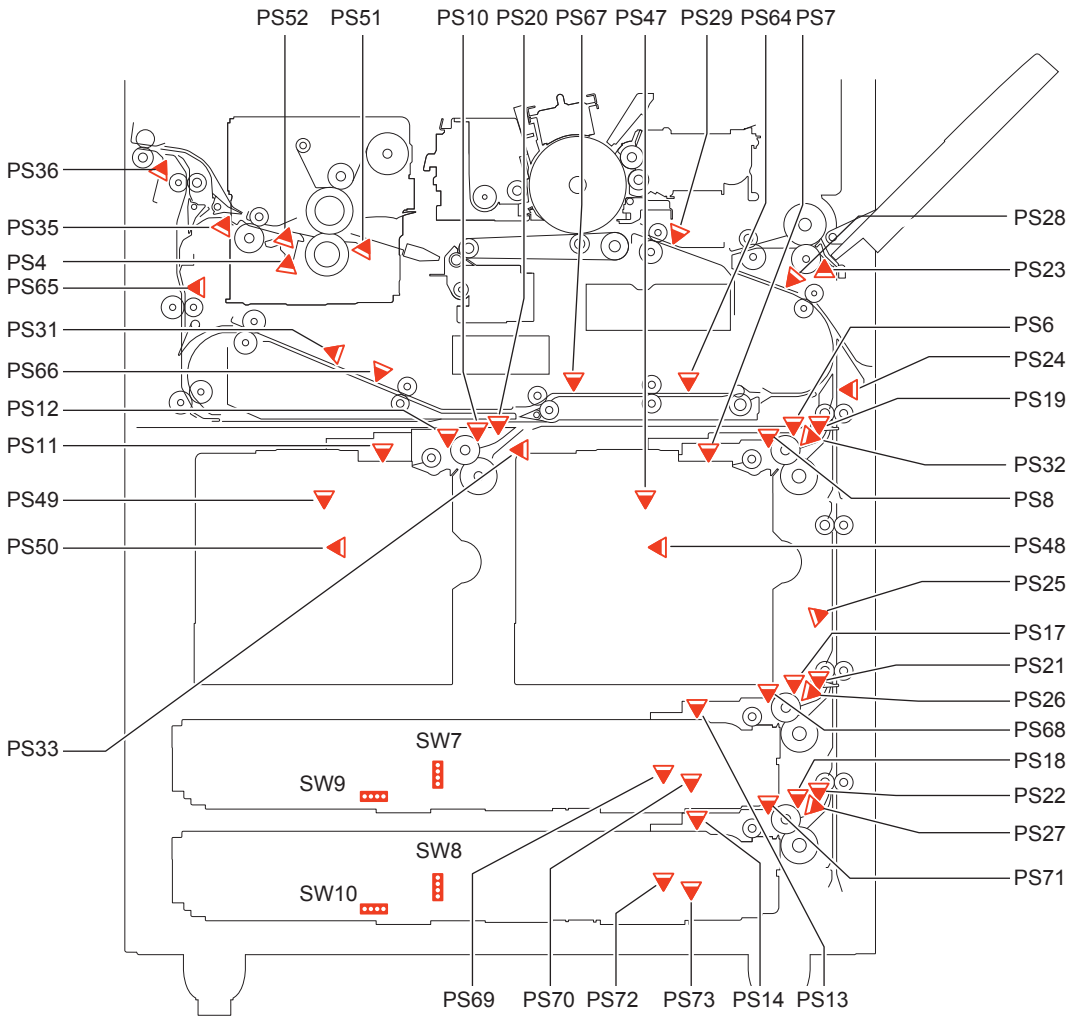
## Specifications

| Item | Function/Method | |
|---|---|---|
| Paper Storage Method | Front Loading Method | |
| Pickup Method | Separation Retard Method | |
| Paper Feed Standard | Center | |
| Paper Loading Capacity | Left/Right Deck | 1500 sheets (80 g/m2) |
| | Cassette 3/4 | 550 sheets (80 g/m2) |
| | Multi-purpose Tray | 100 sheets (80 g/m2) |
| Paper Size | Left/Right Deck | A4,B5,LTR |
| | Cassette 3/4 | A3 B4,A4,A4R,B5,B5R,A5R,8K(270.0 x 390.0mm),16K(270.0 x 195.0mm),LDR(279.4 x 431.8mm),LGL(215.9 x 355.6mm),LTR(279.4 x 215.9mm),LTRR(215.9 x 279.4mm),STMTR(139.7 x 215.9mm),EXE(267.0 x 184.0mm),12” x 18”(304.8 x 457.2mm),12” x 18”(304.8 x 457.2mm),SRA3(320 x 450mm),13” x 19”(330.2 x 482.6mm) |
| | Multi-purpose Tray | Size that can be loaded to cassette, Postcard, Reply Postcard, 4 On 1 Postcard, Envelope, Irregular size (100 x 148 mm to 330.2 x 487.7 mm) |
| Paper Grammage | Left/Right Deck | 52g/m2-220g/m2 |
| | Cassette 3/4 | 52g/m2-220g/m2 |
| | Multi-purpose Tray | 52g/m2-256g/m2 (Duplex printing 52g/m2-220g/m2) |
| Paper Size Switching | Left/Right Deck | Service Switching |
| | Cassette 3/4 | Auto size detection |
| | Multi-purpose Tray | Depends on user |
| Paper Size Switching | Through path | |
| Transparency detection | Available | |

T-2-70

## Parts configuration

### Switch/Sensor 1



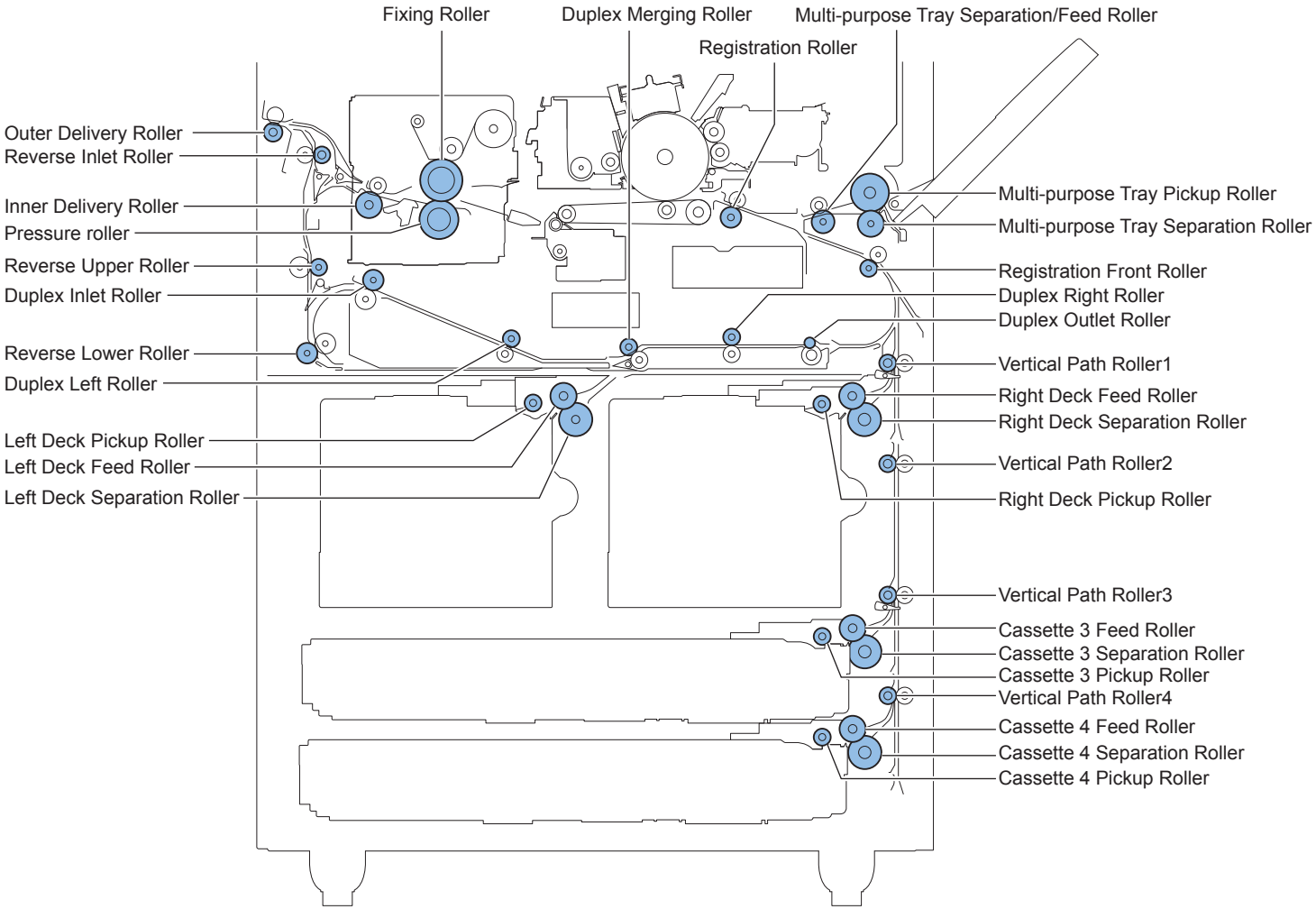

F-2-159

| PS No. | Sensor No. |
|---|---|
| PS2 | Vertical Path Cover Open/Close Sensor |
| PS3 | Multi-purpose Cover Open/Close Sensor |
| PS4 | Fixing Toenail Jam Sensor |
| PS6 | Right Deck Paper Height Sensor |
| PS7 | Right Deck Paper Sensor |
| PS8 | Right Deck Upper Limit Sensor |
| PS10 | Left Deck Paper Height Sensor |
| PS11 | Left Deck Paper Sensor |
| PS12 | Left Deck Paper Height Sensor |
| PS13/14 | Cassette 3 Paper Sensor / Cassette 4 Paper Sensor |
| PS17/18 | Cassette 3 Paper Height Sensor / Cassette 4 Paper Height Sensor |
| PS19* | Right Deck Pull Out Sensor |
| PS20* | Left Deck Pickup Sensor 2 |
| PS21* | Vertical Path Sensor3 |
| PS22* | Vertical Path Sensor4 |
| PS23 | Multi-purpose Tray Paper Sensor |
| PS24*/PS25 | Vertical Path Sensor1/Vertical Path Sensor2 |
| PS26/PS27 | Cassette 3 Pickup Sensor/Cassette 4 Pickup Sensor |
| PS28* | Writing Gudging Sensor |
| PS29* | Registration Sensor |
| PS31 | Side Registration Sensor |
| PS32 | Right Pickup Sensor |
| PS33 | Left Deck Pull Out Sensor |
| PS35 | Inner Delivery Sensor |
| PS36 | Outer Delivery Sensor |
| PS47/48 | Right Deck Paper Level Sensor 1/2 |
| PS49/50 | Left Deck Paper Level Sensor 1/2 |
| PS51/PS52 | Fixing Inlet Sensor/Fixing Outlet Sensor |
| PS64* | Duplex Outlet Sensor |
| PS65* | Reverse Vertical Path Sensor |
| PS66* | Duplex Left Sensor |
| PS67* | Duplex Merging Sensor |
| PS68 | Cassette 3 Upper Limit Sensor |
| PS69 | Cassette 3 Paper Level Sensor 1 |
| PS70 | Cassette 3 Paper Level Sensor 2 |
| PS71 | Cassette 4 Upper Limit Sensor |
| PS72 | Cassette 4 Paper Level Sensor 1 |
| PS73 | Cassette 4 Paper Level Sensor 2 |
| SW7 | Cassette 3 Paper Width Detection Switch |
| SW8 | Cassette 4 Paper Width Detection Switch |
| SW9 | Cassette 3 Paper Length Detection Switch |
| SW10 | Cassette 4 Paper Length Detection Switch |

T-2-71

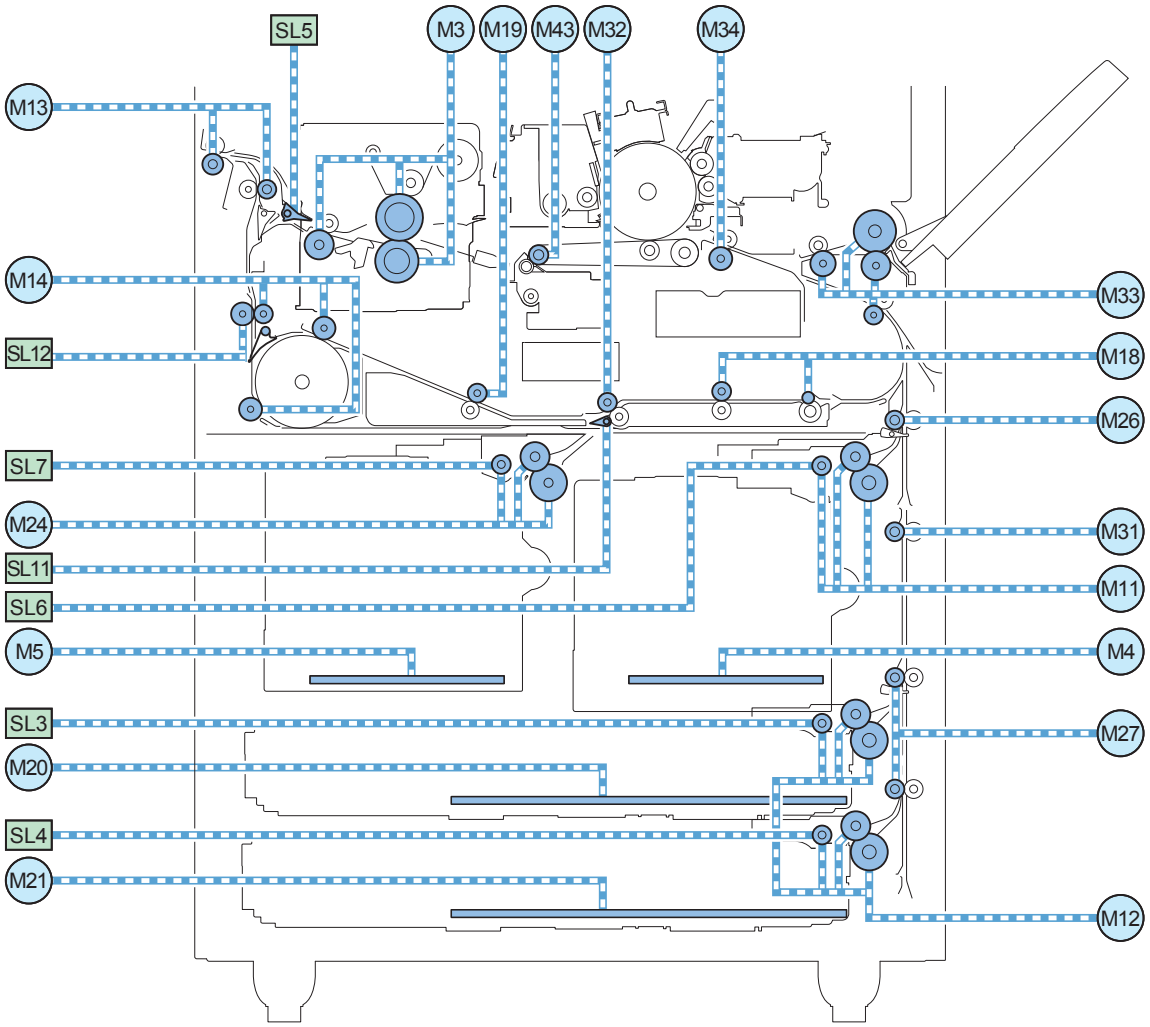
*Scanner Sensor

## Roller




F-2-160

## Drive Configuration

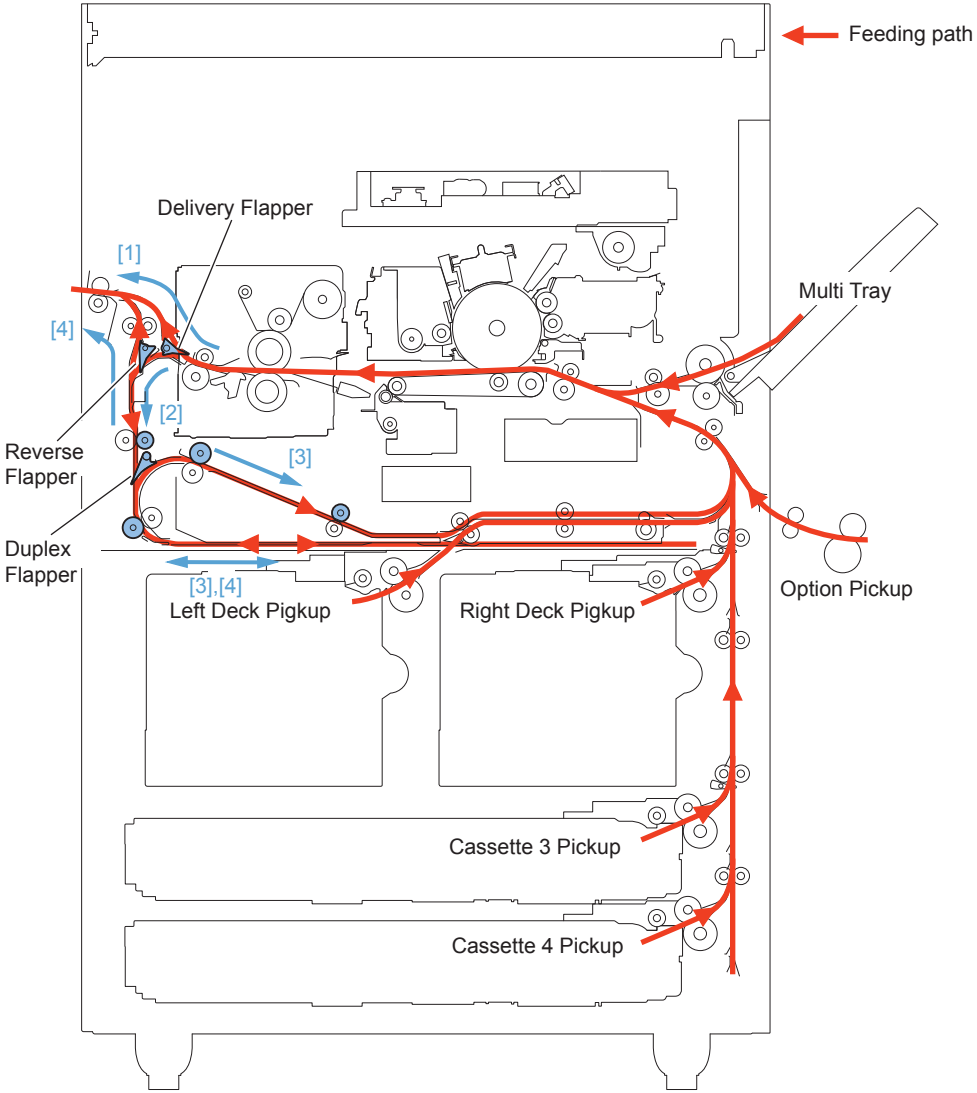



F-2-161

| No. | Name |
|---|---|
| M3 | Fixing Motor |
| M4 | Right Deck Lifter Motor |
| M5 | Left Deck Lifter Motor |
| M11 | Right Deck Pickup Motor |
| M12 | Cassette3/4 Pickup Motor |
| M13 | Delivery Motor |
| M14 | Reverse Motor |
| M18 | Duplex Feed Right Motor |
| M19 | Duplex Feed Left Motor |
| M20 | Cassette3 Lifter Motor |
| M21 | Cassette4 Lifter Motor |
| M24 | Left Deck Pickup Motor |
| M26 | Vertical Path Upper Motor |
| M27 | Vertical Path Lower Motor |
| M31 | Vertical Path Middle Motor |
| M32 | Duplex Feed Merging Motor |
| M33 | Multi-purpose Registration Front Motor |
| M34 | Registration Motor |
| M43 | ETB Motor |
| SL3 | Cassette 3 Pickup Solenoid |
| SL4 | Cassette 4 Pickup Solenoid |
| SL5 | Reverse Upper Flapper Solenoid |
| SL6 | Right Deck Pickup Solenoid |
| SL7 | Left Deck Pickup Solenoid |
| SL11 | Left Deck Merging Solenoid |
| SL12 | Reverse Detachment Solenoid |

T-2-72

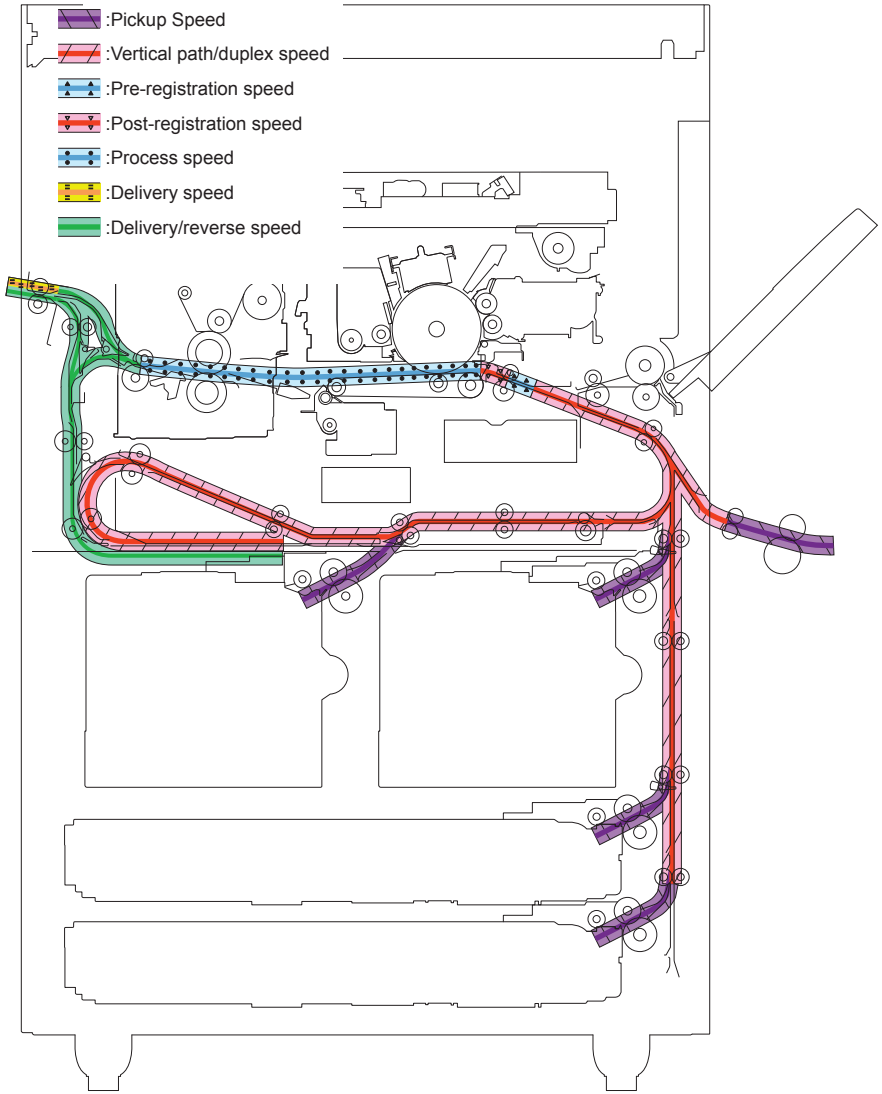
## Paper path




F-2-162

[1] 1-side face-up delivery, duplex face-down delivery
[2] 1-side face-down delivery, duplex printing
[3] Duplex printing
[4] 1-side face-down delivery

## Interval speed

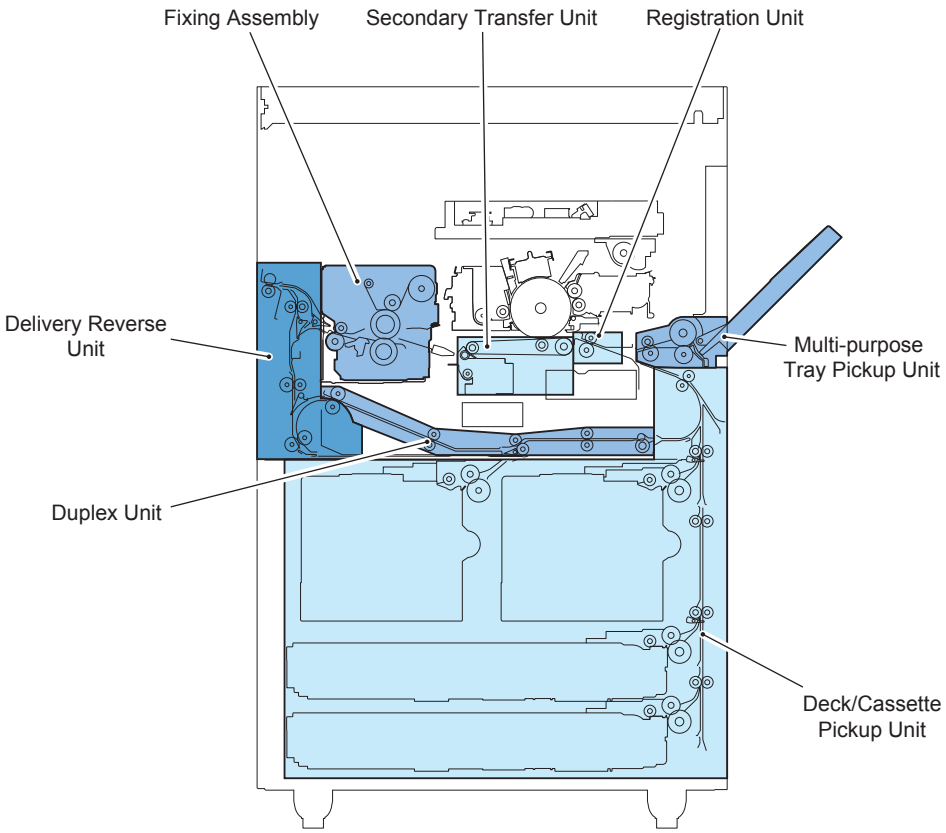



F-2-163

| Model | ImageRUNNER ADVANCE 8105/8095/8085 [mm/s] | | |
|---|---|---|---|
| [ppm] | 105 | 95 | 85 |
| Pickup speed | 500 | | |
| Vertical path/duplex speed | 750 | | |
| Pre-registration speed | 500 | | |
| Post-registration speed | 750 | | |
| Process speed | 500 | | |
| Delivery speed | 1100 | | |
| Delivery/Reverse speed | 1100 | | |

T-2-73

## Various types of control




F-2-164

| Unit | Contorol |
|---|---|
| Deck/cassette pickup unit | Basic Movement |
| | Deck/Cassette detection |
| | Paper Size Detection |
| | Paper Level Detection |
| | Paper Detection |
| | Pickup Retry Control |
| | Pickup Retry Control |
| Multi-purpose pickup tray unit | Basic Movement |
| | Paper Detection |
| Pre-registration/Registration Unit | Pre-registration Control |
| | Basic Movement |
| | Registration Deceleration Control |
| | Registration Acceleration Control |
| Delivery unit/Duplex unit | Face-up Delivery |
| | Face-down Delivery |
| | Basic Movement |
| | Side Registration Control |
| | Circulation quantity and limit |
| Jam detection | Jam Code List |
| | Forced Paper Feed Control |

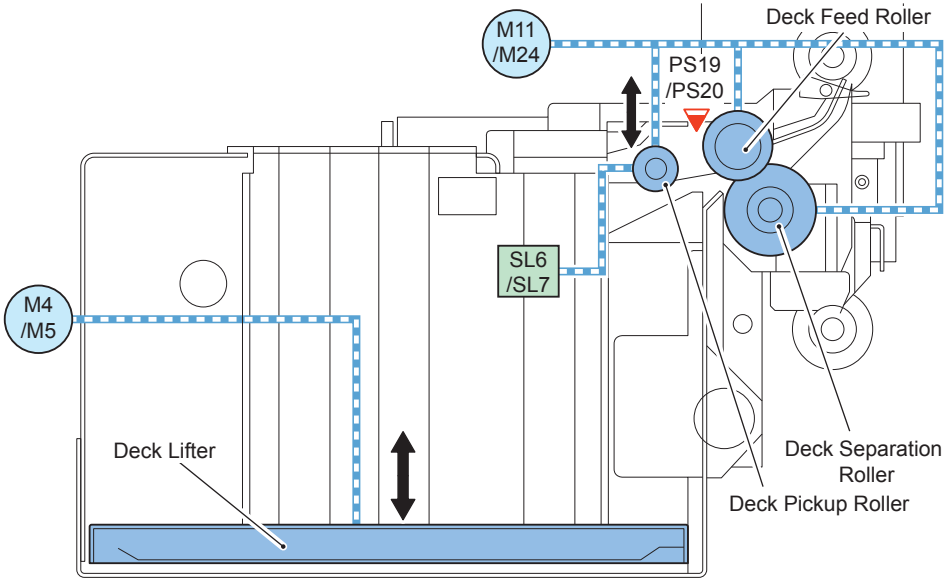
T-2-74

# Deck/Cassette Pickup Unit

## Basic Movement

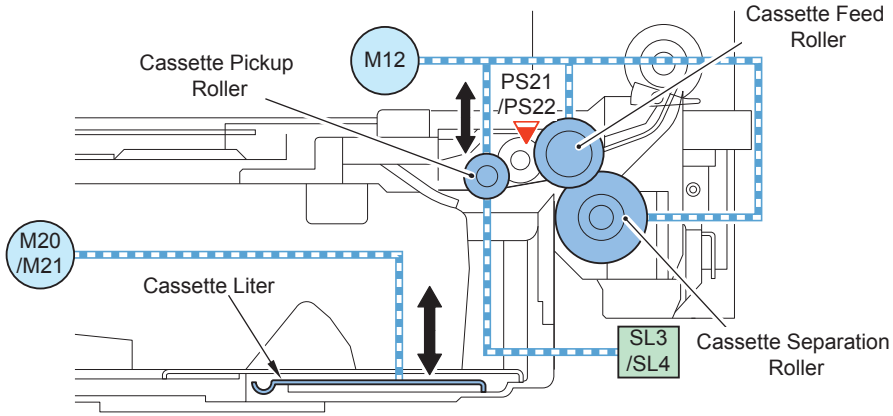
When Deck/Cassette is installed, Motor drives to maintain the height which paper surface attaches to Pickup Roller (This is the height of Pickup Roller when Pickup Solenoid is OFF).
If the Pickup Motor (M11/M12/M24) is turned ON, the Pickup Roller will rotate and the paper will be fed.
When the Pickup Sensor (PS19/PS20/PS21/PS22) detects paper, the Pickup Solenoid (SL3/SL4/SL6/SL7) will turn ON, and Pickup Roller will draw away from paper surface. Only 1 sheet of paper is sent to feed path by the Feed Roller and the Separation Roller, and fed to Vertical Path Roller.

### Deck




F-2-165

### Cassette




F-2-166

NOTE:
The same single motor is used as a pickup motor for both Cassette 3 and Cassette 4. The drive is transmitted to Cassette 3 when the motor is in normal rotation and the drive is transmitted to Cassette 4 when the motor is in reverse rotation. The drive is switched by the One-way Clutch.

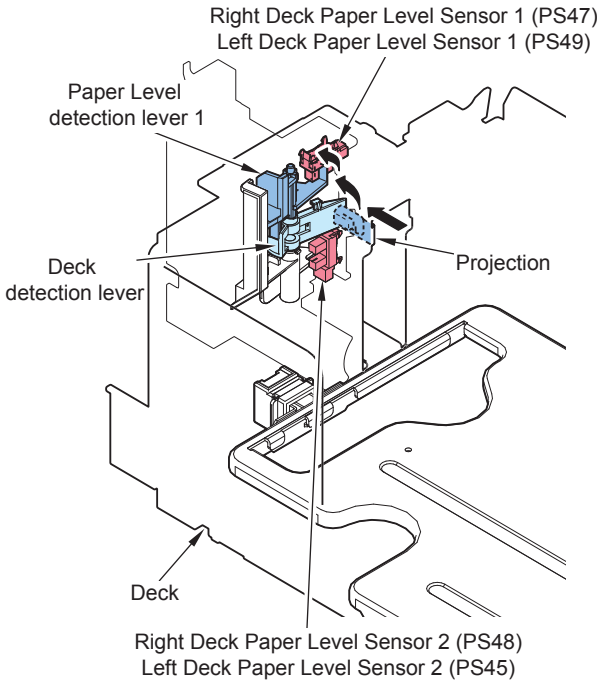
NOTE:Service Mode
(Lv.1) COPIER > OPTION > FEED-SW
DK1-TURN (ON/OFF of Pickup Roller Post-Rotation on Right Deck)
DK2-TURN (ON/OFF of Pickup Roller Post-Rotation on Left Deck)
DK3-TURN (ON/OFF of Pickup Roller Post-Rotation on Cassette3)
DK4-TURN (ON/OFF of Pickup Roller Post-Rotation on Cassette4)
Setting Value 0: OFF (Default), 1: ON

## Deck/Cassette detection

Whether Deck/Cassette is installed is detected

### Deck

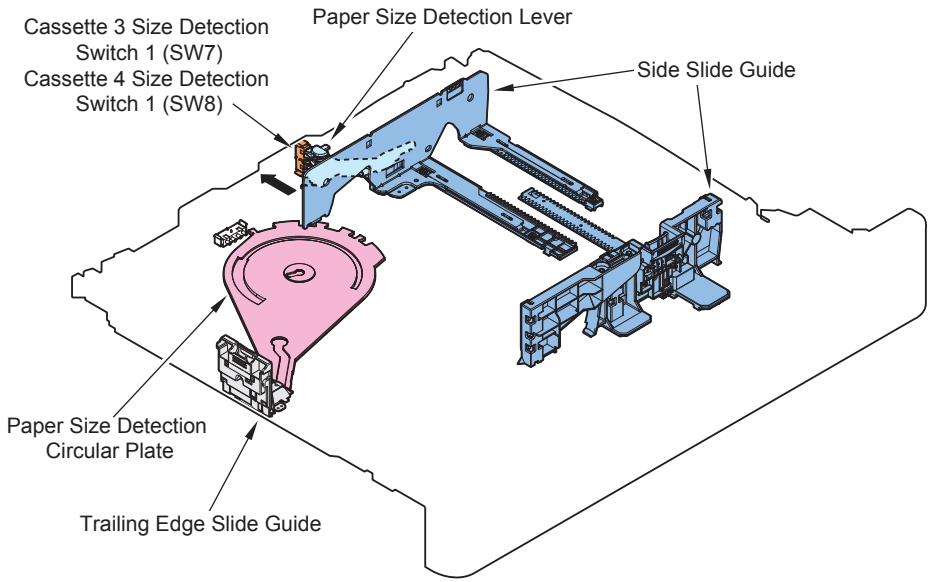
Deck is detected by Paper Level Sensor. When light from 2 Paper Level Sensors is not blocked, it is detected as no deck installed




F-2-167

### Cassette

Cassette is detected by Paper Size Detection Switch. When all actuators of the Paper Size Detection Switch (SW14/SW16) are not pressed, it is detected as no cassette installed




F-2-168

## Paper Size Detection

### Deck

Set in Service Mode.

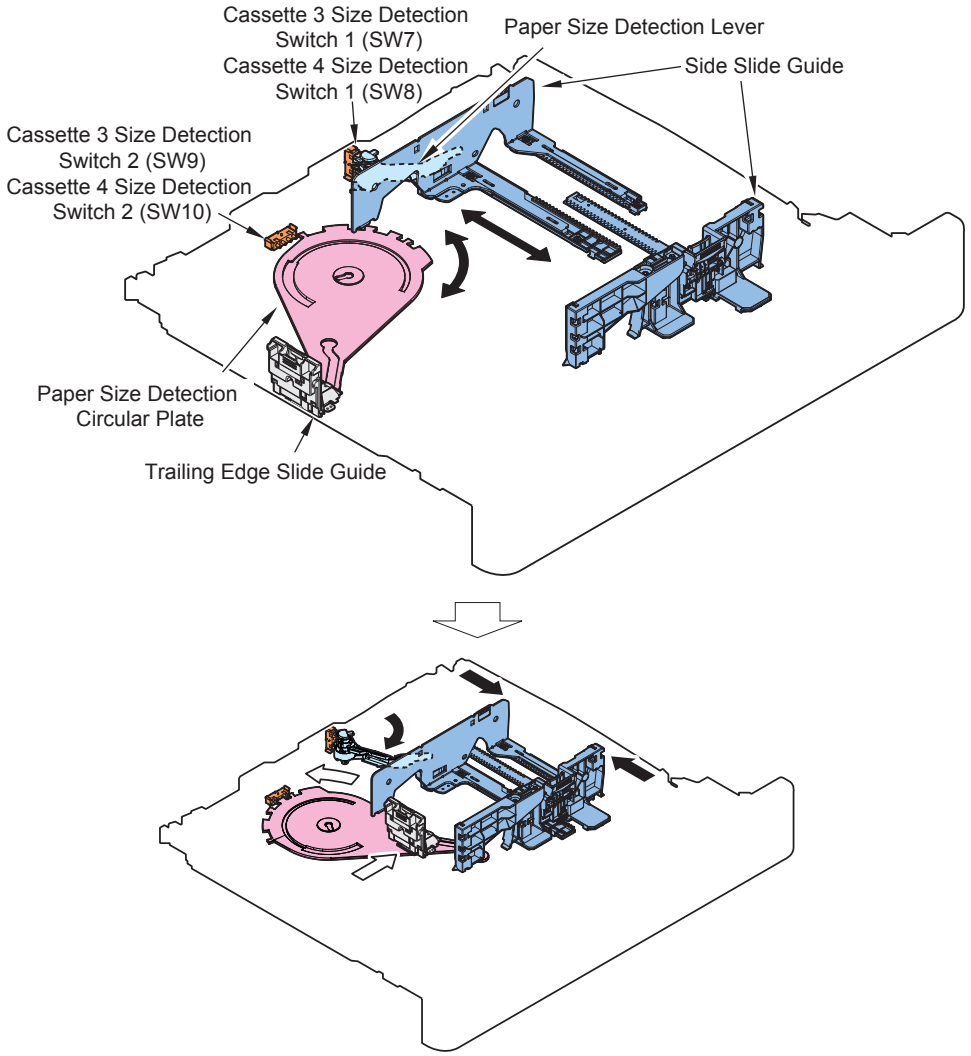
There is no mechanism to detect paper size.

NOTE:Service Mode
(Lv.1) COPIER > OPTION > CST > P-SZ-C1 (Right Deck Paper setting)
(Lv.1) COPIER > OPTION > CST > P-SZ-C2 (Left Deck Paper setting)
Setting Value
0: A4 (default), 1: B5, 2: LTR

### Cassette

Paper size in cassette 3/4 is each detected by 2 paper size detection switches.

ON/OFF of 4-actuator in the Host Machine changes according to the Paper Size Detection Circular Plate/ Lever Position linked to Trailing Edge/Side Slide Guide. Paper size is detected by two 4-actuator ON/OFF combinations. And, if all 4-actuator are OFF is detected, it means no-cassette.

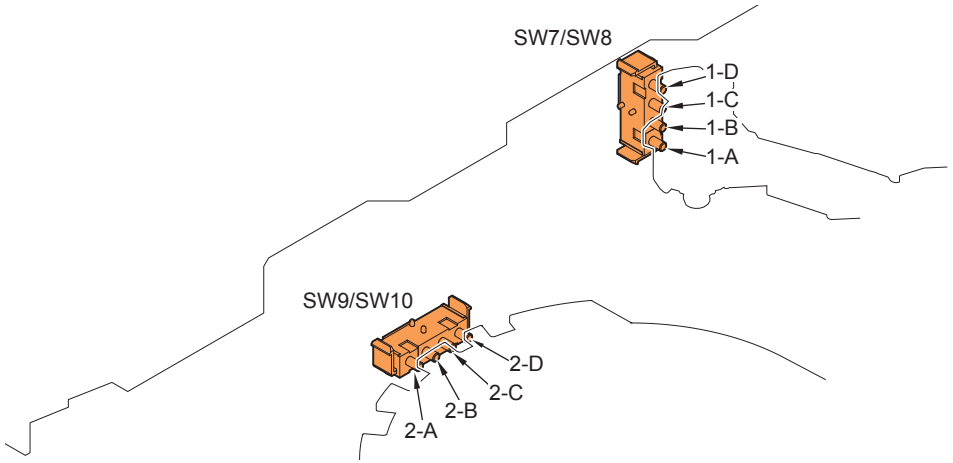



F-2-169

## Paper size detection Switch

| Paper Size | Width (mm) | Length (mm) | Width SW7/SW8 | | | | Length SW9/SW10 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1-A | 1-B | 1-C | 1-D | 2-A | 2-B | 2-C | 2-D |
| B5 | 257.0 | 182.0 | ON | - | - | ON | ON | ON | ON | ON |
| EXEC | 267.0 | 184.0 | ON | - | - | ON | ON | ON | ON | ON |
| 16K | 270.0 | 195.0 | ON | - | - | ON | - | ON | ON | ON |
| A5-R | 148.5 | 210.0 | - | ON | - | ON | ON | - | ON | ON |
| A4 | 297.0 | 210.0 | ON | - | ON | ON | ON | - | ON | ON |
| STMT-R | 139.7 | 215.9 | - | ON | - | ON | ON | - | ON | ON |
| LTR | 279.4 | 215.9 | ON | - | - | ON | ON | - | ON | ON |
| B5-R | 182.0 | 257.0 | - | ON | - | ON | ON | - | ON | - |
| 16K-R | 195.0 | 270.0 | ON | ON | - | ON | ON | ON | - | ON |
| | | | - | ON | - | ON | ON | ON | - | ON |
| LTR-R | 215.9 | 279.4 | ON | ON | - | ON | - | ON | ON | ON |
| | | | ON | ON | - | ON | - | ON | ON | - |
| A4-R | 210.0 | 297.0 | ON | ON | - | ON | - | - | ON | ON |
| LGL | 215.9 | 355.6 | ON | ON | - | ON | ON | ON | - | - |
| B4 | 257.0 | 364.0 | ON | - | - | ON | ON | ON | ON | - |
| 8K | 270.0 | 390.0 | ON | - | - | ON | - | - | ON | ON |
| A3 | 297.0 | 420.0 | ON | - | ON | ON | - | ON | - | - |
| LDR | 279.4 | 431.8 | ON | - | - | ON | - | - | ON | - |
| SRA3 | 320.0 | 450.0 | ON | - | ON | - | - | - | - | ON |
| 12 x 18 | 304.8 | 457.2 | ON | - | ON | ON | - | - | - | ON |
| 13 x 19 | 330.2 | 483.0 | ON | - | ON | - | - | - | - | - |
| K_LGL | 268.0 | 190.0 | ON | - | - | ON | ON | ON | ON | ON |
| K_LGL-R | 190.0 | 268.0 | - | ON | - | ON | ON | ON | - | ON |
| G_LTR | 267.0 | 203.0 | ON | - | - | ON | - | ON | ON | ON |
| G_LTR-R | 203.0 | 267.0 | ON | ON | - | ON | ON | ON | - | ON |
| G_LGL | 203.2 | 330.2 | ON | ON | - | ON | - | ON | ON | - |
| OFI | 216.0 | 317.0 | ON | ON | - | ON | ON | ON | - | - |
| E_OFI | 220.0 | 320.0 | ON | ON | - | ON | ON | ON | - | - |
| M_OFI | 216.0 | 341.0 | ON | ON | - | ON | ON | - | ON | ON |
| B_OFI | 216.0 | 355.0 | ON | ON | - | ON | ON | ON | - | - |
| A_OFI | 220.0 | 340.0 | ON | ON | - | ON | - | - | ON | ON |
| FOLIO | 216.0 | 330.0 | ON | ON | - | ON | - | ON | ON | - |
| FLSP | 216.0 | 330.0 | ON | ON | - | ON | - | ON | ON | - |
| A_FLSP | 206.0 | 337.0 | ON | ON | - | ON | - | - | ON | ON |
| A_LTR | 280.0 | 220.0 | ON | - | - | ON | ON | - | ON | ON |
| A_LTR-R | 220.0 | 280.0 | ON | ON | - | ON | - | ON | ON | - |
| A_LGL | 220.0 | 340.0 | ON | ON | - | ON | - | - | ON | ON |
| FA4 | 216.0 | 343.0 | ON | ON | - | ON | ON | - | - | ON |
| FB4 | 216.0 | 330.0 | ON | ON | - | ON | - | ON | ON | - |

T-2-75




F-2-170

NOTE:

- Settings/registration
  Settings/registration (Top) > Preferences > Paper Settings > A5R/STMTR Original Selection
  Setting value Cassette3: A5R, STMTR Cassette4: A5R, STMTR

  Settings/registration (Top) > Preferences > Paper Settings > B5/EXEC Original Selection
  Setting value Cassette3: B5, EXEC Cassette4: B5, EXEC

  Settings/registration (Top) > Preferences > Paper Settings > Register Custom Size
  Setting value X: 148.0 to 487.7 mm, Y: 100.0 to 330.2 mm (Maximum 5 pieces)

- Related Service Mode
  (Lv.1) COPIER > OPTION > CST
  CST3-P1 (Cassette3 paper size setting (A5R/STMTR))
  CST4-P1 (Cassette4 paper size setting (A5R/STMTR))
  Setting value 0: A5R, 1: STMTR

  CST3-P2 (Cassette3 paper size setting (B5/EXEC))
  CST4-P2 (Cassette4 paper size setting (B5/EXEC))
  Setting value 0: B5, 1: EXEC

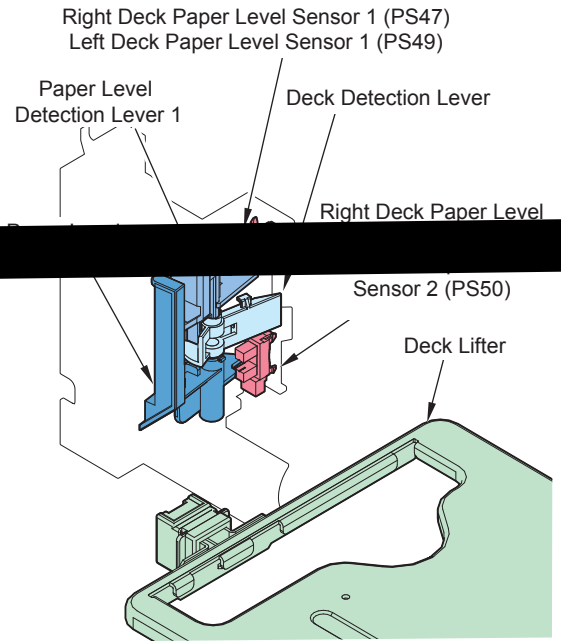
## Paper Level Detection

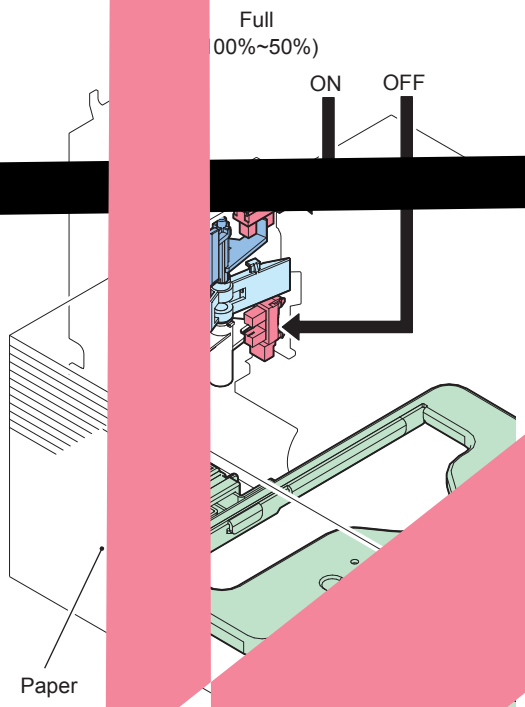
Paper level is detected by two Paper Level sensors in each cassette

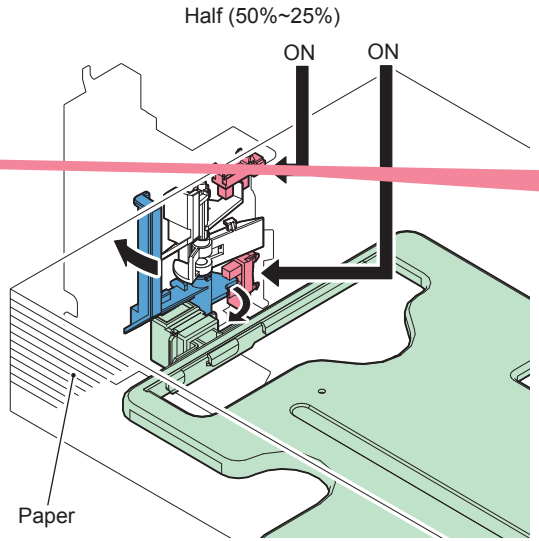
### Deck

| | Right Deck Paper Level Sensor 1 (PS47) Left Deck Paper Level | ight Deck Paper Level Sensor 2 (PS48) Left Deck Paper (PS50) | Control Panel Sensor |
|---|---|---|---|
| Full (100%~50%) | ON | OFF | |
| Half (50%~25%) | ON | ON | |
| Few (25% or less) | OFF | ON | |

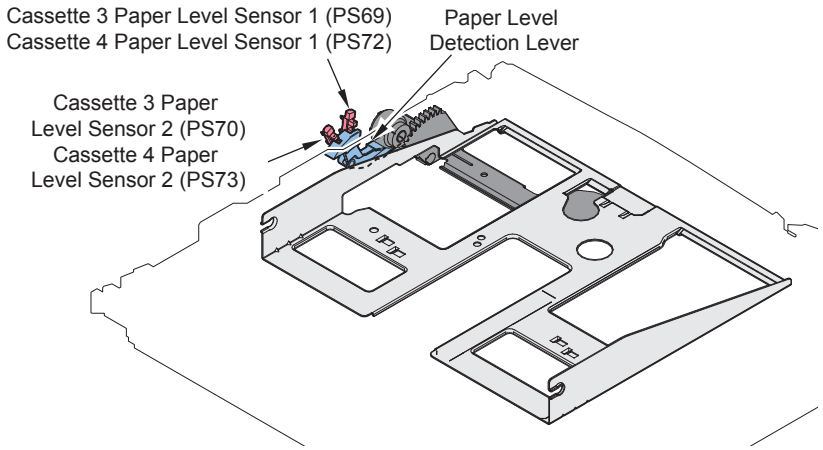
T-2-76



## Cassette

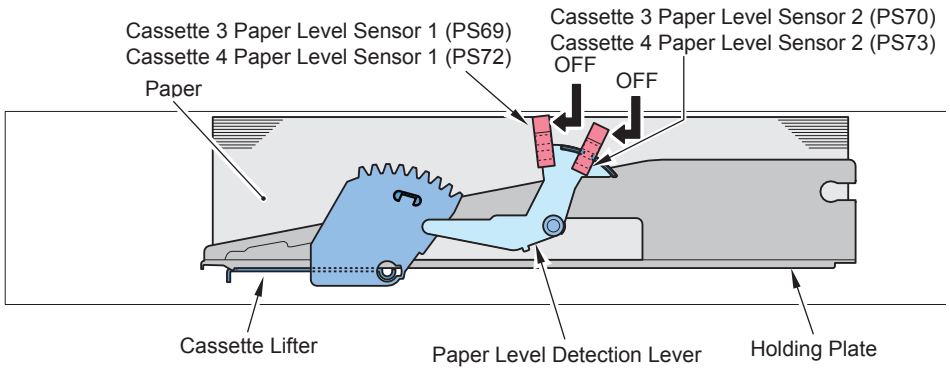



F-2-175

| | Cassette 3 Paper Level Sensor 1 (PS69) Cassette 4 Paper Level Sensor 1 (PS72) | Cassette 3 Paper Level Sensor 2 (PS70) Cassette 4 Paper Level Sensor 2 (PS73) | Control Panel Screen Display |
|---|---|---|---|
| Full (100%~50%) | OFF | OFF | |
| Half (50%~25%) | OFF | ON | |
| Few (25% or less) | ON | ON | |

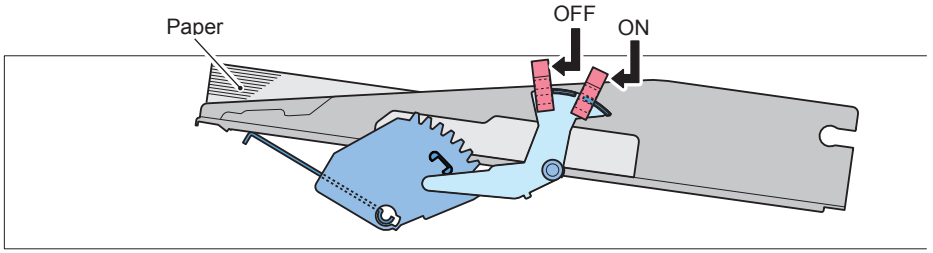
T-2-77

- Full (100%~50%)



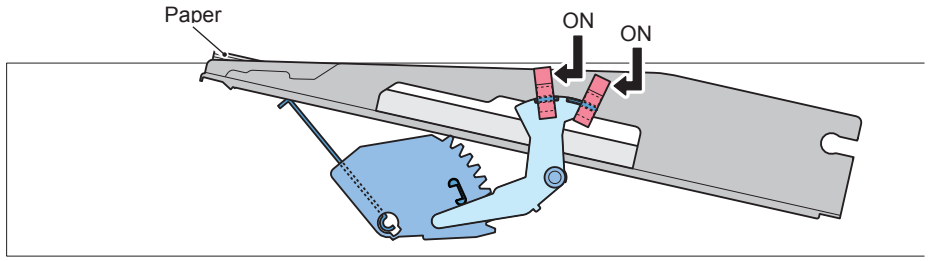

F-2-176

- Half (50%~25%)




F-2-177

- Few (25% or less)



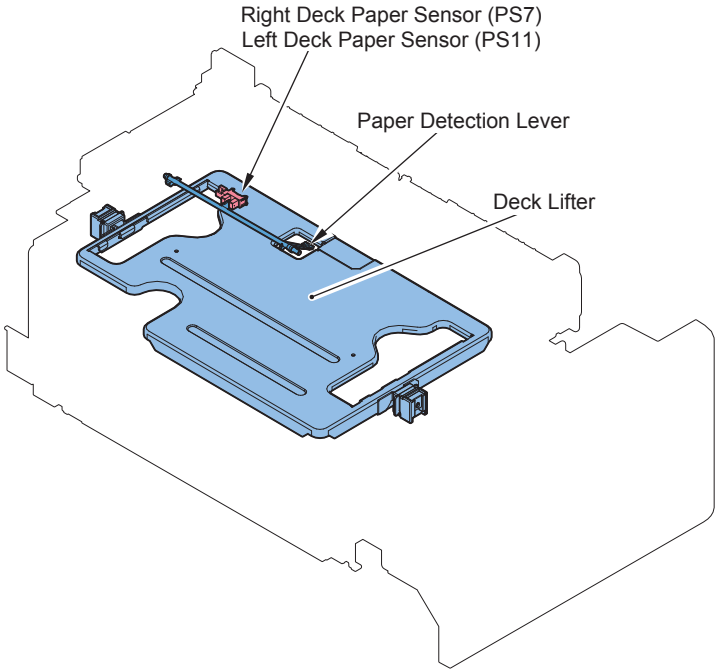

F-2-178

## Paper Detection

If paper is present, the Detection Lever is pushed upward when lifter ascends, and Paper Sensor is turned OFF.

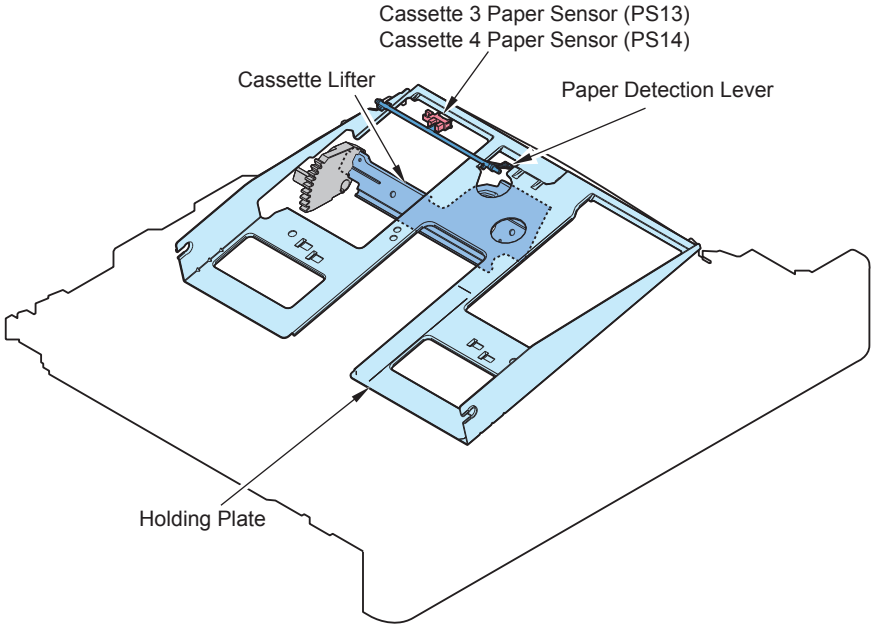
If paper finishes, the Detection Lever enters lifter hole, and Paper Sensor is turned ON

### Deck




F-2-179

### Cassette

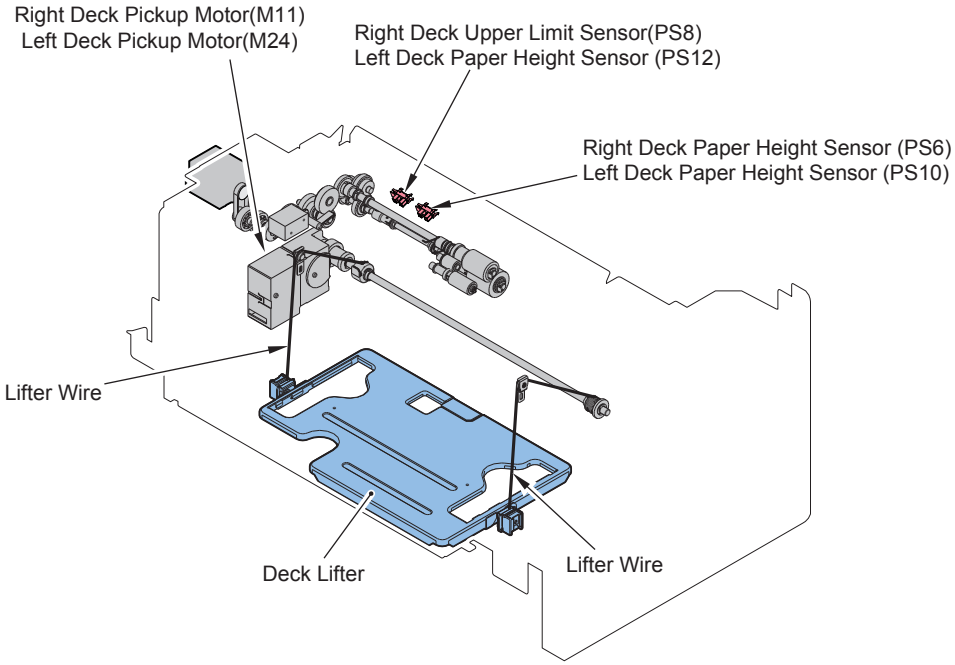



F-2-180

## Lifter Control

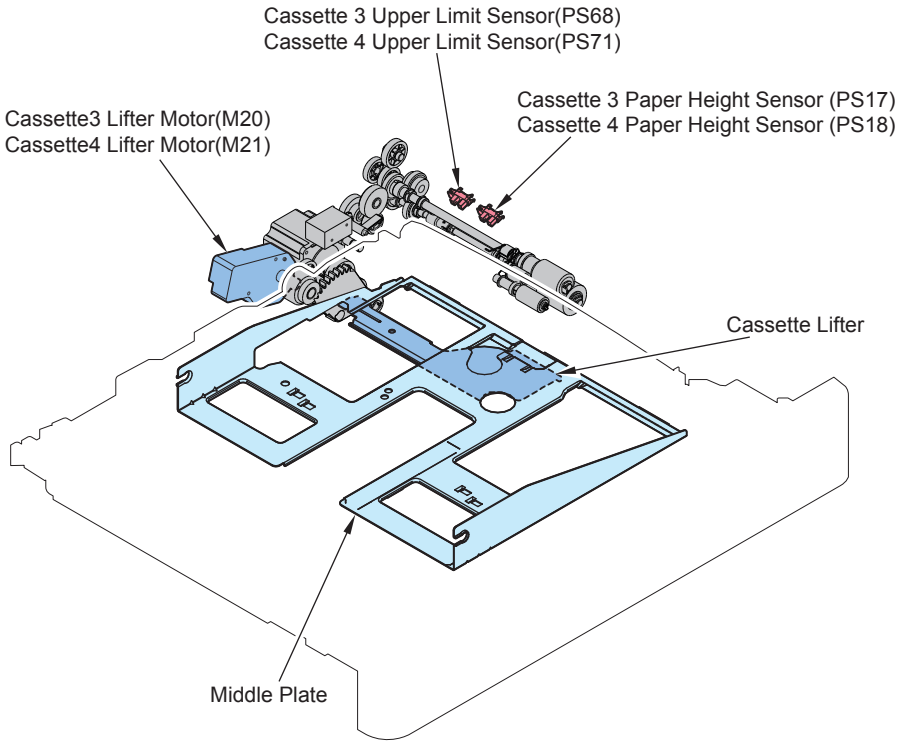
Paper is lifted to the pickup position by the Lifter.
In the machine configuration with the Deck / Cassette set, the Pickup Motor is driven to raise the Lifter to fit the paper level to the height of the pickup position. The Lifter is also raised when the Paper Level Sensor went OFF during the pickup operation.

### Deck




F-2-181

### Cassette




F-2-182

### ● Lifter Error Detection

In case due to some reason the lifter keep ascending even the Paper Surface Height Sensor is turned ON, the Upper Limit Sensor is provided to prevent damage in this equipment due to the error in ascending.
And, if the lifter starts ascending, but not detected by the Paper Surface Sensor and the Upper Limit Sensor within 3 minutes, the alarm corresponds to the concerned Pickup Cassette will be triggered. The alarm will release if the corresponding deck/cassette is open or closed, or the power is turned OFF/ON.

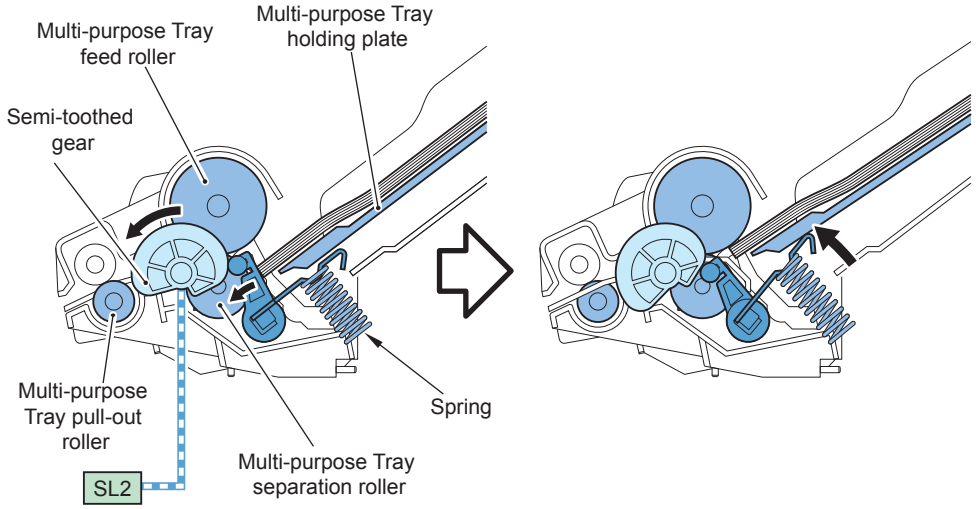
## ■ Pickup Retry Control

If paper leading edge is not detected by Pickup sensor within the specified time after pickup movement starts, it is not immediately determined as jam, and re-pickup movement will be executed.
During pickup retry, the Pickup Motor will be repeatedly turned ON/OFF with the Pickup Roller is in descended condition.

# Multi-purpose Tray Pickup Unit

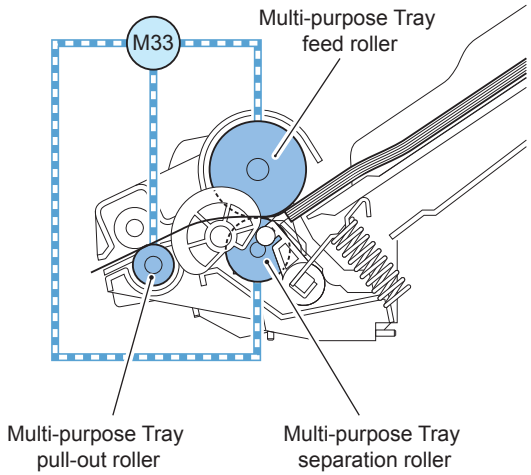
## Basic Movement

1) If the Multi-purpose Pickup Solenoid (SL2) is turned ON, the semi-toothed gear will rotate.
2) The holding plate Fixing Members will be released and the holding plate will ascend.




F-2-183

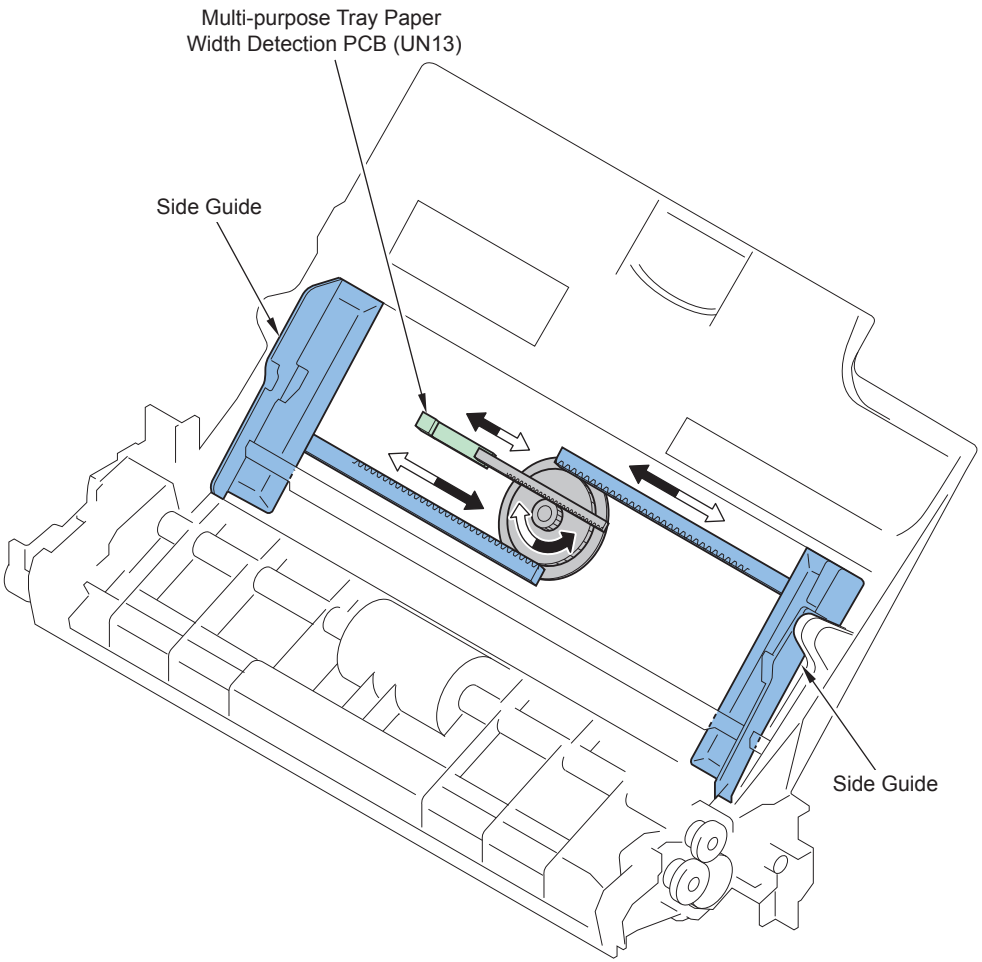
3) When the Pre-registration Multi-purpose Tray Drive Motor drives, the Multi-purpose Pull Out Roller and the Multi-purpose Feed Roller/Multi-purpose Separation Roller will rotate, and only 1 sheet of paper will be picked up/fed.




F-2-184

## Paper Size Detection

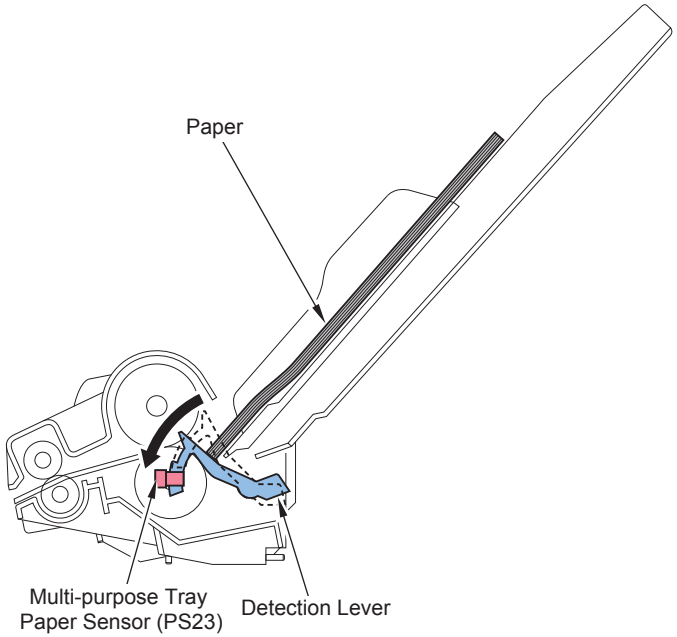
The setting is performed the Side Guide Plate and size code setting (or irregular size setting assignment) by and the Control Panel Unit.
Paper width is detected by the outputted value from the Variable Resistor Assembly (Multi-purpose Tray Paper Width Detection PCB (UN13)) which is linked to movement of the Side Guide Plate.
Setting of the Side Guide Plate on the Multi-purpose Pickup Tray is executed by users after paper is set.




F-2-185

## Paper Detection

When paper is set, Paper Presence Detection Lever will be pushed, and the Multi-purpose Tray Paper Sensor (PS23) will turn ON.



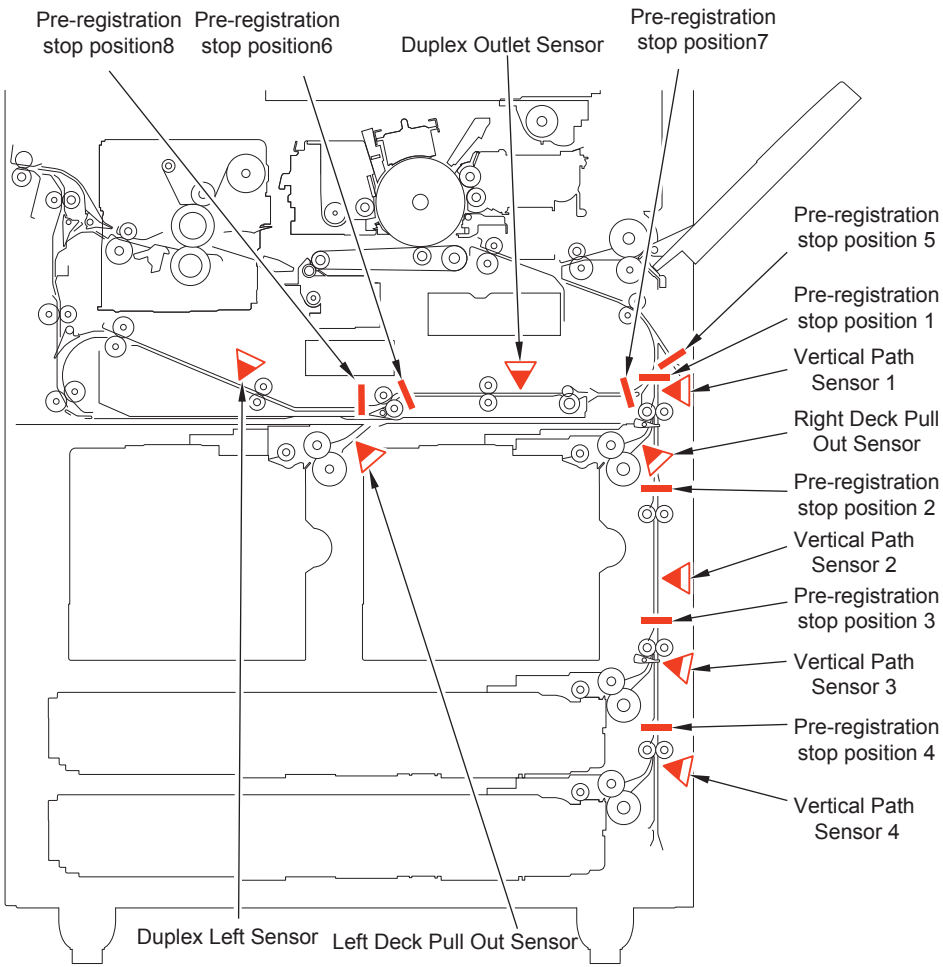

F-2-186

# Registration Unit

## Pre-registration Control

Pickup processing time can vary depending on the paper type and paper size in use as well as the environment. Therefore, the machine executes pre-registration control to ease such variation.

After the paper is picked up from the pickup cassette, the following reference sensor is used as a reference to feed the paper for a specified distance, and then the paper is stopped at the pre-registration position.



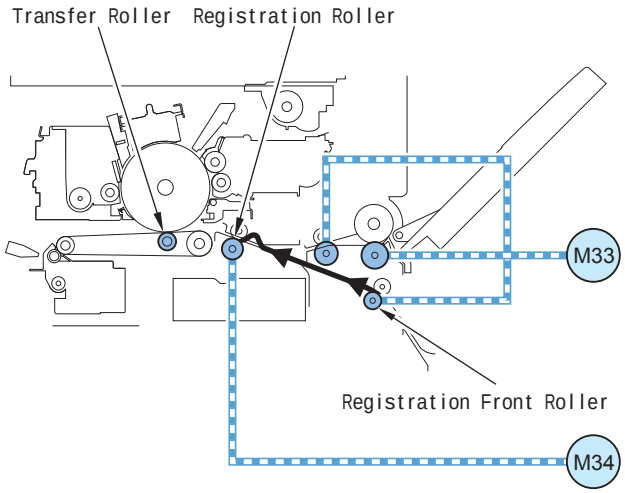

F-2-187

| Stop position name | Pickup Assembly | Paper size | Reference sensor | Stop position |
|---|---|---|---|---|
| Pre-registration stop position 1 | Right Deck | Size LTR (215.9mm) | Vertical Path Sensor1(PS24) | Vertical Path Roller 1 Downstream 10mm |
| | Cassette3 | | | |
| | Cassette4 | | | |
| Pre-registration stop position 2 | Cassette3 | LTRR=< Size =< A4R | Vertical Path Sensor2(PS25) | Vertical Path Roller 2 Downstream 10mm |
| | Cassette4 | | | |
| Pre-registration stop position 3 | Cassette3 | LTRR(279.4mm)< Size | Vertical Path Sensor3(PS26) | Vertical Path Roller 3 Downstream 10mm |
| | Cassette3 Cassette4 | Size =< LTR LTTR < Size < LDRR(431.8mm) | | |
| Pre-registration stop position 4 | Cassette4 | LDRR < Size | Vertical Path Sensor4(PS27) | Vertical Path Roller 4 Downstream 10mm |
| Pre-registration stop position 5 | OP Deck | All Size | Option Deck Pull Out Sensor | Vertical Path Upper Roller 1 Downstream 10mm |
| Pre-registration stop position 6 | Left Deck | Size =< LTR | Left Deck Pull Out Sensor(PS33) | Duplex Merging Roller Downstream 10mm |
| Pre-registration stop position 7 | Lrft Deck | Size =< LTR | Duplex Outlet Sensor(PS64) | Duplex Outlet Sensor(PS64) Downstream 10mm |
| Pre-registration stop position 8 | - | Size =< LTR | Duplex Left Sensor(PS66) | Duplex Merging Roller Upstream 20mm |

T-2-78

## Registration Control

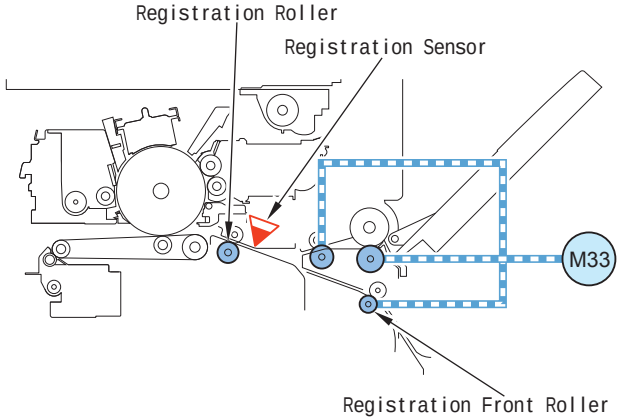
The Registration Motor (M34) is rotated to make the image on the drum and the paper to be aligned at the specified position and feeds the paper to the Transfer Assembly. The rotating speed of the Registration Motor (M34) is increased to be higher than the process speed and then reduced to meet the process speed.



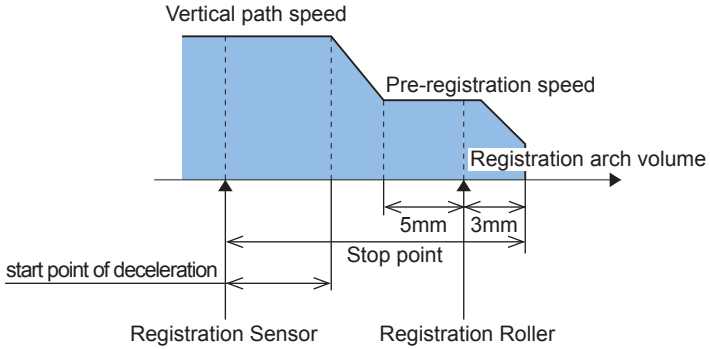

F-2-188

## Registration Deceleration Control

This control reduces speed of Multi-purpose Tray Registration Front Motor (M33) (Registration feed speed) by using Registration Sensor (PS29) as a reference and pushes the paper against the Registration Roller to reduce hitting noise.




F-2-189



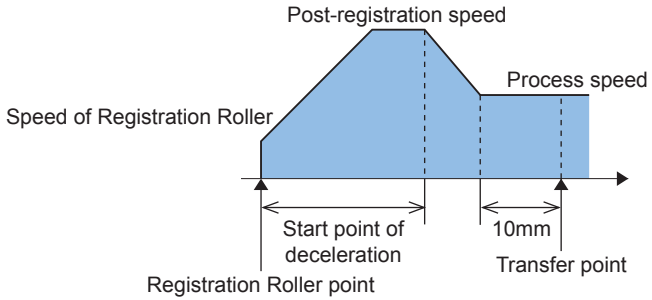

F-2-190

| Model | ImageRUNNER ADVANCE 8105/8095/8085 | | |
|---|---|---|---|
| PPM | 105 | 95 | 85 |
| Vertical path speed | 750[mm/s] | | |
| Registration feed speed | 500[mm/s] | | |
| start point of deceleration | 4.5[mm] | | |
| stop point | 23[mm] (20mm (distance between the Registration Sensor and the Registration Roller) +3mm (registration arch volume)) | | |

T-2-79

## Registration Acceleration Control

The Registration Motor (M34) is rotated to make the image on the drum and the paper to be aligned at the specified position and feeds the paper to the Transfer Assembly. The rotating speed of the Registration Motor (M34) is increased to be higher than the process speed and then reduced to meet the process speed.




F-2-191

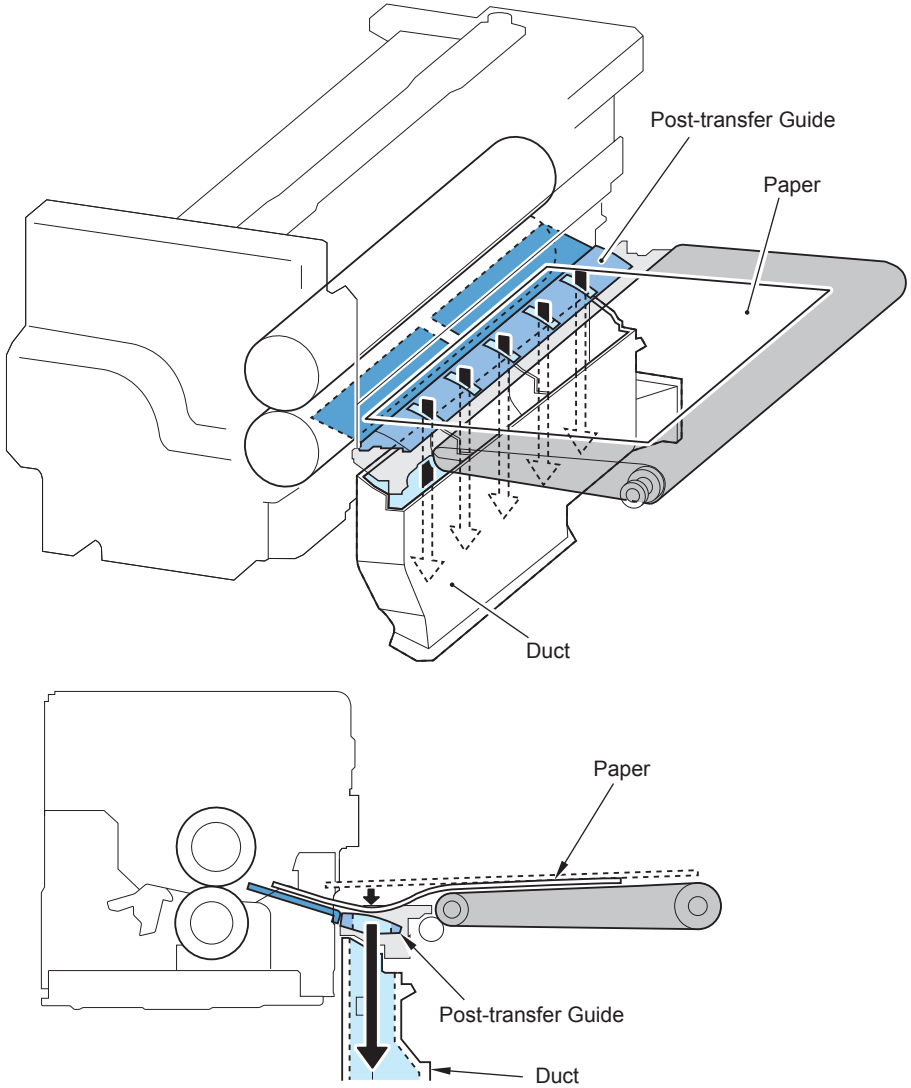
| Model | ImageRUNNER ADVANCE 8105/8095/8085 | | |
|---|---|---|---|
| PPM | 105 | 95 | 85 |
| Post-registration speed | 750[mm/s] | | |
| Process speed | 500[mm/s] | | |
| start point of deceleration | 45.5[mm] | | |

T-2-80

# Transfer

## Post-transfer Guide Attraction Control

With this machine, paper is attracted to the Post-transfer Guide by exhaust from the Image Formation System Exhaust Fan (FM3). Therefore, behavior of papers between transfer and fixing becomes stable, which increase the paper feed capabilities.




F-2-192

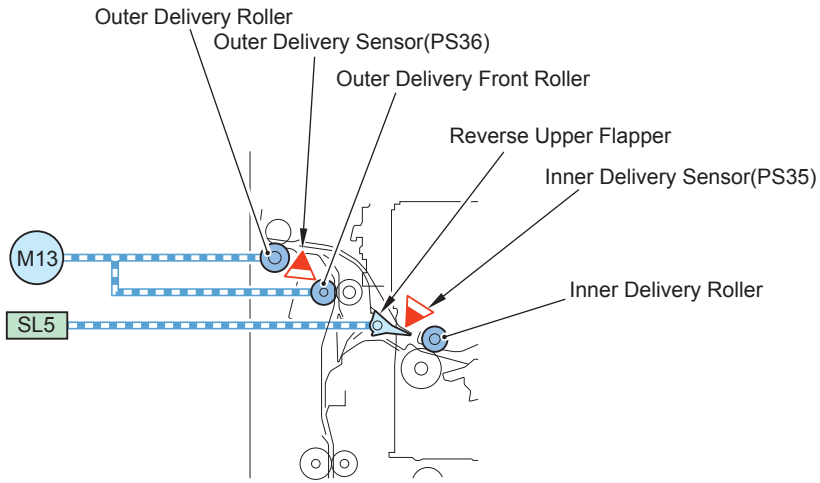
# Delivery/Reverse Unit

## Basic Operation

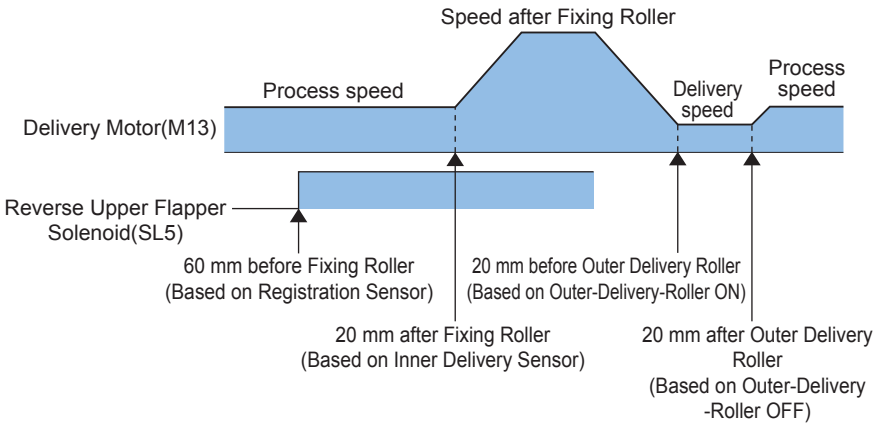
### Face-up Delivery

1) The Reverse Upper Flapper Solenoid (SL5) is turned ON to switch the feeding path to the Delivery Assembly side.
2) Rotating speed of the Delivery Motor (M13) is increased once the paper's trailing edge passes through the Fixing Roller (fixing-through speed)
3) Feeding speed is reduced to meet the delivery speed once the paper's trailing edge reaches the specified position.

NOTE:
Delivery speed is changed according to the paper size. Delivery speed remains the same if no delivery option is connected.




F-2-193




F-2-194

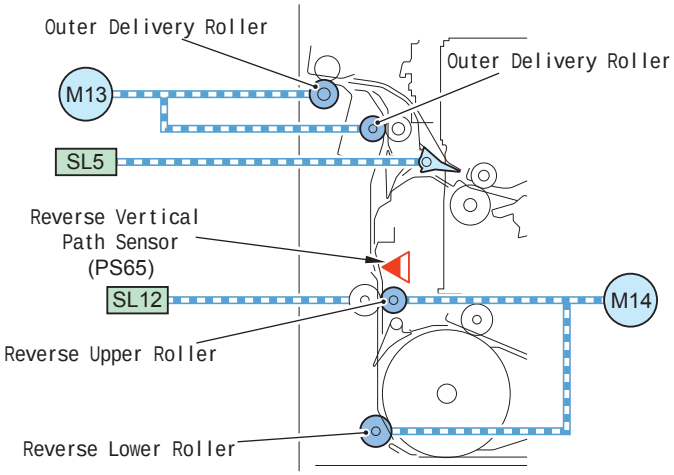
| Model | ImageRUNNER ADVANCE 8105/8095/8085 [mm/s] | | |
|---|---|---|---|
| PPM | 105 | 95 | 85 |
| Process speed | 500 | | |
| Speed after Fixing Roller | 1100 | | |
| Delivery speed | 1100 | | |

T-2-81

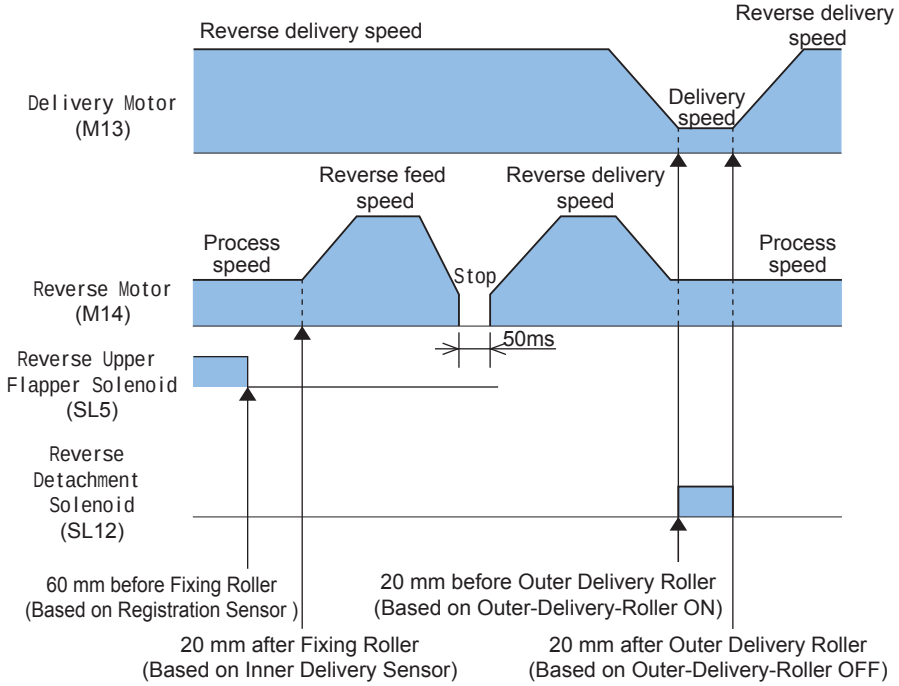
## Face-down Delivery

1) The Reverse Upper Flapper Solenoid (SL5) is turned OFF to switch the feeding path to the Delivery Assembly side.
2) Rotating speed of the Reverse Motor (M14) is increased (reverse feed speed) once the trailing edge of the preceding paper passes through the Fixing Roller to make the paper stopped/rotate reversely at the reverse position (reverse delivery speed)
3) In the case that the paper size is B5R or larger, once the leading edge of the preceding paper reaches the Outer Delivery Roller, the Reverse Detachment Solenoid (SL12) is turned ON to be prepared for entry of the succeeding paper and make the Reverse Roller disengaged.
4) Succeeding paper is fed to the reverse path to make the Reverse Motor (M14) stopped/rotate normally.
5) In the case that the paper size is B5R or larger, once the trailing edge of the preceding paper passes through the Reverse Upper Roller, the Reverse Detachment Solenoid is turned OFF to make the Reverse Upper Roller engaged.
6) Succeeding paper is fed to the reverse stop position.
7) Once the trailing edge of the preceding paper reaches the specified position, rotating speed of the Delivery Motor (M13) is reduced.

NOTE:
Delivery speed is changed according to the paper size. Delivery speed remains the same if no delivery option is connected.




F-2-195




F-2-196

| Model | ImageRUNNER ADVANCE 8105/8095/8085 [mm/s] | | |
|---|---|---|---|
| PPM | 105 | 95 | 85 |
| Process speed | 500 | | |
| Reverse feed speed | 1100 | | |
| Reverse delivery speed | 1100 | | |
| Delivery speed | 1100 | | |

T-2-82

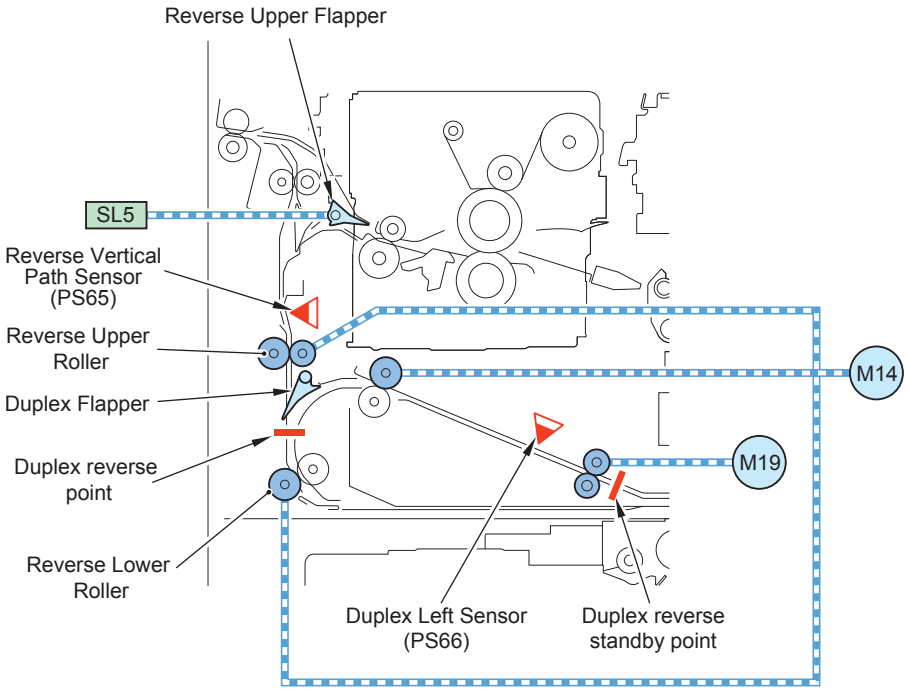
# Duplex Unit

## Basic Operation

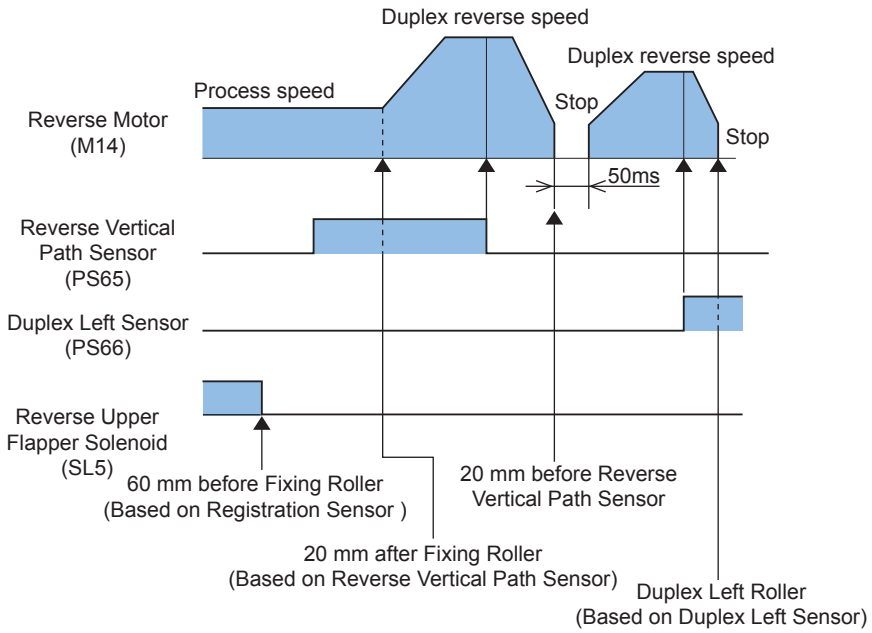
1) The Reverse Upper Flapper Solenoid (SL5) is turned OFF to switch the feeding path to the Reverse Assembly side.

2) When the paper's trailing edge passes through the Fixing Roller, rotating speed of the Reverse Motor (M14) is increased (duplex pull-in speed) to make the paper stopped at the duplex reverse position.

3) The Reverse Motor is driven by the duplex pull-in speed to feed the paper to the Duplex Assembly (the flapper feeds the paper to the Duplex Assembly). Then, the Duplex Left Sensor (P66) detects the paper's leading edge, and the paper is fed for a specified distance to stop at the position of Duplex Left Roller.




F-2-197




F-2-198

| Model | ImageRUNNER ADVANCE 8105/8095/8085 [mm/s] | | |
|---|---|---|---|
| PPM | 105 | 95 | 85 |
| Process speed | 500 | | |
| Duplex feed speed | 1100 | | |
| Duplex reserve speed | 750 | | |
| Duplex delivery spped | 750 | | |

T-2-83

## Side Registration Control

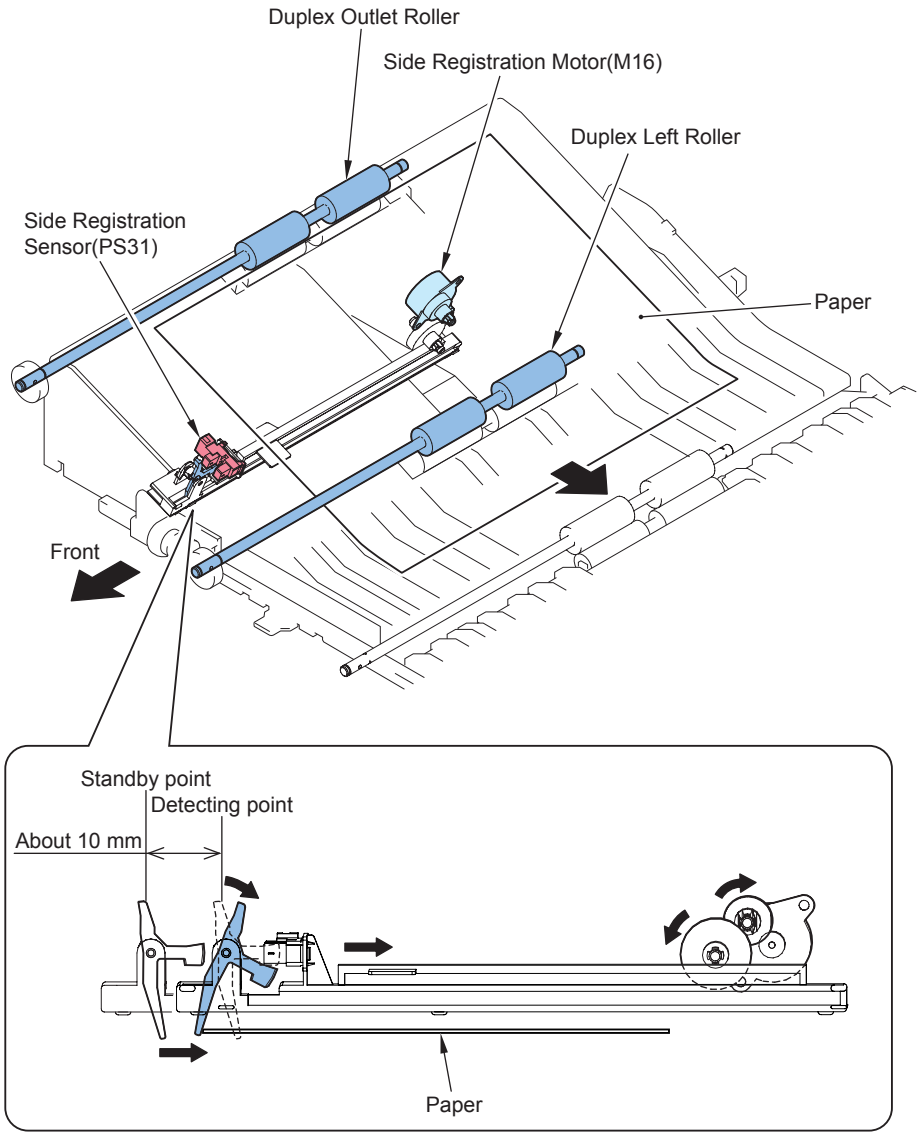
In the case of printing the 2nd side of the 2-sided print, side registration displacement level is measured to adjust the write start timing and correct side registration.
<Execution timing>
When the paper is stopped at the duplex standby position
<Control description>
Side Registration Sensor (PS31) detects side registration.
The side registration control executes detection of the home position as well as operation and detection of the standby position.

1.Home position operation
Side Registration Unit is moved to the home position.
Home position: at 13mm from the nominal dimension of A4 size
Timing
- When the main power is turned ON/when the Front Cover is closed/at the recovery from JAM process/at job completion

2.Standby position operation
The unit is moved to the side registration standby position (10 mm front) corresponding the paper size.

3. Detection operation
The Side Registration Motor (M16) is driven until Side Registration Sensor(PS31) is turned OFF to detect side registration displacement level from the travel distance.

4. The displacement level measured for side registration correction is converted into pixels to adjust the laser write start timing according to the displaced direction.
The write start timing is pushed forward when the paper is displaced to the front.
The write start timing is pushed back when the paper is displaced to the rear.

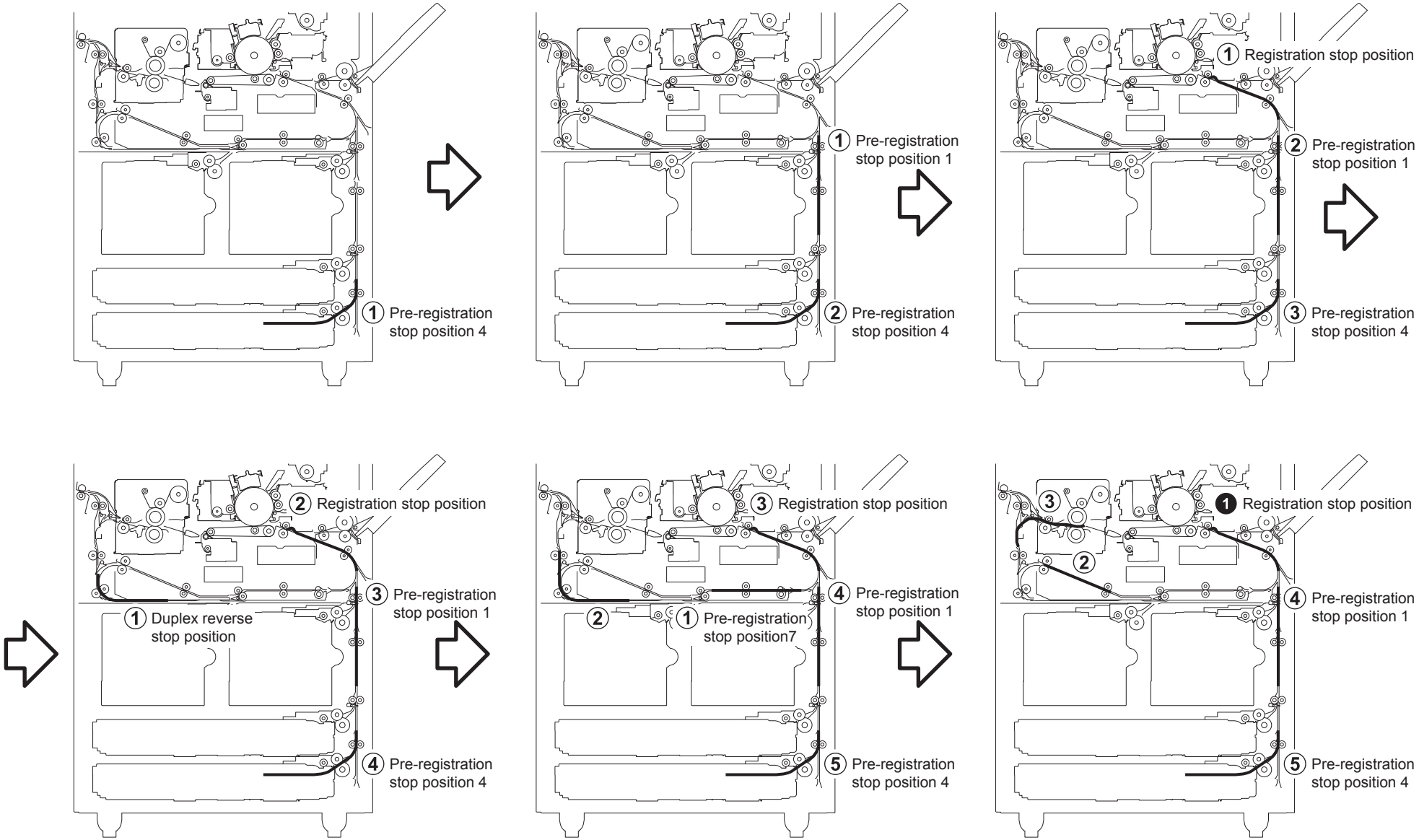



F-2-199

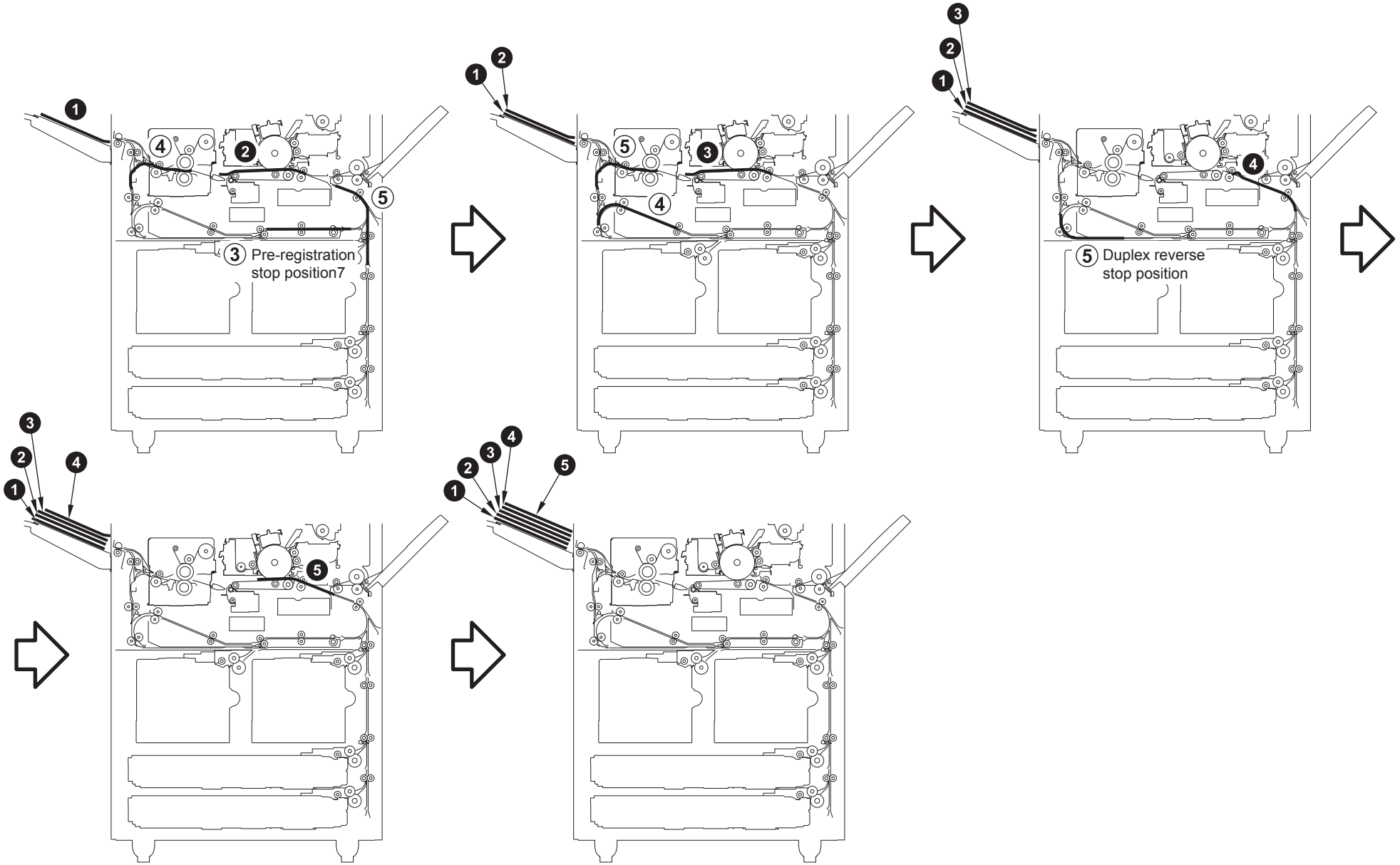
## Circulation quantity and limit

The numbers in white background and the numbers in black background show each the first page and second page.

### Less than 314 mm in size/5 sheets in circulation (B5 to A4R)

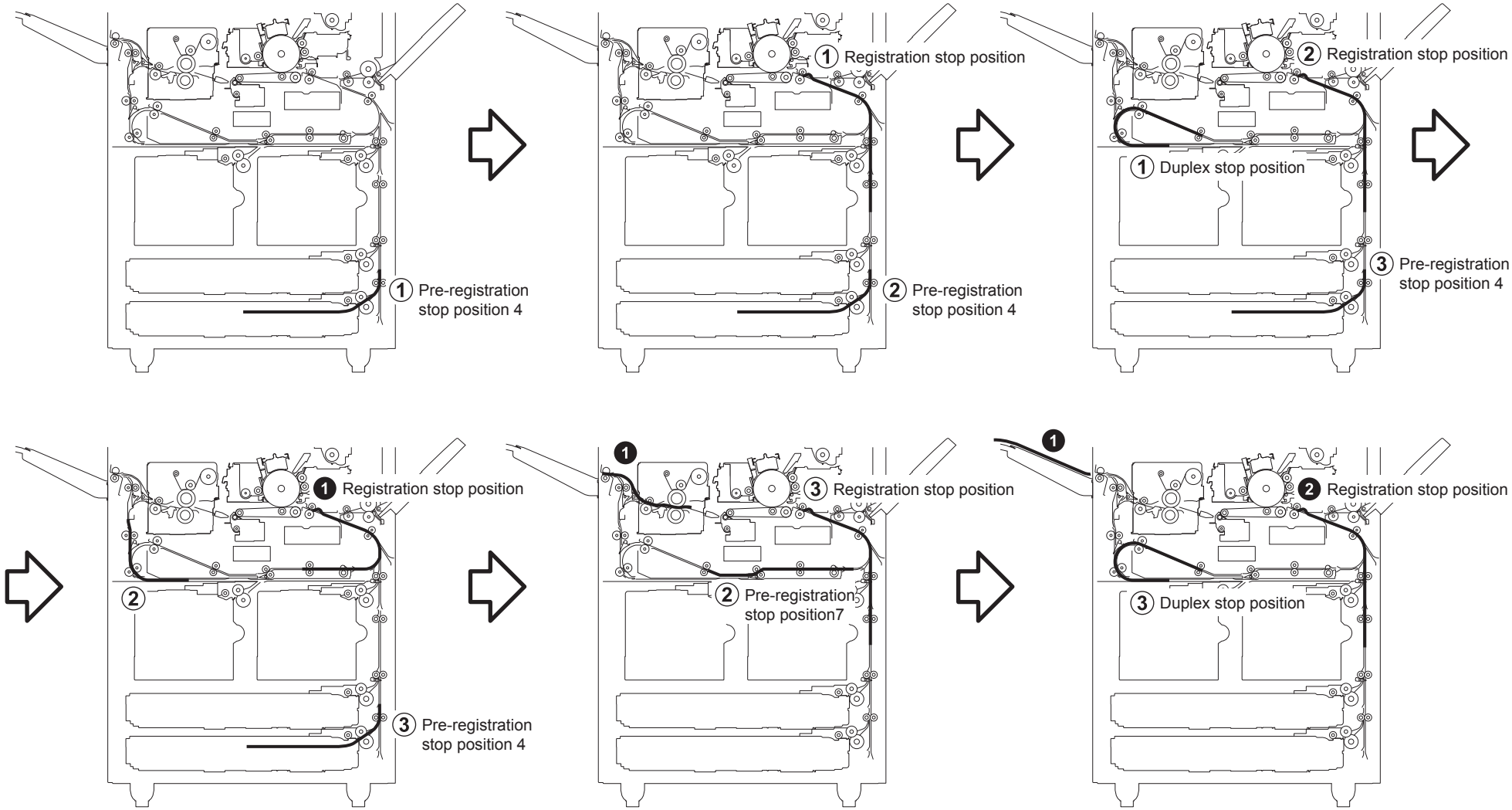



F-2-200

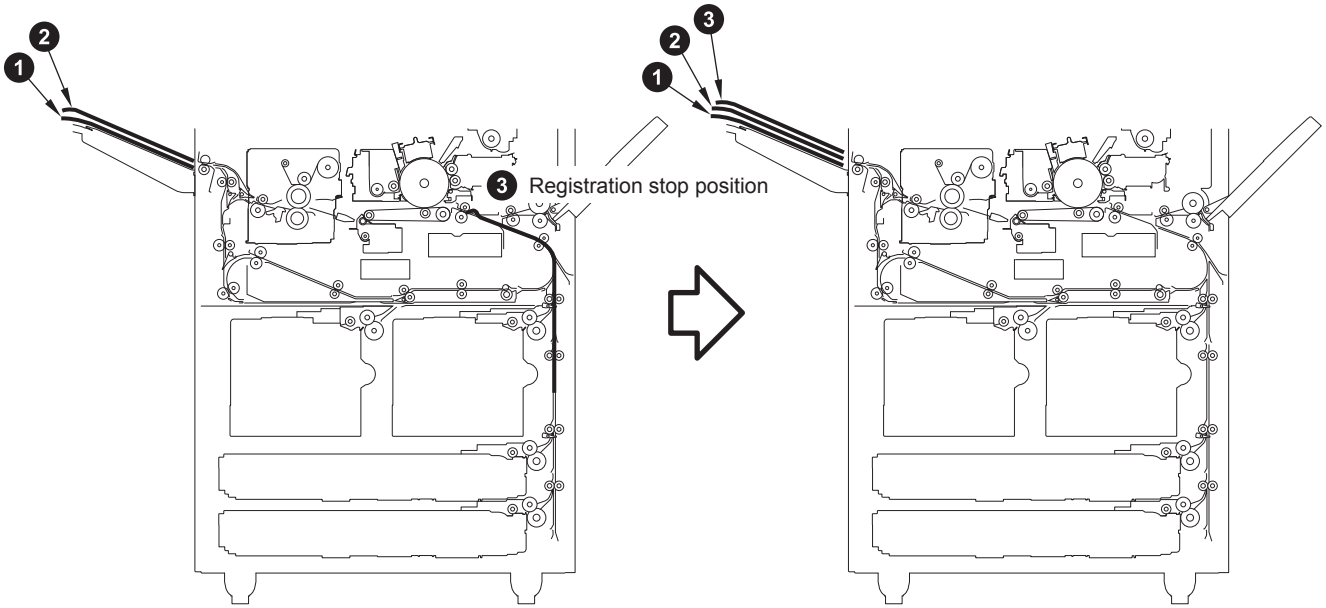

3 Pre-registration stop position7
5 Duplex reverse stop position

F-2-201

## Exceeds 314 mm in size/3 sheets in circulation (B4 to 19.2 inch(483.0))



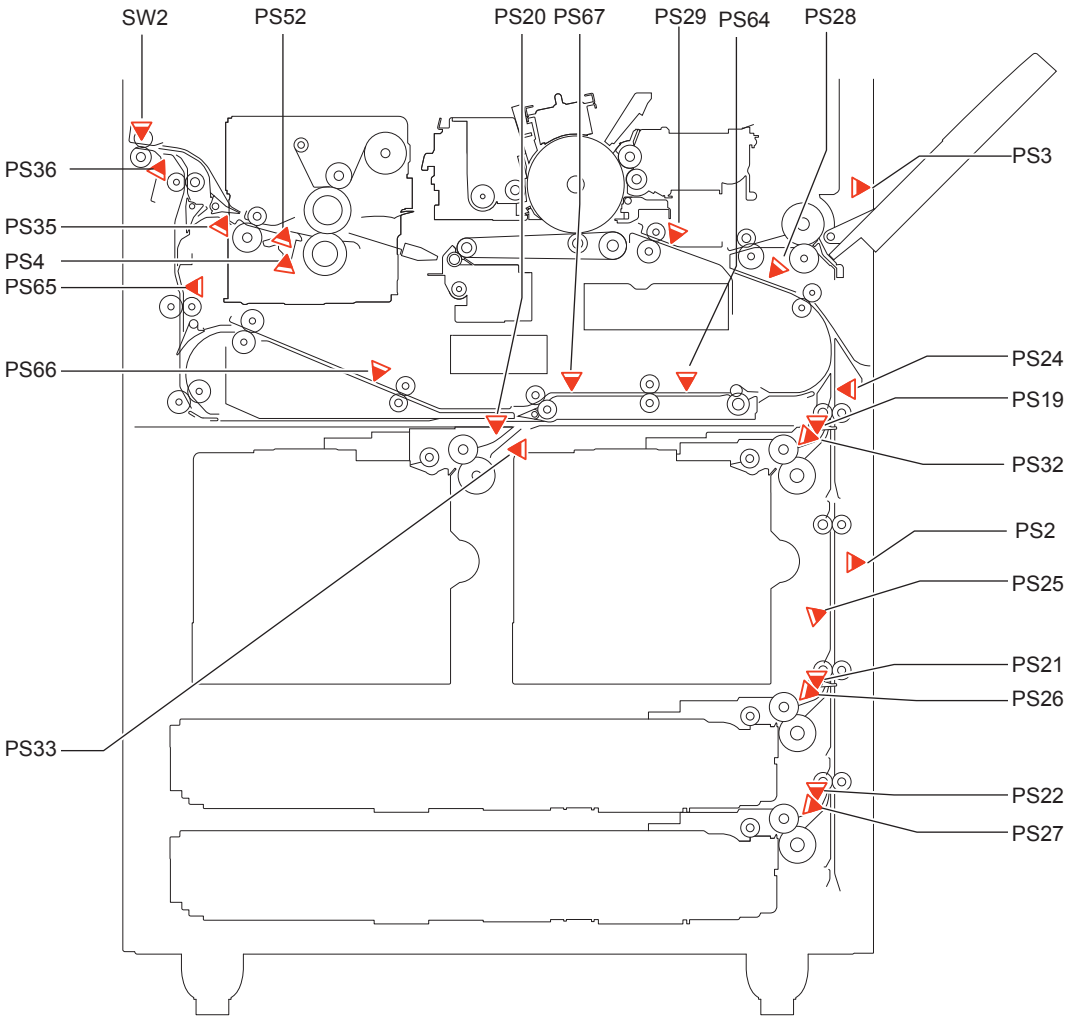

F-2-202




F-2-203

# Jam Detection

## Jam Code List




F-2-204

## Jam in Feed System

xx = 01: Delay, 02: Stationary, 0A: Residue

Yes: Detects, -: Does not detect

| Sensor No. | Sensor name | | | Jam type | | |
|---|---|---|---|---|---|---|
| | | | | Delay | Stationary | Residue |
| xx01 | PS19 | Right Deck Pickup Sensor 1 | | Yes | - | |
| xx02 | PS32 | Right Deck Pull Out Sensor | | Yes | Yes | Yes |
| xx03 | PS24 | Vertical Path Sensor1 | | Yes | Yes | Yes |
| xx04 | PS28 | Multi-purpose Paper Last paper Sensor | | Yes | Yes | Yes |
| xx05 | PS29 | Registration Sensor | | Yes | Yes | Yes |
| xx06 | PS20 | Left Deck Pickup Sensor 2 | | Yes | - | - |
| xx07 | PS33 | Left Deck Pull Out Sensor | | Yes | Yes | Yes |
| xx08 | PS67 | Duplex Merging Sensor | | Yes | Yes | Yes |
| xx09 | PS64 | Duplex Outlet Sensor | | Yes | Yes | Yes |
| xx0A | PS21 | Cassette 3 Pickup Sensor 1 | | Yes | - | - |
| xx0B | PS26 | Vertical Path Sensor3 | | Yes | Yes | Yes |
| xx0C | PS25 | Vertical Path Sensor2 | | Yes | Yes | Yes |
| xx0D | PS22 | Cassette 4 Pickup Sensor 1 | | Yes | - | - |
| xx0E | PS27 | Vertical Path Sensor4 | | Yes | Yes | Yes |
| xx11 | PS52 | Fixing Outlet Sensor | | Yes | Yes | Yes |
| xx12 | PS35 | Inner Delivery Sensor | | Yes | Yes | Yes |
| xx13 | PS36 | Outer Delivery Sensor | | Yes | Yes | Yes |
| xx14 | PS65 | Reverse Vertical Path Sensor | | Yes | Yes | Yes |
| xx15 | PS66 | Duplex Left Sensor | | Yes | Yes | Yes |
| xx17 | PS1 | Deck Pickup Roller | Paer Deck / POD Deck | Yes | - | - |
| xx18 | PS6 | Deck Pull Out Sensor | Paer Deck / POD Deck | Yes | Yes | Yes |
| 0305 | PS29 | Registration Sensor | | early timing jam | | |

T-2-84

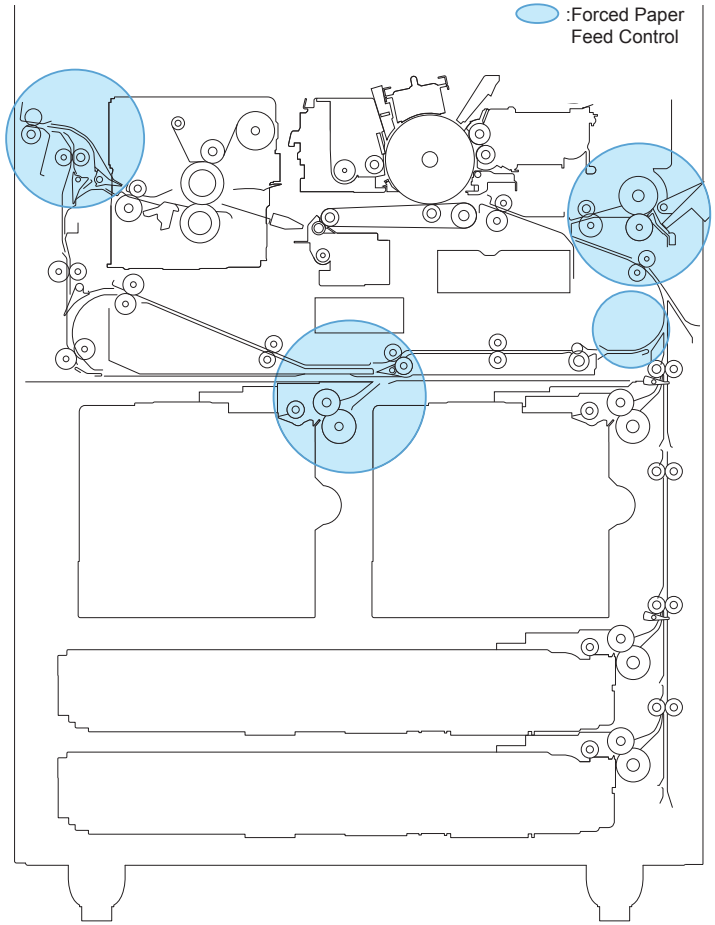
## Other Jams

| Sensor No. | Sensor name | | Jam type |
|---|---|---|---|
| 0B01 | SW2 | Front Door Open Detection Switch | Door Open jam |
| 0B02 | PS3 | Vertical Path Cover Open/Close Sensor | Door Open jam |
| 0B03 | PS2 | Multi-purpose Cover Open/Close Sensor | Door Open jam |
| 0CA1 | - | FeedSts time out jam | REFEED command is not received. (Former: E240-0001) |
| 0CA2 | - | RefeedStart time out jam | RefeedStart command is not received. (Former: E240-0002) |
| 0CA3 | - | ImageSet time out jam | ImageSet command is not received. (Former: E240-0003) |
| 0CA4 | | PageComplete time out jam | PageCompletecommand is not received. (Former: E240-0004) |
| 0CA5 | - | Fixing temperature control time out jam | - |
| 0C10 | PS4 | Fixing Toenail Jam Sensor | Fixing Toenail Jam |

T-2-85

## Forced Paper Feed Control

If there is paper in the following place after jam is detected, the paper will be forcedly fed to downstream direction.This control suppresses paper damage during jam handling.




F-2-205

# Servicing

## Periodically Replaced Parts

None

## Consumable Parts

| Parts Name | Parts Number | Piece | Expected life* | COUNTER (DRBL-1) | Remarks |
|---|---|---|---|---|---|
| Right Deck Pickup Roller | FC5-2524 | 1 | 50 | C1-PU-RL | |
| Right Deck Feed Roller | FC5-2526 | 1 | 50 | C2-PU-RL | |
| Right Deck Separation Roller | FC5-2528 | 1 | 50 | C1-FD-RL | |
| Left Deck Pickup Roller | FC5-2524 | 1 | 50 | C2-FD-RL | |
| Left Deck Feed Roller | FC5-2526 | 1 | 50 | C1-SP-RL | |
| Left Deck Separation Roller | FC5-2528 | 1 | 50 | C2-SP-RL | |
| Cassette 3 Pickup Roller | FC5-2524 | 1 | 50 | C3-PU-RL | |
| Cassette 3 Feed Roller | FC5-2526 | 1 | 50 | C3-FD-RL | |
| Cassette 3 Separation Roller | FC5-2528 | 1 | 50 | C3-SP-RL | |
| Cassette 4 Pickup Roller | FC5-2524 | 1 | 50 | C4-PU-RL | |
| Cassette 4 Feed Roller | FC5-2526 | 1 | 50 | C4-FD-RL | |
| Cassette 4 Separation Roller | FC5-2528 | 1 | 50 | C4-SP-RL | |
| Multi-purpose Tray Separation Roller | FB1-8581 | 1 | 12 | M-FD-RL | |
| Multi-purpose Tray Feed Roller | FC6-6661 | 1 | 12 | M-SP-RL | |

T-2-86

*Unit: 10,000 sheets

## Periodical Servicing List

| Parts/Area Name | Expected life* | Remarks |
|---|---|---|
| Feed Guide | 50 | Remove paper lint with lint-free paper and cleaning tool. |
| Pre-registration Guide | 50 | Clean with lint-free paper moistened with alcohol. |
| Rollers/wheels | 50 | Clean with lint-free paper moistened with alcohol. |
| Separation Static Eliminator | 50 | Remove paper lint (toner) with Blower. |
| Duplex Unit Cleaning Brush | 50 | Using Blower, remove paper lint which was collected by Cleaning Brush. |
| Registration Unit Magnet | 50 | Clean with lint-free paper moistened with alcohol. |
| Scanner Sensor(Pickup Assembly) | 100* | sing Blower, remove paper lint<br>Left Deck Pickup Sensor 2 (PS20),Right Deck Pickup Sensor 2 (PS19) ,Cassette 3 Pickup Sensor 2 (PS21),Cassette 4 Pickup Sensor 1 (PS22)<br>* when replacing Separation Roller |
| Scanner Sensor(Feeding Assembly) | 100 | Using Blower, remove paper lint<br>Vertical Path Sensor 1 (PS24) ,the Multi-purpose Tray Last Paper Sensor (PS28),the Registration Sensor (PS29),Reverse Vertical Path Sensor (PS65),Duplex Outlet Sensor (PS64), Duplex Merge Sensor (PS67), and Duplex Left Sensor (PS66) |

T-2-87

*Unit: 10,000 sheets

## When Replacing Parts

When replacing the Periodically Replaced Parts and Consumable Parts, be sure to clear the Parts Counter (COPIER > COUNTER > PRDC-1/DRBL-1)

## Major Adjustments

None

## Troubleshooting

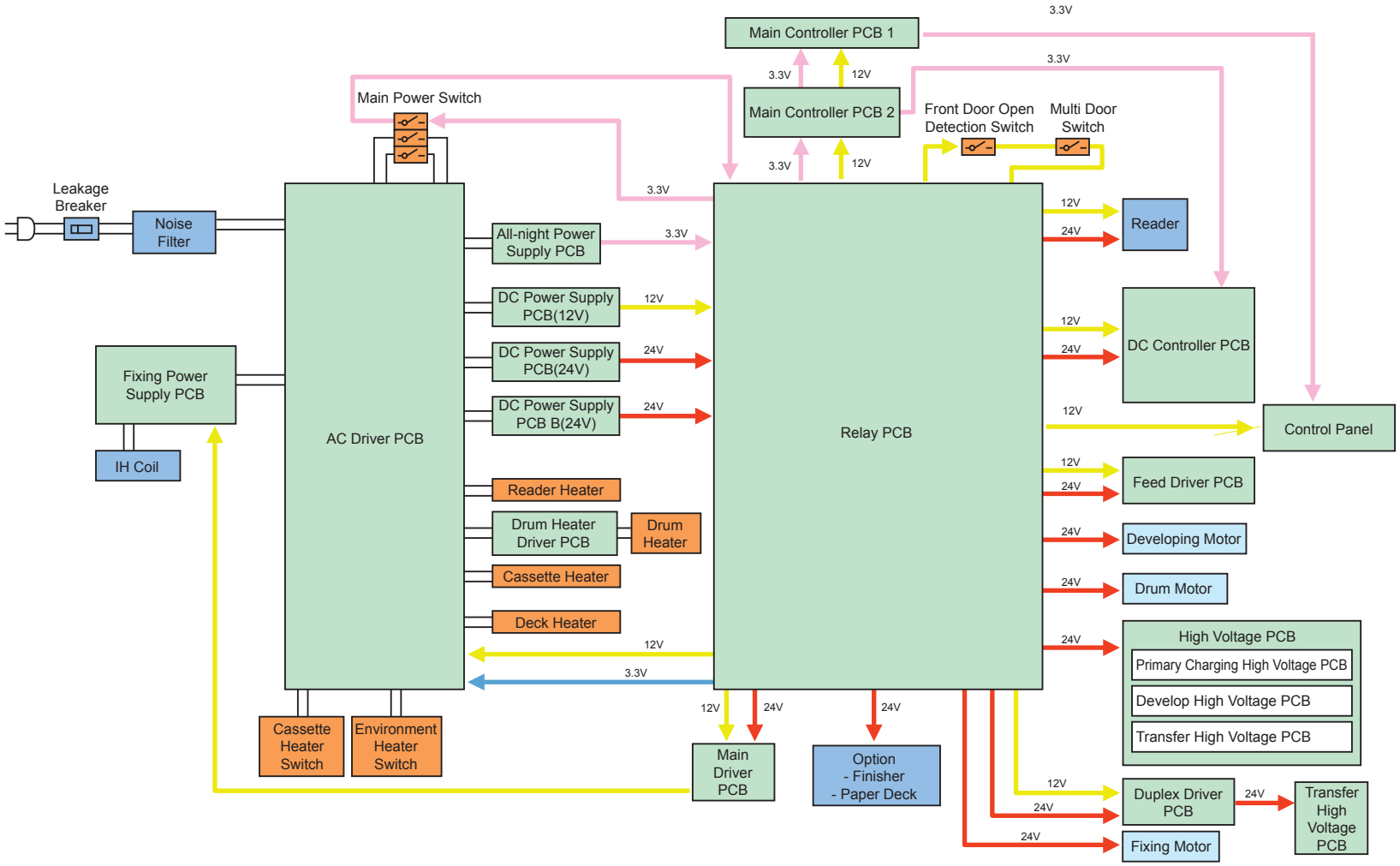
None

# External Auxiliary System

## Overview

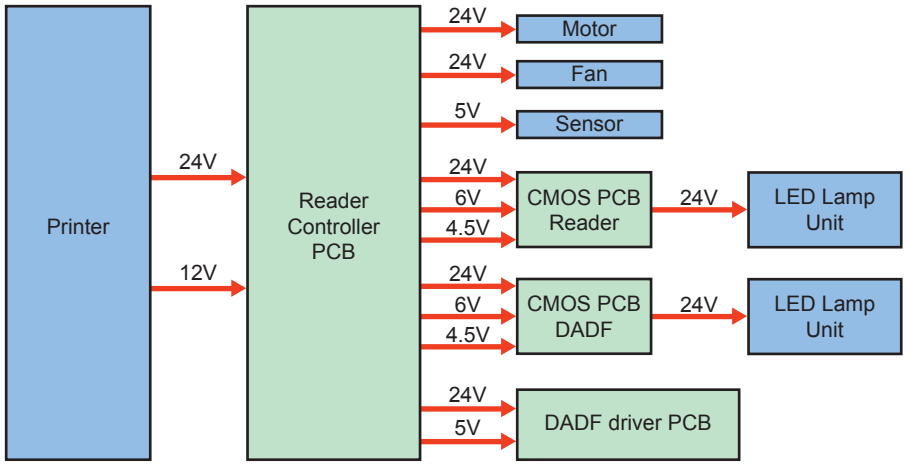
### Power Supply Configuration

#### Power Supply Configuration inside the Host Machine




F-2-206

## Power Configuration of the Reader Unit




F-2-207

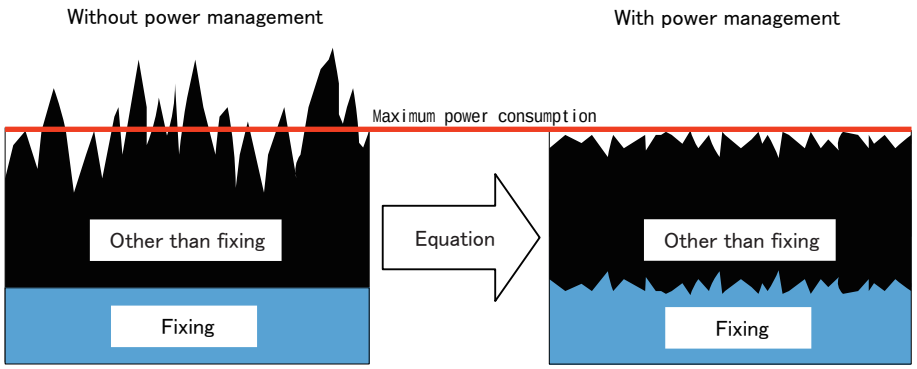
# Controls

## Power supply control

### Electric Power Management

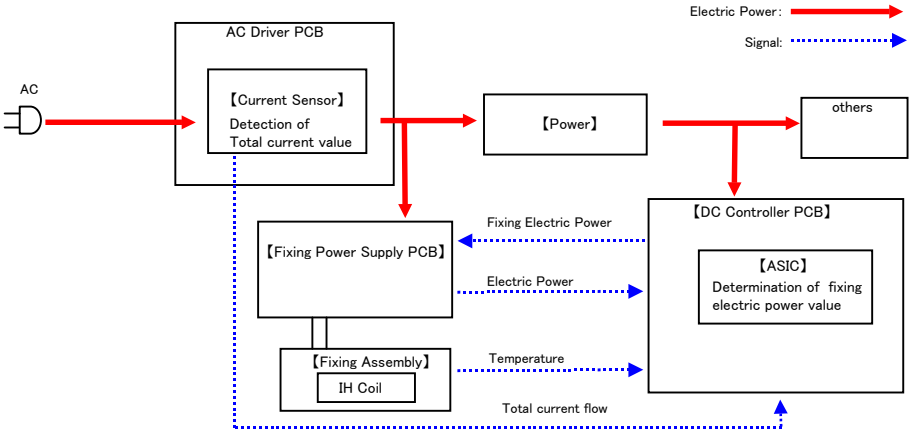
<Over View>

By equating the electric power in the machine, the maximum power consumption is reduced in comparison with the conventional models (iR7105/7095/7086 series).




F-2-208

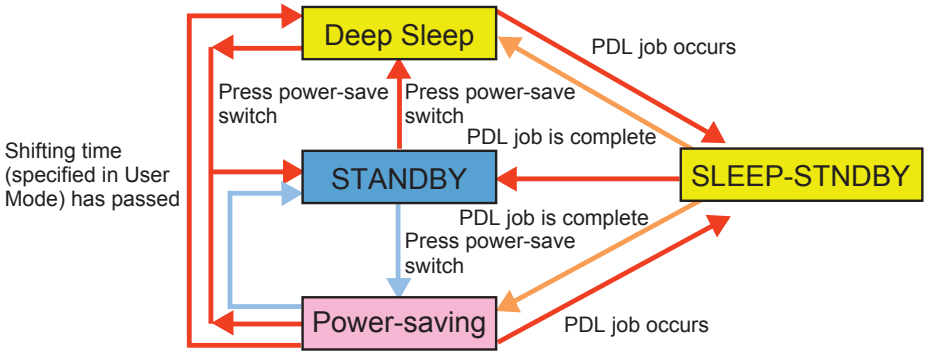
<Control description>
This machine executes electric power management to prevent temporary power shortage. The electric power management detects current value of the entire product with the Current Sensor. In the case that the current value is likely to exceed the electric power reference value, the DC Controller temporarily reduces electric power supply to the fixing area to compensate for power shortage.




F-2-209

Current Sensor : Converts the flux occurred by current to the voltage.

## Energy saver function




F-2-210

**Sleep standby**

The mode that can start operation immediately. All power is supplied in this mode, but display on the Control Panel is OFF.

**Energy Saver**

The mode to reduce energy consumption by reducing the control temperature when the Fixing Unit is at standby state according to the energy saving rate (this mode can be changed in Settings/registration “Change Energy Saver Mode” Default: -10%).

**Deep Sleep**

The state that only 3.3V on the All-night Power Supply PCB is supplied. To be shifted to the standby mode when the next job is generated.

- Print job
- Pressing the power key on the Control Panel

## Effects of Spanning Tree-supported Hub

If you set the network as a loop, data keeps staying in this loop and efficiency of data transfer might be decreased. In order to prevent this symptom, some hubs have the function called “spanning tree”. If this function is enabled, the device newly connected to the hub can make data communication with network 10 to 50 seconds (time changes due to the conditions) after the connection. When the machine enters Deep sleep mode and restores from the sleep mode, the machine electrically disconnects with the network once. Therefore, if the machine connects with the spanning tree-installed hub, the machine cannot communicate with network for approximately 1 minute at a maximum after restoring from the Deep sleep mode.
For this reason, right after restoring from the Deep sleep mode, the following symptoms might occur: Device status cannot be collected, printing cannot be made, and login using a login application cannot be made. If such symptoms become any problems, perform the following operations.

- Using user mode, set not to enter the Deep sleep mode.
  Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High
- Disable the spanning tree function of hub.
- Request users to use the hub which supports Rapid Spanning-Tree
- Protocol (RSTP) that resolved such problems.

## Distribution of Power and the Switches

The power of this machine is supplied to each load side by linking with the following switches, etc.

A. 2-dimensional shading OFF(defolt*1)

<Environment Switch: OFF>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | Environment control *1 | Environment control *1 | ON | ON |
| | Cassette | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-88

<Environment Switch: ON>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | Environment control *1 | Environment control *1 | Environment control *1*2 | Environment control *1*2 | Environment control *1*2 | Environment control *1*2 | OFF | OFF | Environment control *1 | Environment control *1 | ON | ON |
| | Cassette | OFF | ON | OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-89

B. 2-dimensional shading ON *1]

<Environment Switch: OFF>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON *1 | ON *1 | ON | ON |
| | Cassette | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-90

<Environment Switch: ON>

| Mode | | Main Power OFF | | sleep mode (low energy consumption)*3 | | sleep mode (high energy consumption)*3 | | WarmUp(Recovery) | | Standby/Energy Saver | | Copy/Print | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch | Main SW | OFF | | ON | | | | | | | | | |
| | Cassette SW | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| Heater | Drum | ON *1 | ON *1 | ON *1 | ON *1 | ON *1 | ON *1 | OFF | OFF | ON *1 | ON *1 | ON | ON |
| | Cassette | OFF | ON | OFF | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | Reader | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |

T-2-91

*1 It can be switched by COPIR > OPTION > IMG-MCON > 2D-SHADE..

*2 It can be switched by COPIR > OPTION > IMG-MCON > DRM-H-SW.

*3 When sleep mode (high energy consumption) is set, the Cassette Heater/Reader Heater cannot be turned ON although the Environment Switch and the Cassette Heater Switch are ON. When using the Cassette Heater and the Reader Heater at sleep state, set the sleep mode (low energy consumption). Settings/Registration > Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High/Low

<Environment Control>

Environment control 1: The condition of the heater at the time of turning OFF the main power continues.

Environment control 2: Whether to turn ON or OFF the heater is determined by the environment (moisture content) right before moving to sleep state, and the condition continues while the power is OFF or the machine is at sleep state.

| Environment | Moisture content | Temperature/Humidity | Drum Heater |
|---|---|---|---|
| 1 | 0.86 | 23 deg C 5% | OFF |
| 2 | 1.73 | 23deg C 10% | |
| 3 | 5.8 | 23 deg C 30% | |
| 4 | 8.9 | 23 deg C 50% | |
| 5 | 15 | 23 deg C 70% | ON |
| 6 | 18 | 27 deg C 80% | |
| 7 | 12.41 | 30 deg C 80% | |

T-2-92

Environment control 3: Basically the heater is ON. ON or OFF of the heater can be switched depending on the moisture contents when the duration time of standby mode/ energy saving mode is long (4 hours at minimum).

<Related service modes>

COPIER > OPTION > IMG-MCON > DRM-H-SW: To set ON/OFF of the Drum Heater.

0: Normal mode (ON/OFF of the Drum Heater is determined when moving to sleep 1.) (Default)

1: Drum Heater ON mode *(The Drum Heater must be turned ON when moving to sleep 1 while the 2-dimensional shading-related control is OFF.)

2: Energy saving mode (The Drum Heater is OFF when moving to sleep 1.)

* The mode differs from 2-dimensional shading ON (image priority mode). This mode is for users who just want to turn ON the Drum Heater when startup time is delayed because of the increase of controls due to 2-dimensional shading ON.

COPIER > OPTION > IMG-LSR > 2D-SHADE: Image priority mode (2-dimensional shading). ON/OFF

0: 2-dimensional shading OFF (Default)

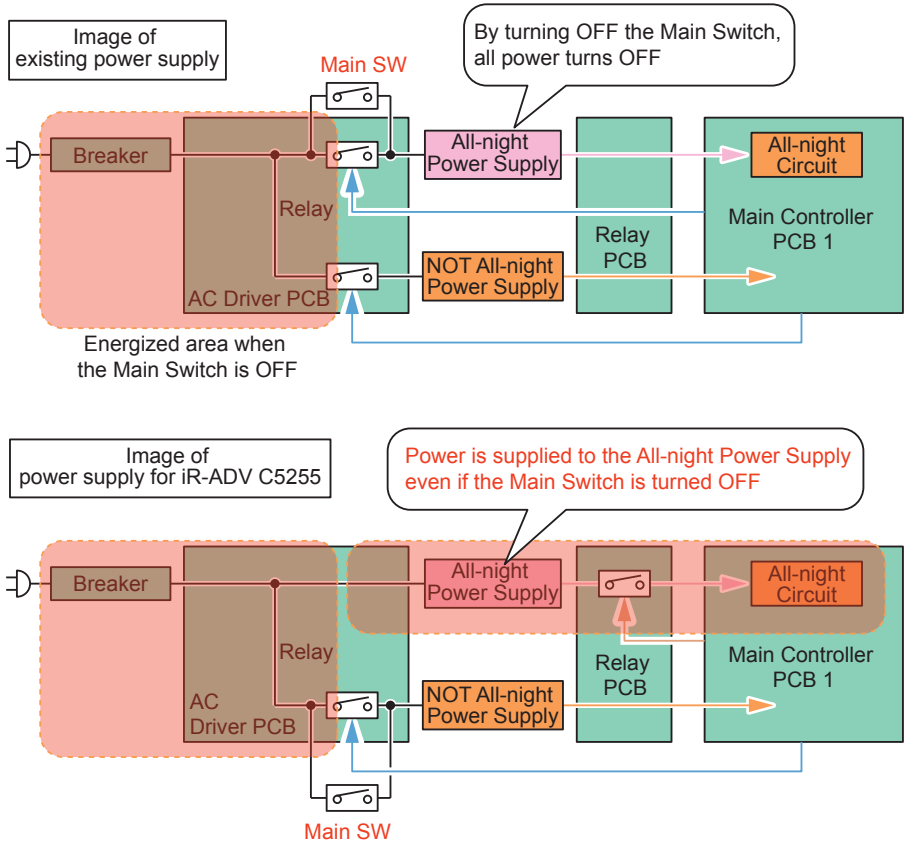
1: 2-dimensional shading ON (The Drum Heater is turned ON at first time for the day, sleep, standby/energy saving, potential control, and 2-dimensional shading.)

## Quick Startup

To realize faster startup, power configuration has been changed to always supply power to the All-night Power Supply PCB. Thereby, the main menu can be displayed after 30 seconds from turning ON the Main Power Supply Switch.

Although when the Main Power Supply Switch is OFF, power is supplied to the following PCBs.

- AC Driver PCB
- All-night Power Supply PCB
- Relay PCB
- Main Controller PCB 1

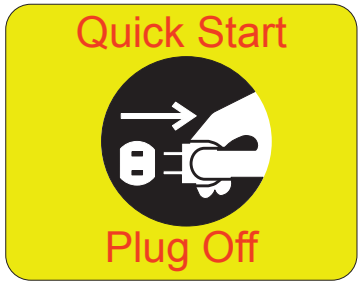



F-2-211

Disconnect the plug from outlet or turn OFF the Breaker when performing work with the

possibility to come in contact with the PCBs above. PCBs may get damage. If a conductive material comes in contact with the PCB, short circuit may occur in the PCB, and may cause damage on it.

The following illustration is used at the place where attention needs. When the following label is affixed, be sure to disconnect the plug from outlet or turn OFF the Breaker.




F-2-212

In addition, quick startup is not performed under the following conditions.

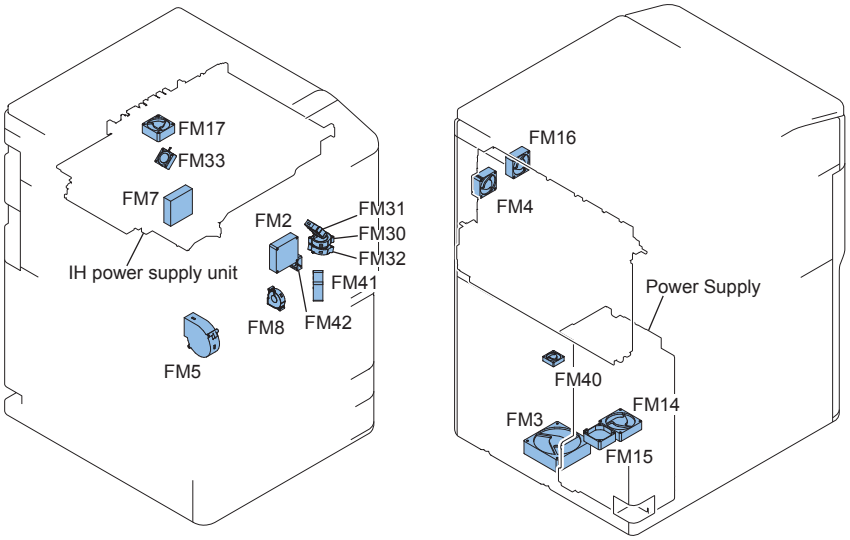
| At first startup after the AC Power Plug is connected to the outlet | | |
|---|---|---|
| Under the following conditions (settings), the machine always starts up normally (even quick startup is ON). | | |
| | When any of the following devices is connected. | |
| | | • EFI Controller |
| | | • Serial Interface Coin Vendor |
| | | • Wireless LAN |
| | When any of the following network settings is set to "ON". | |
| | | • RARP |
| | | • BOOTP |
| | | • IPsec |
| | | • IPv6 |
| | | • NetWare |
| | | • AppleTalk |

| As for startup right after shutting down of the machine under any of the following conditions, it starts up normally (even quick startup is ON). | | |
|---|---|---|
| | FAX | |
| | | • There is a fax transmission reservation. |
| | | • Within a specified period of time (10 seconds) from disconnection of a fax line |
| | | • Within a specified period of time (10 seconds) from non-detection of reception from a fax line |
| | | • Within a specified period of time (10 seconds) from putting down the fax sub device or handset |
| | MEAP | |
| | | During execution of MEAP application which prohibits moving to Deep Sleep |
| | | A scheduled processing is reserved on MEAP. |
| | Job processing | |
| | | • During print/scan job processing |
| | | • During SEND job processing |
| | | • During I-Fax communication/job processing |
| | | • During report job processing |
| | | • During forwarding transmission job/reception job processing |
| | | • During processing of data storage to Advanced Box |
| | | • During fax communication/phone communication |
| | | • During distribution of device information |
| | | • During Box backup |
| | | • During export/import by RUI |
| | | • During opening/reading/writing file of Advanced Box (common with SMR/WebDAV) |
| | | • During rebuilding with the HDD Data Encryption/Mirroring Board installed |
| Others | | |
| | • When the machine state remains unchanged for more than 110 hours after turning ON the power as quick startup or turning OFF the power.<br>-> At the time of shutdown, it will be normal shutdown.<br>* This is to prevent a risk of UI freeze caused by memory leak. | |
| | • Within a specified period of time (20 seconds) from turning OFF the Main Power Supply Switch<br>-> In such a case, the machine reboots and then starts up normally at startup. Therefore, it will take a few more seconds compared with the normal startup.<br>* This is for starting up the machine normally at the time of failure (UI freeze, etc.). | |
| | • After moving to the Settings/Registration screen of service mode or RUI | |
| | • After changing the user mode that requires restart | |
| | • The machine is shut down from RUI | |
| | • When an error occurs | |
| | • When resource downloader is active | |
| | • In printer/scanner limited functions mode | |
| | • When a login application is switched by SMS | |
| | • A license has been registered. | |
| | • Startup by pressing the Control Panel Key | |

T-2-93

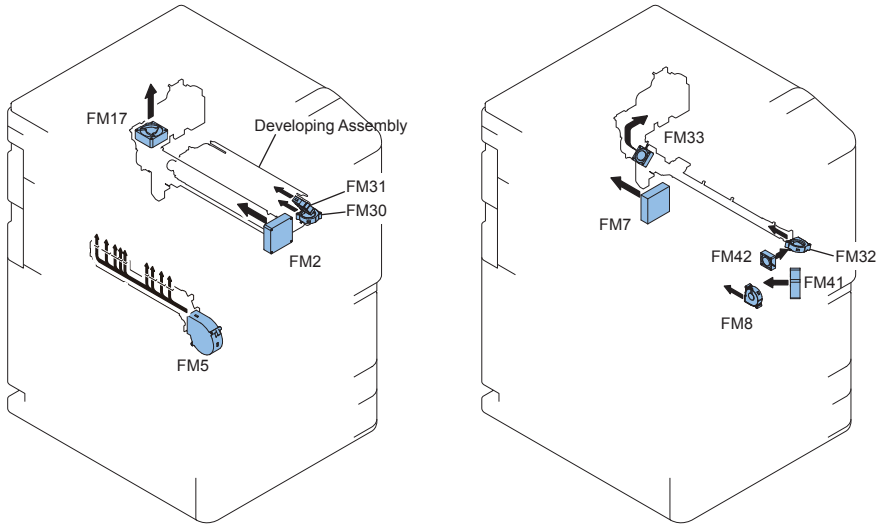
# Fan Control

## Location of Fans




F-2-213

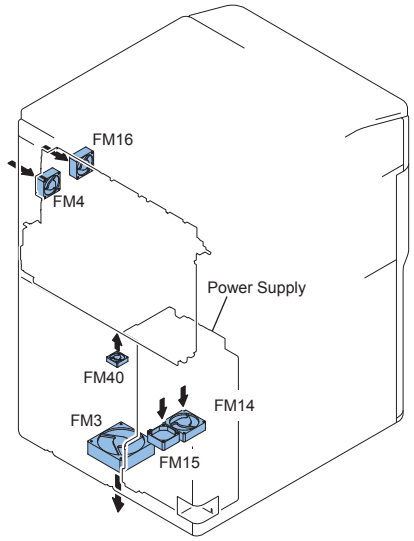
## Airflow




F-2-214

| Circuit code | Name | Function | Error/Alarm code |
|---|---|---|---|
| FM2 | Primary Charging Air-supply Fan | To intake air around the Primary Charging Assembly | E824-0000 |
| FM3 | Making Image Exhaust Fan | To exhaust air in the image formation area | E806-0000 |
| FM4 | Main Controller Cooling Fan | To cool the Main Controller PCB | E880-0001 |
| FM5 | Paper Cooling Fan | To cool the paper passing through the delivery area | 33-0001 |
| FM7 | Fixing Power Supply Cooling Fan | To cool the fixing power supply | E804-0001 |
| FM8 | Transfer Cleaner Cooling Fan | To cool the Transfer Cleaner / To cool the Duplex Feed Guide | E820-0002 |
| FM14 | Power Supply Cooling Fan 1 | To cool the power supply | E804-0000 |
| FM15 | Power Supply Cooling Fan 2 | To cool the power supply | |
| FM16 | Laser Scanner Cooling Fan | To cool the Laser Scanner | E121-0001 |
| FM17 | Primary Charging Exhaust Fan | To exhaust air around the Primary Charging Assembly | 33-0027 |
| FM30 | Developer Lower Cooling Fan | To cool the Developing Unit | E820-0000 |
| FM31 | Developer Upper Cooling Fan | To cool the Developing Unit | E820-0001 |
| FM32 | Pre-transfer Charging Unit Air-supply Fan | To intake air around the Pre-transfer Charging Assembly | 33-0026 |
| FM33 | Pre-transfer Charging Unit Exhaust Fan | To exhaust air around the Pre-transfer Charging Assembly | |
| FM40 | Feed Driver Cooling Fan | To cool the Feed Driver | 33-0013 |
| FM41 | Duplex Driver Cooling Fan | To cool the Duplex Driver | 33-0028 |
| FM42 | Registration Motor/Duplex Motor Cooling Fan | To cool the Duplex Motor and the Registration Motor | 33-0002 |

T-2-94




F-2-215

## Fan Sequence

| NO. | NAME | WAIT UP | INTR | STBY | PRINT | | | LSTR | JAM | ERR | Power saving | DEEP Sleep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FM2 | Primary Charging Air-supply Fan | | | | | | | | | | | |
| FM3 | Making Image Exhaust Fan | | | | | | | | | | | |
| FM4 | Main Controller Cooling Fan | Controller control | | | | | | | | | | |
| FM5 | Paper Cooling Fan | | | | | | | | | | | |
| FM7 | Fixing Power Supply Cooling Fan | | | | | | | | | | | |
| FM8 | Transfer Cleaner Cooling Fan | | | | | | | | | | | |
| FM14 | Power Supply Cooling Fan 1 | | | | | | | | | | | |
| FM15 | Power Supply Cooling Fan 2 | | | | | | | | | | | |
| FM16 | Laser Scanner Cooling Fan | | | | | | | | | | | |
| FM17 | Primary Charging Exhaust Fan | | | | | | | | | | | |
| FM30 | Developer Lower Cooling Fan | | | | | | | | | | | |
| FM31 | Developer Upper Cooling Fan | | | | | | | | | | | |
| FM32 | Pre-transfer Charging Unit Air-supply Fan | | | | | | | | | | | |
| FM33 | Pre-transfer Charging Unit Exhaust Fan | | | | | | | | | | | |
| FM40 | Feed Driver Cooling Fan | | | | | | | | | | | |
| FM41 | Duplex Driver Cooling Fan | | | | | | | | | | | |
| FM42 | Registration Motor/ Duplex Motor Cooling Fan | | | | | | | | | | | |

:Full speed
:half speed

F-2-216

## Counter control

Count-up timing differs according to the following.

- Print mode (1-sided page, 2nd side of 2-sided page, 1st side of 2-sided page)
- Delivery position (Finisher).

| Delivery position | | | Print mode | |
|---|---|---|---|---|
| | | | 1-sided print/2nd side of 2-sided print | 1st side of the 2-sided print |
| | | | Count-up timing | |
| 1 | In the case of the Host Machine only | | Reference Sensor: External Delivery Sensor (PS36) | Reference Sensor: Small (when the length is up to LTR) -> Duplex Left Sensor (PS66)<br><br>R-configuration (when the length exceeds LTR up to A4R) -> Duplex Merger Sensor (PPS67)<br><br>Large (when the length is A4R or more) -> Reverse Vertical Path Sensor (PS65) |
| 2 | Staple Finisher-N1 / Booklet Finisher-N1 | Tray A (Upper Tray) | Reference Sensor: Feed Path Sensor (S102) | |
| | | Tray B (Lower Tray) | | |
| | | Saddle area | Reference Sensor: Saddle inlet sensor (S201) | |
| 3 | Staple Finisher-Q1 / Booklet Finisher-Q1 | Tray A (Upper Tray) | Reference Sensor: Upper delivery sensor (PS5) | |
| | | Tray B (Lower Tray) | Reference Sensor: Lower delivery sensor (PS6) | |
| | | Saddle area | Reference Sensor: Saddle inlet sensor (PS101) | |
| 4 | Booklet Trimmer-D1 | | Reference Sensor: Saddle inlet sensor (PS101) | |

T-2-95

Default counters for each country (model) are listed below.

| Target | Display number of each counter (in service mode) / item | | | | | | Country code |
|---|---|---|---|---|---|---|---|
| | Counter 1 | Counter 2 | Counter 3 | Counter 4 | Counter 5 | Counter 6 | |
| 100V Japan model Type 1 (Conventional method) | Total 1 | *1 | *1 | *1 | *1 | *1 | JP |
| | 101 | 0 | 0 | 0 | 0 | 0 | |
| 100V Japan model (New method) | Total 2 | Copy (Total 2) | Total A2 | *1 | *1 | *1 | JP |
| | 102 | 202 | 127 | 0 | 0 | 0 | |
| 120V Taiwan model | Total 1 | Total (Large) | Copy (Total 1) | Copy (Large) | *1 | *1 | TW |
| | 101 | 103 | 201 | 203 | 0 | 0 | |

| Target | Display number of each counter (in service mode) / item | | | | | | Country code |
|---|---|---|---|---|---|---|---|
| | Counter 1 | Counter 2 | Counter 3 | Counter 4 | Counter 5 | Counter 6 | |
| 120V UL model Type 1 (Conventional method) | Total 1 | Total (Large) | Copy (Total 1) | Copy (Large) | *1 | *1 | US |
| | 101 | 103 | 201 | 203 | 0 | 0 | |
| 120V UL model Type 2 (New method) | Total 2 | Copy (Total 2) | *1 | *1 | *1 | *1 | US |
| | 102 | 202 | 0 | 0 | 0 | 0 | |
| 230V General model | Total 1 | Total (Large) | Copy (Total 1) | Copy (Large) | *1 | *1 | SG/KO/CN |
| | 101 | 103 | 201 | 203 | 0 | 0 | |
| 240V UK model Type 1 (Conventional method) | Total (Black/Large) | Total (Black/Small) | Scan (Total 1) | Print (Total 1) | *1 | *1 | GB |
| | 112 | 113 | 501 | 301 | 0 | 0 | |
| 240V UK model Type 2 (New method) | Total 1 | *1 | *1 | *1 | *1 | *1 | GB |
| | 101 | 0 | 0 | 0 | 0 | 0 | |
| 240V CA model | Total 1 | Total (Large) | Copy (Total 1) | Copy (Large) | *1 | *1 | AU |
| | 101 | 103 | 201 | 203 | 0 | 0 | |
| 230V FRN model Type 1 (Conventional method) | Total (Black/Large) | Total (Black/Small) | Scan (Total 1) | Print (Total 1) | *1 | *1 | FR |
| | 112 | 113 | 501 | 301 | 0 | 0 | |
| 230V FRN model Type 2 (New method) | Total 1 | *1 | *1 | *1 | *1 | *1 | FR |
| | 101 | 0 | 0 | 0 | 0 | 0 | |
| 230V GER model Type 1 (Conventional method) | Total (Black/Large) | Total (Black/Small) | Scan (Total 1) | Print (Total 1) | *1 | *1 | DE |
| | 112 | 113 | 501 | 301 | 0 | 0 | |
| 230V GER model Type 2 (New method) | Total 1 | *1 | *1 | *1 | *1 | *1 | DE |
| | 101 | 0 | 0 | 0 | 0 | 0 | |
| 230V AMS model Type 1 (Conventional method) | Total (Black/Large) | Total (Black/Small) | Scan (Total 1) | Print (Total 1) | *1 | *1 | ES/SE/PT/NO/DK/FI/PL/HU/CZ/SI/GR/EE/RU/NL/SK/RO/HR/BG/TR |
| | 112 | 113 | 501 | 301 | 0 | 0 | |
| 230V AMS model Type 2 (New method) | Total 1 | *1 | *1 | *1 | *1 | *1 | ES/SE/PT/NO/DK/FI/PL/HU/CZ/SI/GR/EE/RU/NL/SK/RO/HR/BG/TR |
| | 101 | 0 | 0 | 0 | 0 | 0 | |
| 230V ITA model Type 1 (Conventional method) | Total (Black/Large) | Total (Black/Small) | Scan (Total 1) | Print (Total 1) | *1 | *1 | IT |
| | 112 | 113 | 501 | 301 | 0 | 0 | |
| 230V ITA model Type 2 (New method) | Total 1 | *1 | *1 | *1 | *1 | *1 | IT |
| | 101 | 0 | 0 | 0 | 0 | 0 | |

T-2-96

<Explanation of the list>

- Large: Large size paper (when paper length exceeds 364 mm in paper feed direction)
- Small: Small size paper (when paper length is 364 mm or less in paper feed direction)
- Total: Copy + Print; 1 count up
- 2-Sided: 1 count up when auto 2-sided copy
- Country code change of CONFIG is executed from COPIER > OPTION > FNC-SW > CONFIG.
- Three-digit number in the counter column shows the setting value of the following service mode items.
  COPIER > OPTION > USER > COUNTER 1 to 8
- COUNTER2 to 8 can be changed from the service mode (COPIER > OPTION > USER).

*1: Nothing is displayed as default. However, you can change this setting from the service mode.

# Servicing

## Periodically Replaced Parts

| No | Parts name | Parts Number | Piece | Expected life | Remarks |
|---|---|---|---|---|---|
| 1 | Ozone Filter | FL3-2134-000 | 1 | 6000,000 sheets | |
| 2 | Dustproof Filter | FC8-9564-000 | 1 | 2000,000 sheets | |

T-2-97

## Consumable Parts

None

## Periodical Servicing

None

## When Replacing Parts

### DC Controller PCB

Get in service mode to enter all the latest service mode values written on the label at the back of the Front Cover.

<Procedure of parts replacement>

see "Removing the DC Controller PCB," on p. 4-226.

<Procedure of adjustment>

1. Before Replacing
   1)Backup of the Service Mode data
   COPIER>FUNCTION>SYSTEM>DSRAMBUP

2. After Replacing
   1)Restoring the backup data
   COPIER>FUNCTION>SYSTEM>DSRAMRES
   2)Switch OFF and then ON the main power.
   3)Execute auto gradation adjustment.
   4)Test print

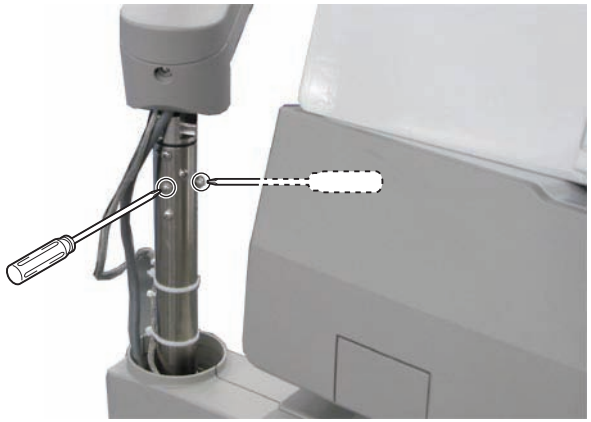
## ■ Troubleshooting

### ● Adjusting rotation of the Upright Control Panel Arm

If rotation of the Upright Control Panel Arm has become loose, retighten the Fixation Screws securing the Arm Rotation Adjustment Ring according to the following procedure.

<Procedure>

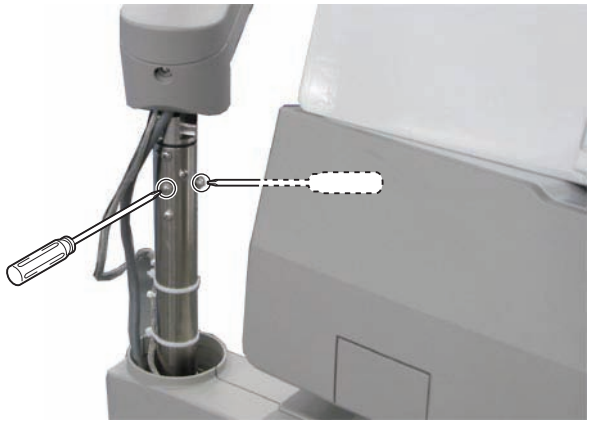
1) Remove the Shaft Support Cover (Left) and the Shaft Support Cover (Right).
2) Open the DADF and retighten the 2 Fixation Screws securing the Arm Rotation Adjustment Ring.



F-2-217

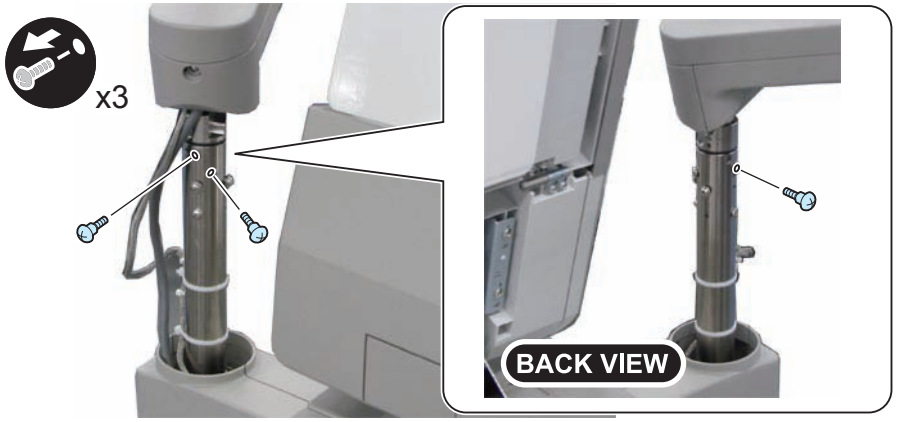
NOTE:
If rotation of the arm is still loose after retightening the Fixation Screws according to "●Adjusting rotation of the Upright Control Panel Arm", change the phase difference between the Arm Rotation Adjustment Ring and the Fixation Screws according to the following procedure.

1) Open the DADF and loosen the 2 Fixation Screws securing the Arm Rotation Adjustment Ring.



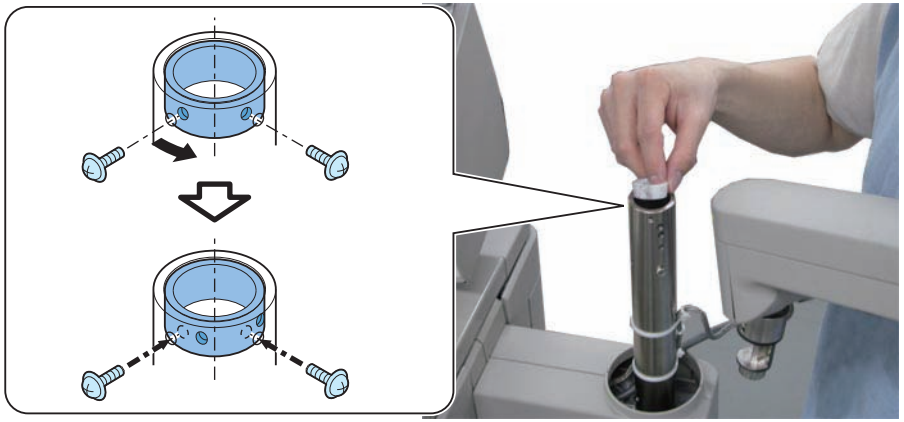
F-2-218

2) Remove the 3 Stepped Screws securing the Arm Shaft.




F-2-219

3) Pull out the Upright Control Panel and the Arm Shaft, and rotate the Arm Rotation Adjustment Ring to change the phase so that the Fixation Screws do not contact with the dents formed by tightening the screws.



F-2-220

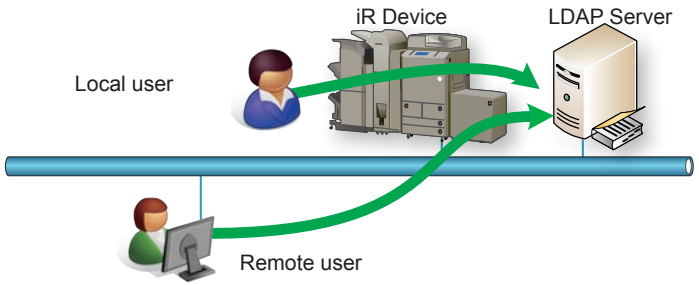
4) Insert the Upright Control Panel and the Arm Shaft, and retighten the 2 screws loosened in step 3.

# MEAP

## Changes

### LDAP Authentication (SSO-H Server Authentication)

LDAP authentication has been added to the server authentication method using Single Sign-On H (hereinafter referred to as SSO-H).
LDAP authentication is a user authentication performed by using an LDAP server on the network linked with the device.

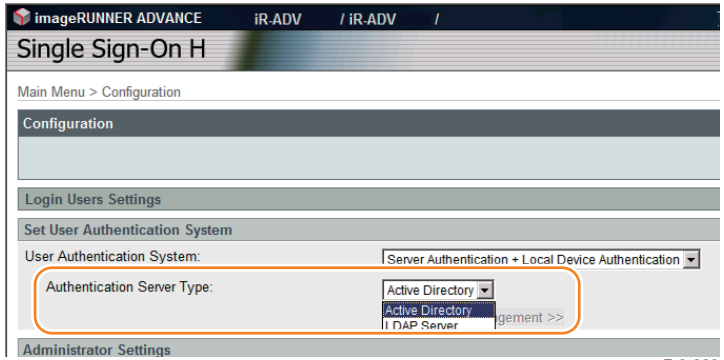



F-2-221

Accordingly, the following item and setting screens have been added to the SSO-H management screen of the remote UI.

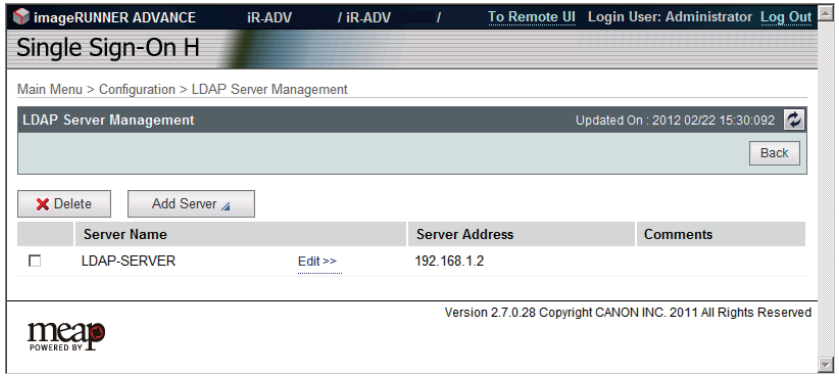
- Drop-down list for selecting the LDAP server as the authentication server
- The LDAP server management screen (when [LDAP Server] is selected from the foregoing drop-down list)
- The screen for adding an LDAP server

An example of the screen showing the drop-down list for selecting LDAP Server



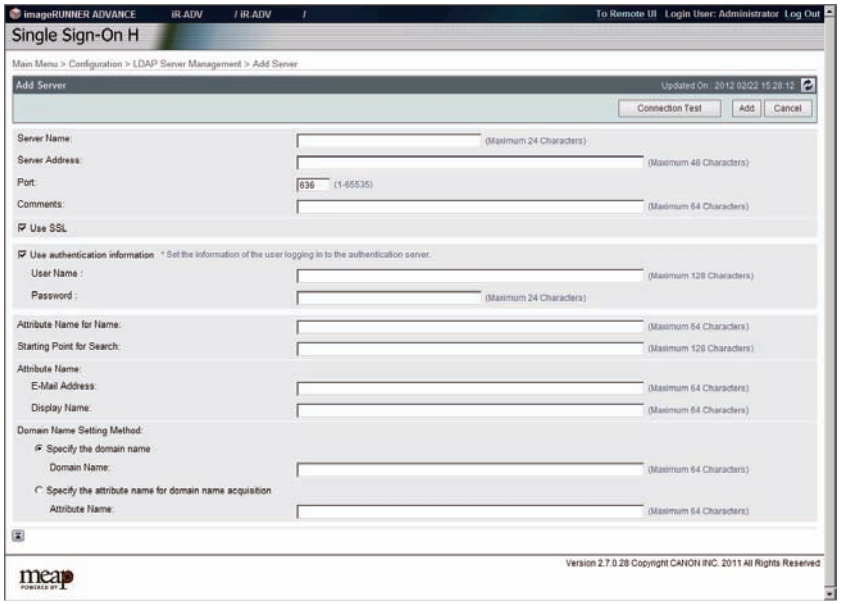

F-2-222

An example of the LDAP server management screen




F-2-223

An example of the screen for adding an LDAP server



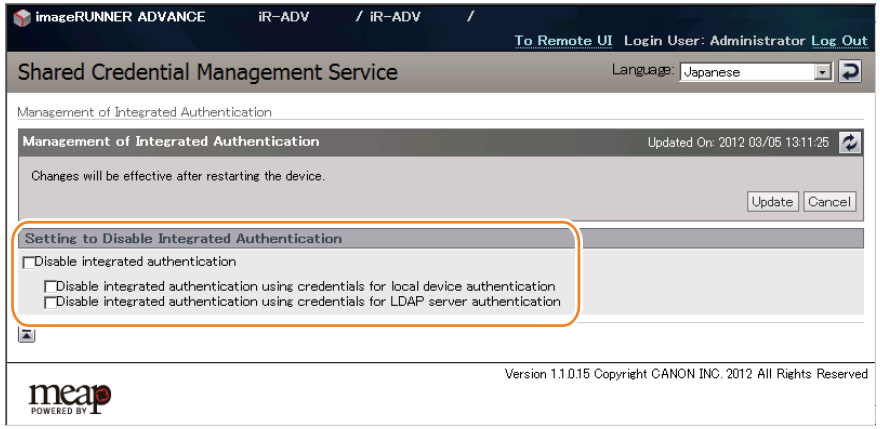

F-2-224

For details, refer to "Server authentication (Active Directory authentication)" in this chapter.

## Integrated Authentication Disabling Setting Screen

A user setting screen has been added to the integrated authentication function which allows the authentication information used for logging into the machine to be shared between MEAP applications.

From a security standpoint, the setting screen for disabling the function to allow authentication information (Volatile Credential), whose registered information is discarded at the time of logout or shutdown of the device, to be used has conventionally been included in service mode.
In addition to this service mode, a screen that allows even users to make the setting has been added to the remote UI.
This screen can be also used to disable the integrated authentication function for each authentication protocol.
For details, refer to "Integrated Authentication Function" in this chapter.




F-2-225

# Preparation for Using SSO-H

## Outline

When using Single Sign-On H (hereinafter referred to as SSO-H) for the login service, required system environments are different in server authentication or local device authentication.
See the following for system requirements in each of authentication methods:

## Server authentication management

The system requirements necessary when using server authentication by SSO-H vary depending on the authentication server.
The system requirements for using each authentication server are shown below.

### Active Directory authentication

In order to use Active Directory authentication in SSO-H, the following system environments are required.

1) Authentication server (Active Directory : Windows server )

- Active Directory and Domain Name System (DNS) should be installed.
- A group named "Canon Peripheral Admins" should be created on the Active Directory.
- The OS should be one of the followings.
  - Microsoft Windows Server 2003 SP2 *
  - Microsoft Windows Server 2003 R2 SP2 *
  - Microsoft Windows Server 2008 SP2 *
  - Microsoft Windows Server 2008 R2 SP1

  * 64-bit version is not supported.

2) Users accessing the authentication server (Active Directory: Windows Server)

- The user should belong to the "Canon Peripheral Admins" group on the Active Directory.
- The user name should contain only single-byte alphanumeric characters, - (hyphen), _ (low line), and % (percent).

Note:
The difference in time setting between the authentication server (Active Directory) and the machine (and the computer for login) should be within 5 minutes. (If the difference in time setting is 5 minutes or longer, an error will occur at the time of login for the server authentication.)

Note:
As for the user name for logging into the machine, use the name registered as "User logon name (pre-Windows 2000)" in the Active Directory.

An example of the user registration screen (Windows Server 2003)

F-2-226

## LDAP authentication

When using LDAP authentication by SSO-H, the following conditions need to be satisfied.

1) LDAP server
- Novell eDirectory V8.8 SP6 for Windows
- Lotus Domino V8.5 for Windows

2) OS where the LDAP server runs
- It should comply with the specifications of the LDAP server product.

Operation check has been conducted for the following OS.
- Microsoft Windows Server 2003 Enterprise SP2
- Microsoft Windows Server 2008 Enterprise

Note:
When an LDAP server other than the server shown above is used, SSO-H may not work properly.
Windows Active Directory works also as an LDAP server, but is not supported.

# PC Environment of Administrator Users and General Users

The following environment is required to use this machine (managed by SSO-H) from a PC on the network.

## OS of the PC and Other Environments

| Classification | Operating System | Supported browser | Supported JRE |
|---|---|---|---|
| Client OS | Windows XP Professional SP3 | Internet Explorer 7<br>Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | Windows Vista SP2 | Internet Explorer 7<br>Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | | Internet Explorer 9 | JRE 1.5 or later *2 *3 |
| | Windows 7 SP1 | Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | | Internet Explorer 9 | JRE 1.5 or later *2 *3 |
| Server OS | Windows Server 2003 SP2<br>Windows Server 2003 R2 SP2 | Internet Explorer 7<br>Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | Windows Server 2008 SP2 | Internet Explorer 7<br>Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | | Internet Explorer 9 | JRE 1.5 or later *2 *3 |
| | Windows Server 2008 R2 SP1 | Internet Explorer 8 | JRE 1.5 or later *1 *3 |
| | | Internet Explorer 9 | JRE 1.5 or later *2 *3 |
| Mac OS | Mac OS X v10.5 | Safari 4.0.5<br>Safari 5.0.5 | J2SE 5.0 *1 *3 |
| | Mac OS X v10.6 | Safari 4.0.5<br>Safari 5.0.5<br>Safari 5.1 | |
| | Mac OS X v10.7 | Safari 5.1 | |

JRE : Java Runtime Environment
J2SE : Java 2 Platform Standard Edition

T-2-98

Note:
*1 Excluding JRE6 update4/5
*2 In order to use JRE1.6 with Internet Explorer 9, JRE1.6.0.24 or later is required.
*3 Refer to the website of JAVA (http://java.com/) for how to obtain the Java environment.

Note:
- The ActiveX plug-in should be enabled in Internet Explorer.
- In Internet Explorer, if [Run ActiveX controls and plug-ins] is disabled in [Internet Options] > [Security] > [Custom level...], a warning message that JRE has not yet been installed is displayed.
- JavaScript should be enabled in all the browsers.
- In the case of an IP v6 environment, JRE1.5 or later is required.
- When using Windows XP in an IP v6 environment, IP v6 may need to be installed manually in some cases.

### Network ports used

| | Port No. | Application |
|---|---|---|
| Connecting | 53 | Communication with DNS server (fixed) |
| | 88 | Kerberos authentication with KDC (Key Distribution Center) |
| | 1-65535 ( default:389) | Communication with directory service using LDAP (default is 389, may be changed to any port on LDAP service side) |
| Listening | 10000 - 10100 | - |

T-2-99

## Preparation for Using SMS

To use SMS, a PC and browser used to access SMS are required, and the network settings need to be set up on the device.

## Preparation of PC for Accessing SMS

### Checking of operation environment

In order to access SMS using password authentication, the PC and browser need to comply with the following system environment.

Combination of the Browser and the OS

| Operating System | Supported browser |
|---|---|
| Windows XP Professional SP3 | Microsoft Internet Explorer 7<br>Microsoft Internet Explorer 8 |
| Windows Vista SP2 | Microsoft Internet Explorer 7<br>Microsoft Internet Explorer 8<br>Microsoft Internet Explorer 9 |
| Windows 7 SP1 | Microsoft Internet Explorer 8<br>Microsoft Internet Explorer 9 |
| Mac OS X v10.5 | Safari 4.0.5<br>Safari 5.0.5 |
| Mac OS X v10.6 | Safari 4.0.5<br>Safari 5.0.5<br>Safari 5.1 |
| Mac OS X Lion | Safari 5.1 |

T-2-100

In order to access SMS using RLS authentication, the environment should comply with the environment for using SSO-H as the login service. (For details, refer to "PC Environment of Administrator Users and General Users".)

### PC and Browser Settings

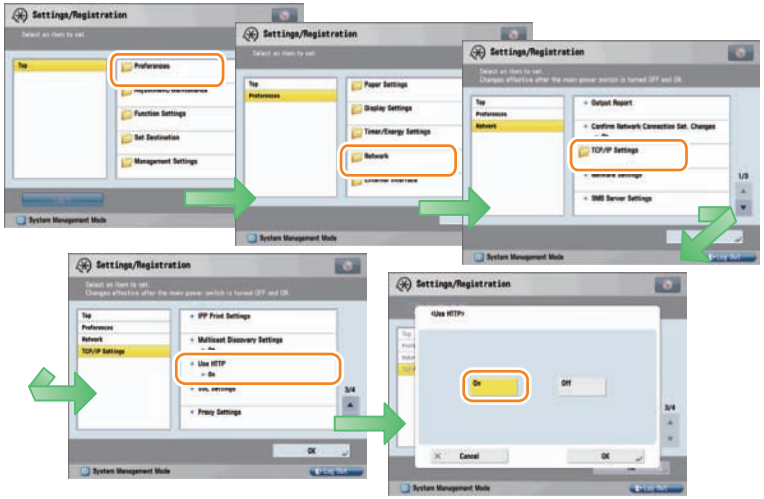
The PC and browser used to access SMS need to satisfy the following conditions.
- The supported browser language should be the same with the language of the OS.
- Java Script should be enabled.
- The supported screen size should be 800 x 600 or larger (recommended size: 1024 x 768).
- Session cookie should be enabled.
- Only alphanumeric characters and some of the symbols ("-" or ".") should be used as the machine domain name and host name.
- If an invalid character string such as a low line ("_") is included in the host name, cookies cannot be enabled.

## Settings on the Device Side

### Network configuration process

In order to provide support for the machine via network such as SMS, the network settings need to be made from the touch panel of the machine. (this setting is [ON] by default).

1) Press [Settings/Registration] button, select [Preferences] > [Network] > [TCP/IP Settings] > [Use HTTP] and press [On] button.



F-2-227

Note:
In iR-ADV series, the System Manager ID and the System PIN are configured by default, so “Network” and the items that follow are grayed out and cannot be selected. Return to the top screen, press “Login” button at the lower left of the screen, login as the system manager, and configure the settings.
The default setting for the System Manager ID is “7654321”, and the password is” 7654321”.

F-2-228

Note:
When using SSL, press [Settings/ Registration] button, select [Management Settings]>[License / Other] > [MEAP Settings] > [SSL Settings] and press [On] button. (This setting is applied to SSL setting on RUI. Vice versa, [On] set for SSL on RUI is also applied to the touch panel.)
When [Use SSL] is set to On, the message dialog, [The Default Key is not set. Check the Key and Certificate List settings in Certificate Setting.], is shown. Press [OK] button for this message.

F-2-229

2) Press [OK] button to return to Main Menu screen.
3) Restart this device.

CAUTION:

- The setting [ Use HTTP ] is not actually enabled/disabled until you have restarted the device.
- You cannot make a connection through a proxy server. If a proxy server is in use, enter the IP address of the MEAP device in the Exceptions field for the browser. Open Internet Options dialog of Internet Explorer and select Connections tab, LAN Settings button, Use a proxy server option, and Advanced button of Proxy server group. Proxy Settings dialog will opens. The Exceptions field is in the dialog. As network settings vary among environments, consult the network administrator.
- If Cookie and JavaScript are not enabled in the Web browser, you will not be able to use SMS.
- To type text using the Web browser, use the characters compatible with the MEAP device’s touch panel display. The MEAP device may not properly recognize some characters.
- When [Use SSL] is made available, it is necessary to set the key and the certificate necessary for the SSL communication. Set the key and the certificate by SSL with [SSL Settings] that exists in [Preferences] > [Network] > [TCP/IP Settings] > [SSL Settings] on the iR device.

## Key Pair and Server Certificate when Using Encrypted SSL Communication

To use SMS via SSL connection, it is required to specify a key pair and server certificate as the key to be used.

Since a key (default key) that can be used for encrypted SSL communication is installed as standard on the device, advance setting of the key pair and server certificate is not required.

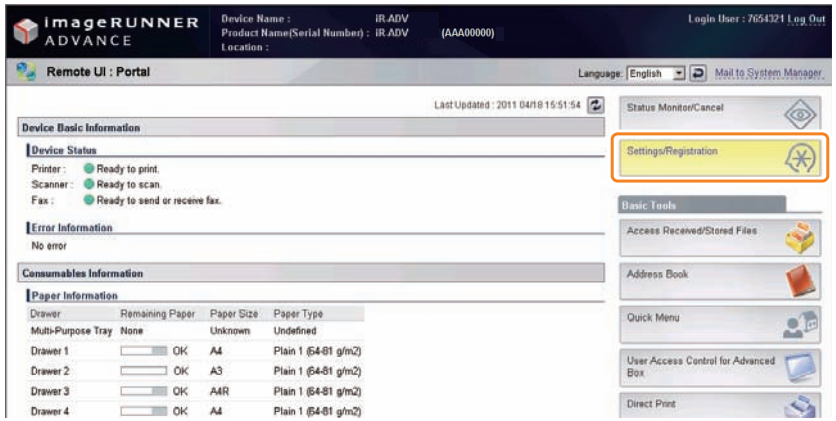
In order to use an encryption key other than the default key, follow the procedure "Generating a key pair" shown below to make settings for the key pair and server certificate necessary for encrypted SSL communication.

Note:
- MFP has a server certificate registered as standard.
- For detailed procedures of the Default Key setting, refer to [e-Manual > Security].
- As for SMS, by setting a Default Key, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] (Settings/Registration) > [MEAP Settings] > [SSL Settings]: ON/OFF.

### Generating a key pair

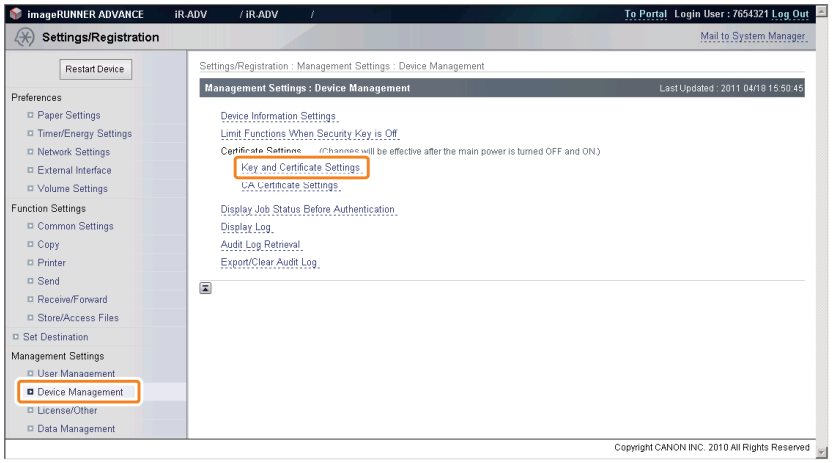
1) From a PC on the same network as the device, use a web browser to access the remote UI's portal page. Then, select [ Settings/Registration ] from the menu on the right side of the screen.

URL to access: http://<device's IP address>:8000/



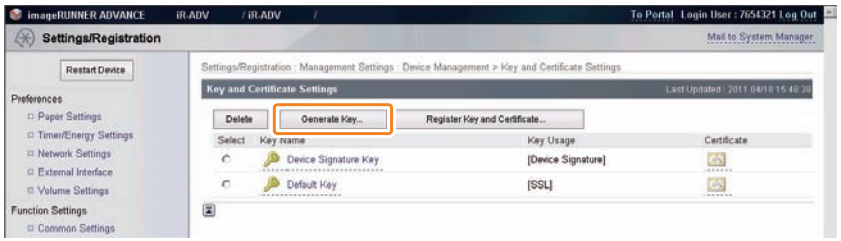

F-2-230

2) Click [ Management Settings ] > [ Device Management ] > [ Certificate Settings ] > [ Key and Certificate Settings ].



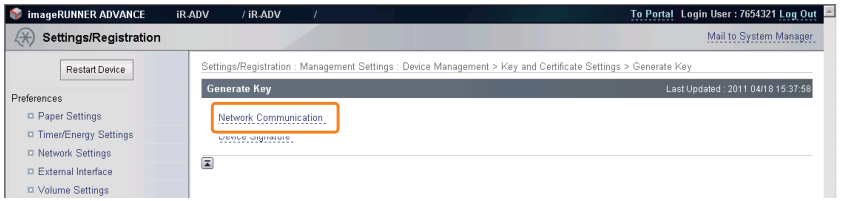

F-2-231

3) Click [ Generate Key... ] button.



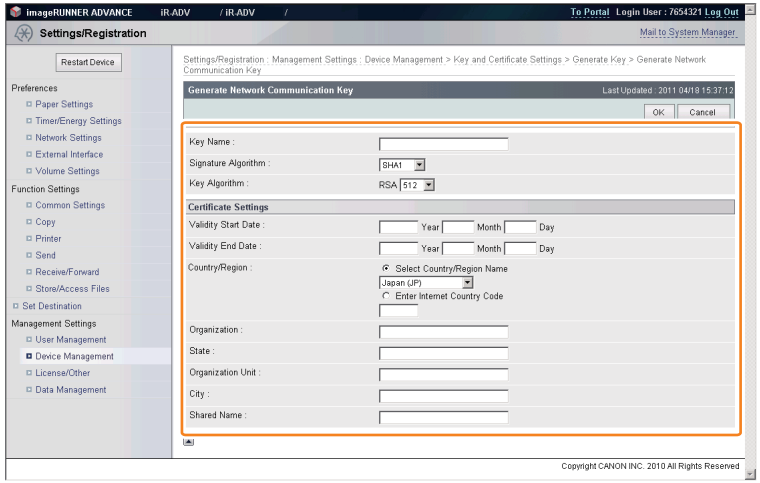

F-2-232

4) Click [ Network Communication ]




F-2-233

5) Enter the necessary information, and then click the [ OK ] button.




F-2-234

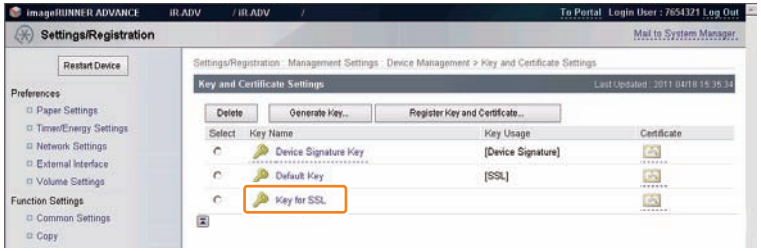
Input example

| Item name | Type | Content | Entry |
|---|---|---|---|
| Key Settings | | | |
| Key Name | Compulsory | An arbitrary character string | Default Key |
| Signature Algorithm | Compulsory | Selected from:SHA1/SHA256/SHA384/SHA512 | RSA |
| Key Algorithm | Compulsory | Selected from:512/1024/2048/4096 | 512 |
| Certificate Settings | | | |
| Validity Start Date | Compulsory | Date | 15/4/2012 |
| Validity End Date | Compulsory | Date | 15/4/2036 |
| Country/Region | Compulsory | Country or region name | US |
| State | Arbitrary | State name | - |
| City | Arbitrary | City name | - |
| Organization | Arbitrary | Organization name | - |
| Organization Unit | Arbitrary | Organization unit | - |
| Common Name | Arbitrary | Common Name* | - |

T-2-101

Note:
When the IP address of the device has been entered in the [Common Name] entry field, if you install a server certificate to the browser ( see "Installing a server certificate (reference information)" ), the message "Certificate Error" that usually appears when access is made from Internet Explorer 7 or later will not be displayed.

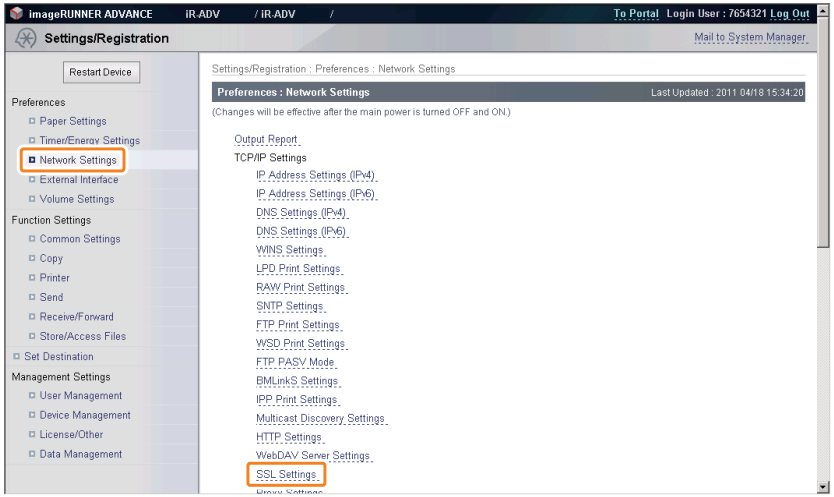
6) Check to see that the generated key appears in [ Registered Key and Certificate ].




F-2-235

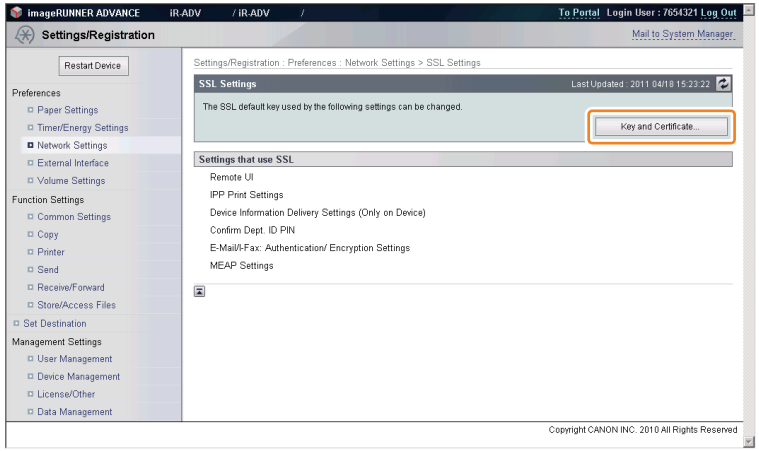
## Default Key Settings

1) Click [ Preferences ] > [ Network Settings ] > [TCP/IP Settings ] > [ SSL Settings ].



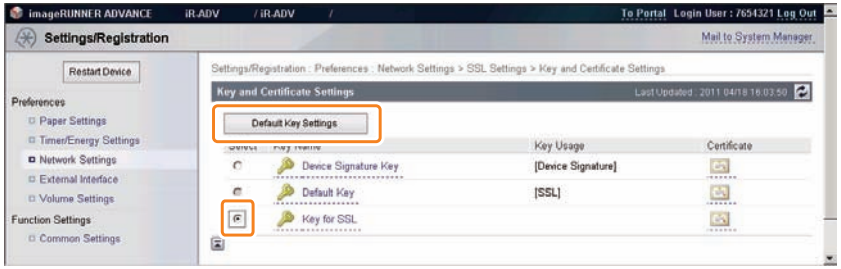

F-2-236

2) Click [ Key and Certificate...] button.



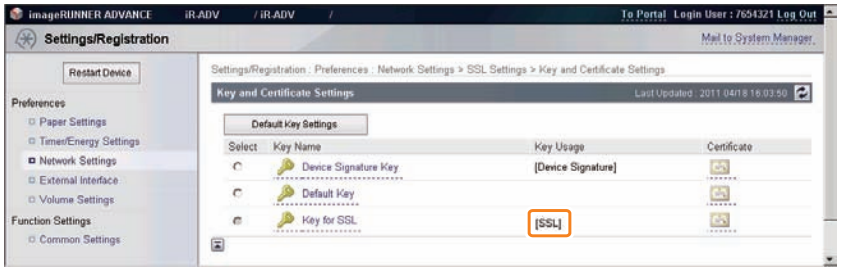

F-2-237

3) Select the generated key, and then click the [ Default Key Settings ] button.




F-2-238

4) Check that [ SSL ] is displayed in the [ Key Usage ] entry field.




F-2-239

5) Log out from the remote UI, and then restart the device.

## Installing a server certificate (reference information)

When you access a device where the key installed as standard [default key] is set as the key for SSL, "Certificate Error" appears if the version of Internet Explorer (IE) is Version 7 or later.

Error display example

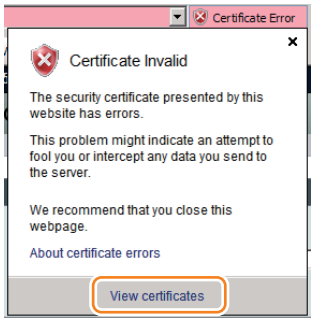
F-2-240

To disable display of "Certificate Error", use the following procedure (for IE8) to set the key generated in "Key Pair and Server Certificate when Using Encrypted SSL Communication" (i.e. the key with the IP address of the device specified as the shared name) as an SSL key.

1) Access SMS from the browser, and then click "Certificate Error" in the URL entry field.

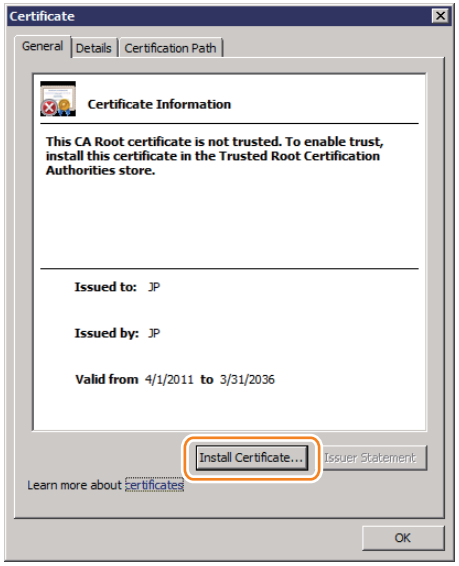
F-2-241

2) Click [ View certificates ].




F-2-242

3) Click the [ Install Certificate... ] button on the [ General ] tab.

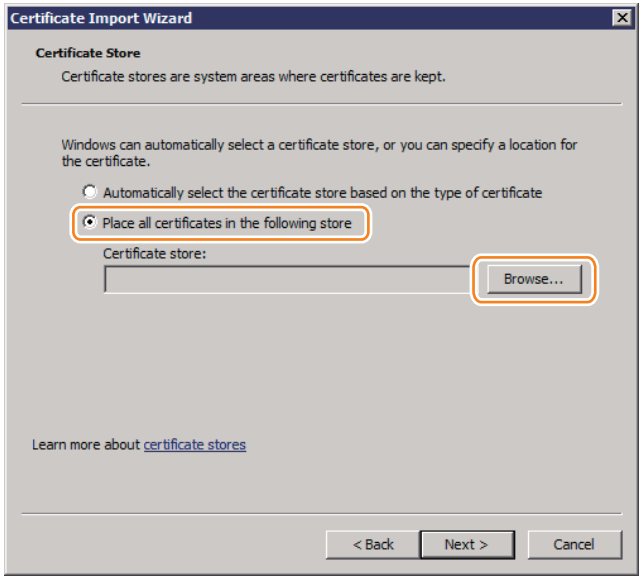



F-2-243

4) [ Certificate Import Wizard ] will appear. Click the [ Next ] button.

F-2-244

5) In [ Certificate Store ], select the [ Place all certificates in the following store ] option, and then click the [ Browse ] button.

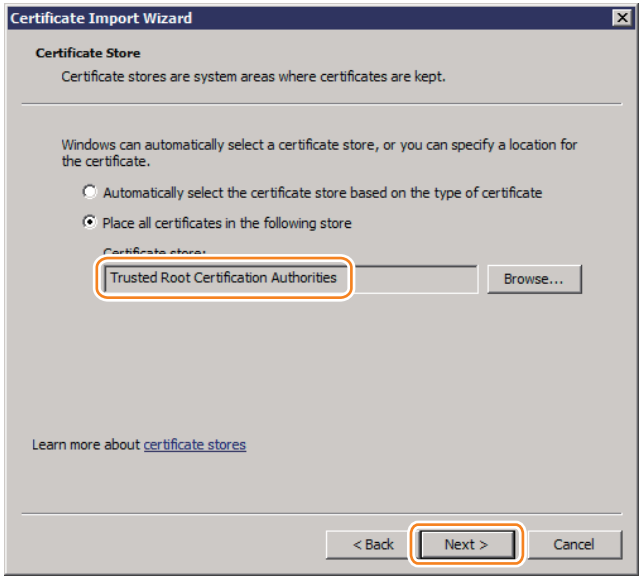



F-2-245

6) In [ Select Certificate Store ], select [ Trusted Root Certification Authorities ], and then click the [ OK ] button.

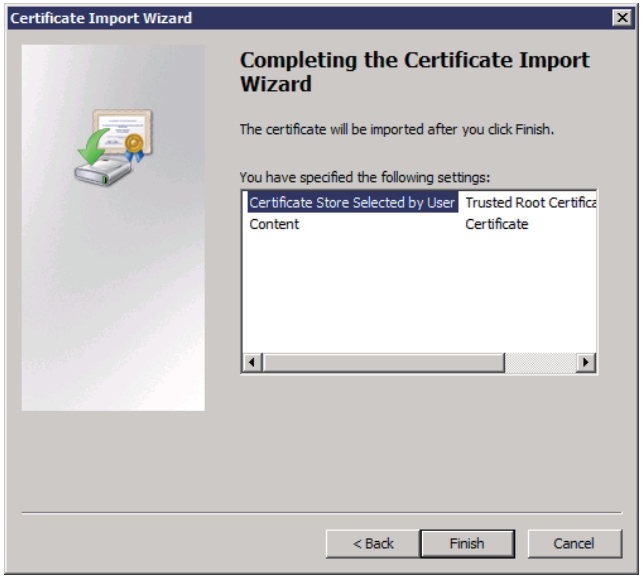
F-2-246

7) You will return to the [ Certificate Store ] dialog. Check that "Trusted Root Certification Authorities" appears in [ Certificate ], and then click the [ Next ] button.




F-2-247

8) [ Completing the Certificate Import Wizard ] will appear. Click the [ Finish ] button.

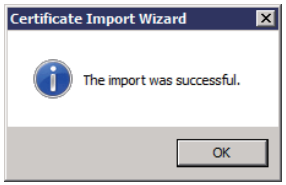



F-2-248

9) If the [Security Warning] appears, click the [Yes] button. (It does not appear when installing the same certificate again.)

F-2-249

10) A message will appear to indicate that import has been completed successfully. Click the [ OK ] button.

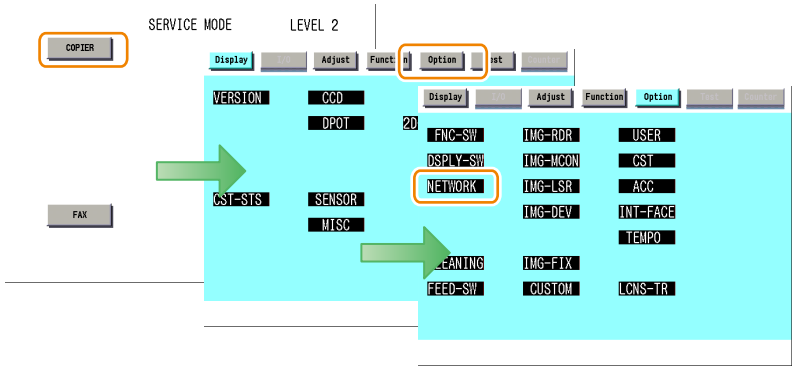



F-2-250

## Network Port Settings

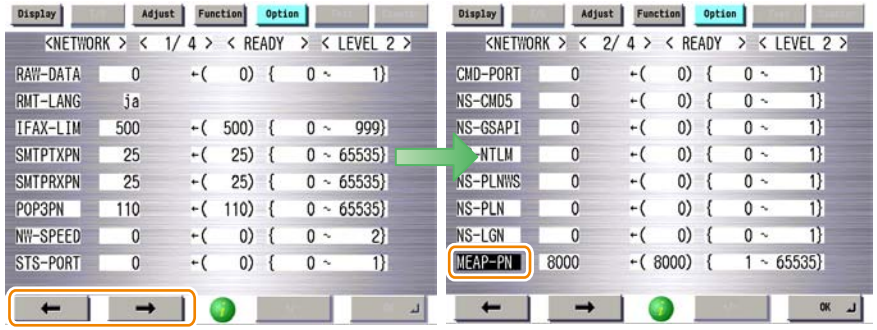
The default port of the HTTP server used for MEAP and MEAP applications to provide the servlet function is 8000, and the HTTPS server's default port is 8443. In the case that these ports have already used by the customer who is to introduce this application, the MEAP application cannot use the HTTP (or HTTPS) server(s).
By changing the following ports to use, however, the MEAP application can be used as well as the existing system.

1) Start [SERVICE MODE] in Level 2.
2) Press [COPIER] > [Option] > [NETWORK] buttons.




F-2-251

3) To set up the HTTP server port, select [ MEAP-PN ]. To set up the HTTPS server port, select [MEAP-SSL ].




F-2-252

4) Press the port number to specify on the control panel (the numerical value input in the field is displayed), and press [OK] button.

F-2-253

> Note:
> A port number can be any integer from 0 to 65535. To avoid port numbers that are frequently used, do not use any integer from 0 to 1023.

| Server | Setting value | Default value / Value after RAM clear |
|---|---|---|
| HTTP Server | 1024 to 65535 | 8000 |
| HTTPS Server | 1024 to 65535 | 8443 |

T-2-102

> Note:
> If PS Print Server Unit is connected, do not specify port 8080.
> If port 8080 is specified, it is not possible to access the remote UI of the device where the MEAP authentication application is running. (Port 8080 is reserved to allow the PS Print Server Unit to redirect to the iR device.)

5) Restart the device if the port number is set.

F-2-254

## How to Check the Serial Number

When performing MEAP device support, the serial number of the device is necessary in some cases.

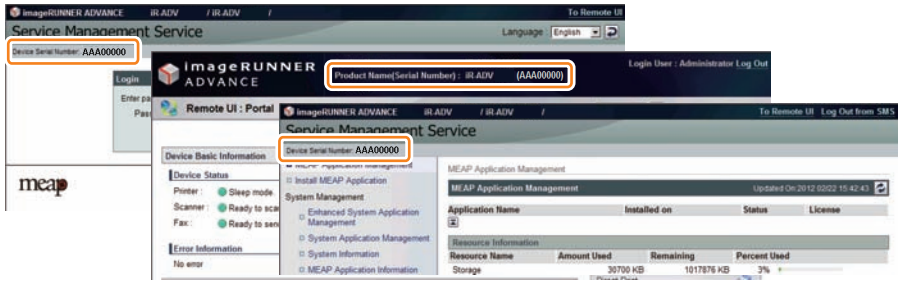
Examples of where the serial number is necessary

- When initializing SMS login password (obtaining a switch license)
- When obtaining a MEAP application license from LMS
- When obtaining a transfer license of MEAP application
- When obtaining a special license for reinstalling MEAP application

If a problem occurs in the MEAP device and you want to contact the support department of the sales company, you need to provide the serial number. Perform the following procedure to get the serial number.

### Checking from the PC browser

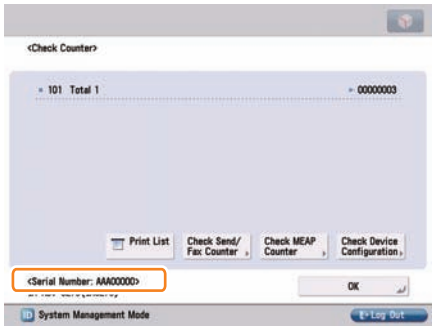
The serial number of the device is displayed on the SMS login screen, SMS screen, and remote UI portal screen.




F-2-255

### Checking from the device's Touch Panel

You can see the number by pressing the counter key on the Control Panel of the machine.



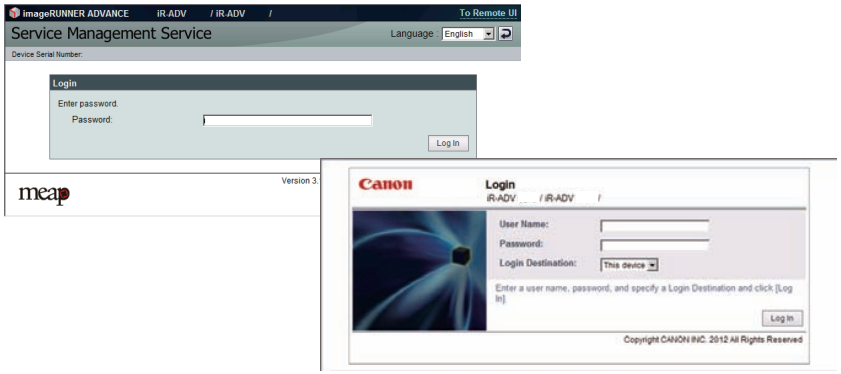

F-2-256

## Login to SMS

### Outline

SMS login may be done by entering a password for authentication, or by authentication via the Remote Login Service (RLS) login window (RLS authentication). Settings can be changed to allow either only one of these methods or both of them.

SMS login window (password auth) RLS login window (user name/ password auth)




F-2-257

| Login method | Authentication method | Authentication service name | Users who may log in |
|---|---|---|---|
| Password authentication | Password authentication | SMS Installer Service (Password Authentication) | Users who know the SMS login password |
| RLS login | SSO-H | SMS Installer Service (Remote Login Service Authentication) | Users registered as administrators with SSO-H |

T-2-103

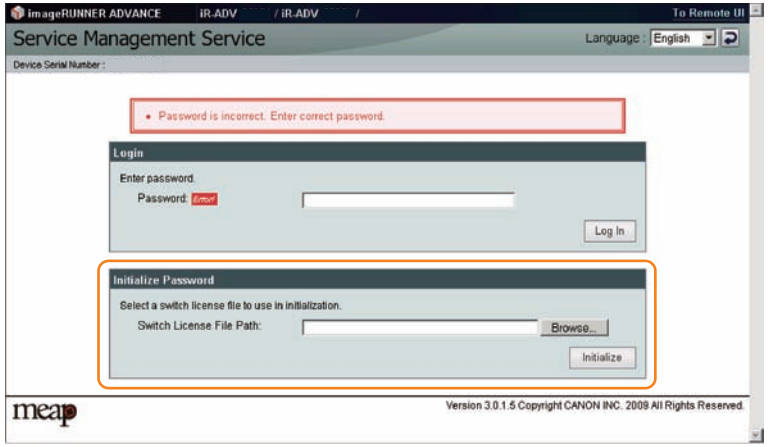
Note:
If Default Authentication is selected as the device authentication method, 'RLS Authentication' is not selectable as SMS Login method. Also, if 'RLS Authentication' is selected, the device authentication method (Default Authentication, SDL, SSO) cannot be changed.

## ■ When SMS Cannot Be Accessed

### ● If you forgot the password (SMS login password initialization)

After changing the default SMS login password, if you forgot the new password and cannot log in to SMS, you can use a switch license for password initialization to change the password back to the default value "MeapSmsLogin".
Note that there is no special password for service.

1) Obtain a switch license file for password initialization.
   Contact the person in charge of support at the sales company, give the device's serial number, and have a switch license file for password initialization issued.
2) Load the switch license file.
   With nothing entered, click the [ Log in ] button to display the area for specifying a switch license file for password initialization.




F-2-258

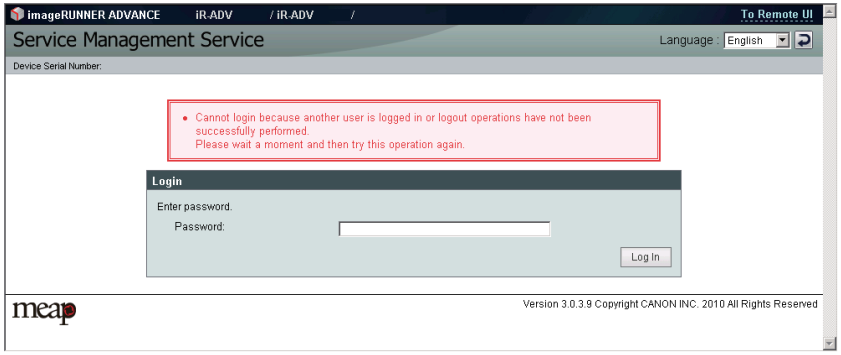
3) Specify the switch license file.
   Click the [ Browse ] button and specify the switch license file.
4) Initialize the login password.
   Click the [ Initialize ] button to display an initialization confirmation page, and click the [ OK ] button.

> Note:
> - The default password is “MeapSmsLogin.” (The password is case-sensitive.)
> - If you click [Cancel] button, the Login page opens without initializing the password.

### ● If login is not possible due to exclusive control

Since access to SMS is under exclusive control, you cannot log in if another user has already logged into the SMS of the same iR device.

An example of the exclusive control message




F-2-259

If you cannot log in due to exclusive control, you need to ask the other user to log out before you can try again.

> Note:
> If you close the browser without logging out, the session remains active. In that case, you cannot log in again.
> If this problem occurs, you can wait for 5 minutes so that the session is disconnected.
> Or, you can restart the device to force the session to disconnect.

### If [Key and Certificate Settings] is not set

If [Key and Certificate Settings] is not set correctly, you cannot access the URL for SMS (https://<device's IP address>:8443/sms/). In that case, perform the following procedure.

1) Go to http://<device's IP address>:8000/sms/, and check to see that "HTTP 500 Internal Server Error" appears.
2) If it appears, perform the procedure "Key Pair and Server Certificate when Using Encrypted SSL Communication" in this chapter.

> Note:
> In the case of SMS, by setting the key to be used, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] > [License/Other] > [MEAP Settings] > [Use SSL] > ON/OFF.

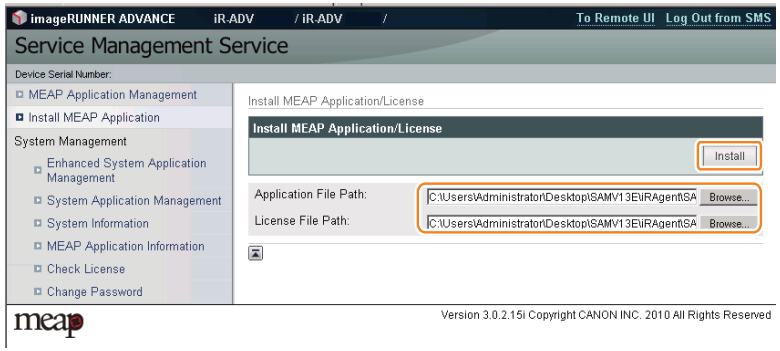
## How to Deal with a Message "Certificate Error" That Appears at the Time of Access

When accessing from the browser to SMS, a message "Certificate Error" appears in some cases. In that case, perform the procedure "Installing a server certificate (reference information)" in this chapter.

# Installing an MEAP Application

## Outline

From the MEAP application installation screen, you can install the MEAP application as well as the license file.




F-2-260

Before installing the MEAP application, be sure to check the following items.

### Device compatibility with the MEAP application

To find out whether the device is compatible with the MEAP application, check the devices supported by the MEAP application. Depending on the application, the device's firmware may require version upgrade.

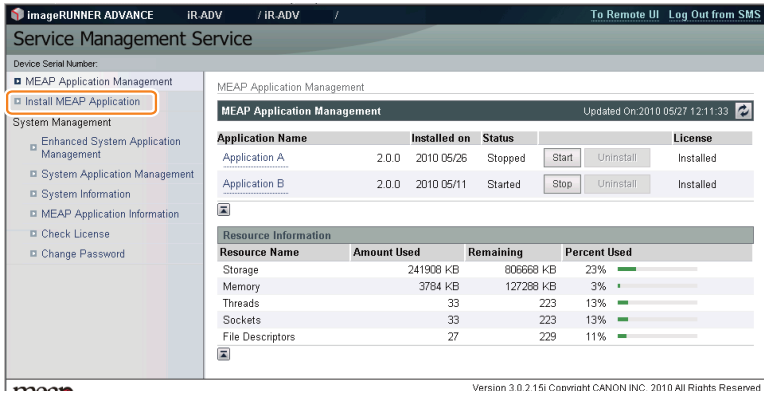
### Resources availability (remaining amount)

The necessary resources (free storage space and free memory available) must be secured for an MEAP application to run; otherwise, you cannot install the MEAP application.
To check the resource information, see "Device's resources" in this manual.

## Procedure to install applications

1) Long on to SMS.

2) Click [ Install MEAP Application ] on the menu.

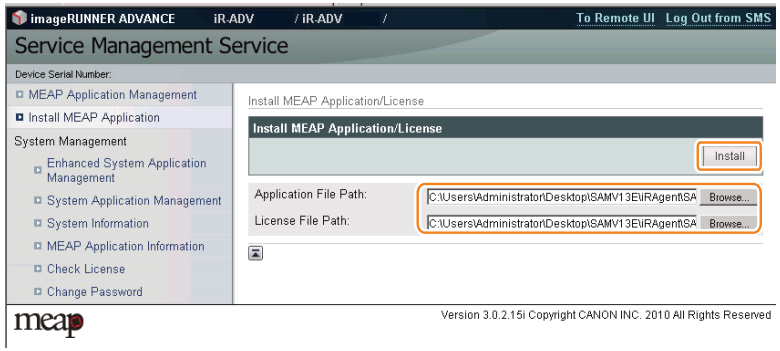



F-2-261

3) Check [ Install MEAP Application/License ]page appears.

4) Click [ Browse.. ] button, and select the application file and the license file of the application; then, click [ Install ] button.

Note:
Application File: identified by the extension “jar”.
License File: identified by the extension “lic”.



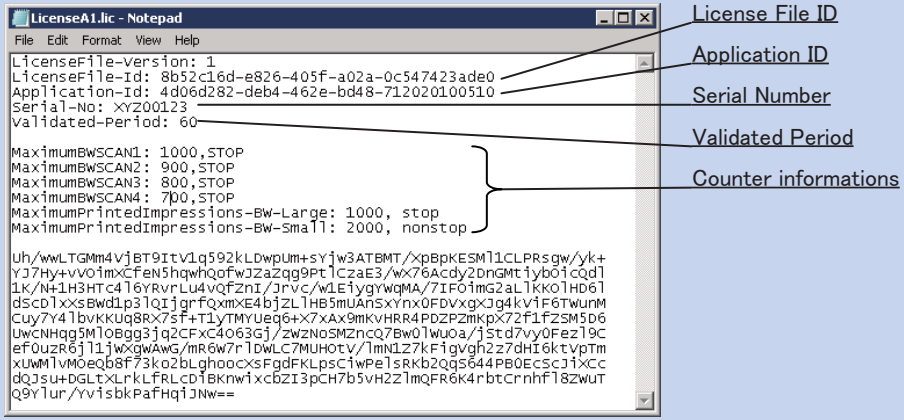

F-2-262

CAUTION:

- You cannot install only the license.
- You will not be able to install the application without using the appropriate license. Be sure to select its license file.
- If you are adding a license to an existing application, see "Procedure adding a license file".
- If you are updating an existing application, stop the application; then, install the new application or its license file. You will not be able to update an application while it is running.

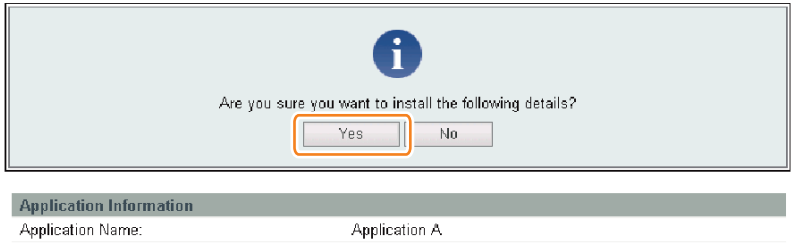
Note:
The license file is provided in text file format, enabling to view in a text editor. The application ID and device serial number shown in the file allow users to confirm which device to install with the license file.
Note that any changes added to the license file may disable installation. Cares should be taken when confirming the contents of the license file.

Sample file




F-2-263

5) Check the contents of the Confirm page; then, click [ OK ] button.



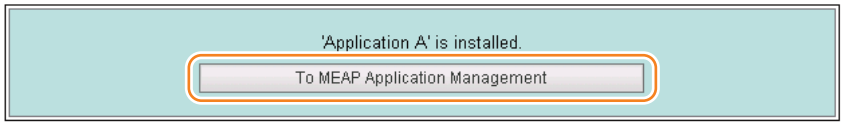

F-2-264

6) Some applications show a screen to indicate the terms of agreement. Read the terms, and click [ OK ].

7) Check the message "Installing...Please wait." appears, beginning the installation.

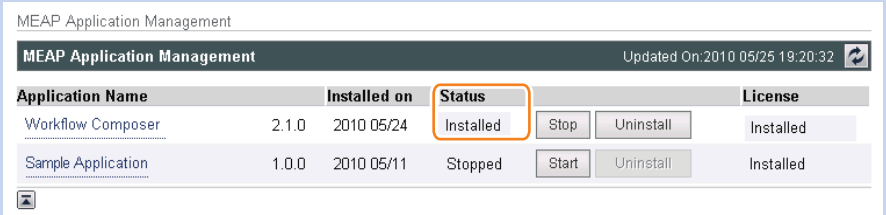
F-2-265

8) Upon installation completed, click [ To MEAP Application Management ] button shown on the screen to view MEAP Application Management page.



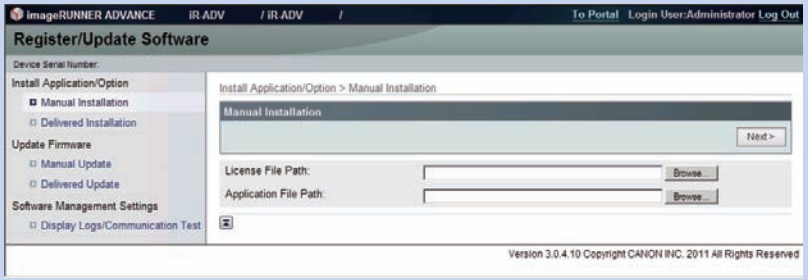

F-2-266

Note:
As for an application that has just been installed, the status is "Installed". In order to use the application, it is necessary to click the [Start] button to change the status to [Started].




F-2-267

Note:
There are two ways to install an MEAP application. You can install using SMS, or install using the [Register/Update Software] screen of the remote UI.
Screen example




F-2-268

[Register/Update Software] provides two types of installations. One is [Manual Installation] where you specify a jar file and a license file and then install. The other is [Delivered Installation] where you enter a license access number.
For details of the procedures, please refer to the e-Manual.

# Resource Information

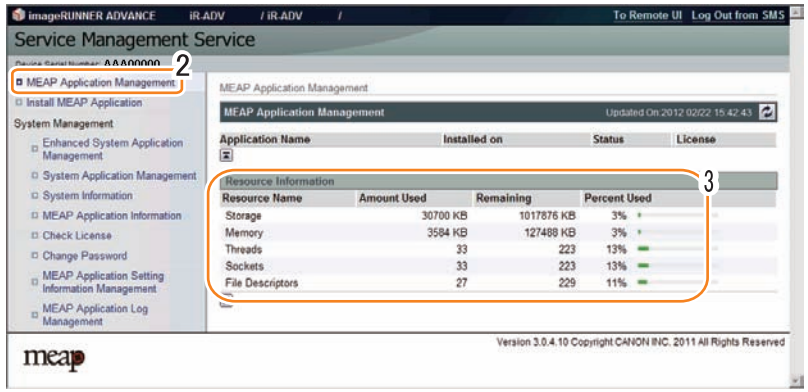
## Outline

Application Management page shows [ resource information ] for information of the whole device resources including Amount Used, Remaining, and Percent Used.
This function enables users to judge the remaining resources before installing the additional application. Such resource information is shown based on the manifest header stated at the top of each application, which declares the resources required in the application. Therefore, the information does not necessarily show the resources actually in use.
The following resource information is shown:

- Storage
- Memory
- Thread
- Socket
- File Descriptor

If the hard disk does not have enough free space for the application, the application cannot be installed.
Moreover, if the free space of any of the resources (Memory, Thread, Socket, and File Descriptor) is insufficient, the application cannot be started.
The following procedure shows how to check the resource information.

1) Log in to SMS.
2) Click [ MEAP Application Management ].
3) Check [ Resource Information ] for information of the whole device resources.




F-2-269

## Device's resources

When 1 MEAP application operates, the resource volume allocated to each device is as follows (loaded resource list). Since the following value is an estimate, when installing the MEAP applications, it needs to check the available resource of SMS.
Since the indication of SMS resource volume fluctuates by the login service (authentication function) and configuration (future model), which the user selected, it may show a bigger value than the following values.

List of Available Resources

| Product Name | | Storage | Memory | Thread | Socket | File Description |
|---|---|---|---|---|---|---|
| iR-ADV C5051 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV C9075 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV 6075 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV 8105 PRO series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV C2030/C2020 series | Flash model | 220MB | 32MB | 162 | 128 | 128 |
| | HDD model | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV 4045 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV C5255 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV C9280 PRO series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV 6275 series | | 1024MB | 128MB | 256 | 256 | 256 |
| iR-ADV 8205 PRO series | | 1024MB | 128MB | 256 | 256 | 256 |

T-2-104

Note:
- Among the resources, the free space of Storage is checked when installing an application. For other resources, the free space is checked when the application is started.
- Some applications call for a specific set of conditions for installation. For details, see the User's Guide that comes with the individual applications.
- Maximum installable application is up to 20 even if the remaining resource is adequate. (However, the Send function consumes 1, it must be 19 in practice.) Authentication application is not included in this number.
- The MEAP application, which can be started simultaneously, is up to 19. (Authentication application is not included in this number.)

CAUTION:
To install an application, the user needs to use the following URL when accessing the license control system to obtain a license file. In doing so, he/she needs to register the license access number of the application and the serial number of the device.

http://www.canon.com/lms/license/

# MEAP Specifications

## What is MEAP Specifications (MEAP Spec Version)?

MEAP Specifications is one of the information required to judge whether MEAP applications can be operated or not. With MEAP Specifications, you can prevent an application that uses a specific function of device from being installed onto the device that does not have the function.

### About Name

The displayed name for Meap Specifications differs depending on the screen or the location where the name is displayed.
In this document, it is referred to as "Meap Specifications".

| The location where the name is displayed/shown | Displayed name |
|---|---|
| Platform Information : SMS > [ System Management] > [ System Information ] > [ Platform Information] | MEAP Specifications |
| System Information Print : Local UI [ Settings/Registration ] > [ Management Settings ] > [ License/Other ] > [ MEAP Settings ] > [ System Information Print] | |
| Manifest file of the MEAP application | MeapSpecVersion |
| SDK documents | |

T-2-105

### Mechanism

MEAP platform judges whether MEAP applications can be operated on it using on the 2 information below:

- Device Specification ID
- MEAP Specifications

Device Specification ID shows information such as the original functions of MFP (including print, scan, and copy), and one that differs by model such as maximum copy number, thus each model has a different ID. (It is easy to determine the IDs for this reason.) MEAP application declares 1 or more Device Specification ID required for its execution. Declaration of multiple Device Specification IDs means that the application is operable in all the models declared. Upon installation of MEAP application in (using) SMS or MEAP Enterprise Service Manager, matching of Device Specification ID is executed on the side of MEAP platform machine. The machine which doesn't support the ID declared by the application rejects installation of such an application.
Meanwhile, MEAP Specifications shows other information than defined by Device Specification ID above, including network and security. Thus each model does not always have the same version.
MEAP application declares 1 or more MEAP Specifications required for its execution.
Declaration of multiple Device Specification IDs means that the application is operable in all the environments declared. Upon installation of MEAP application in SMS or MEAP Enterprise Service Manager, matching of MEAP Specifications is executed on the side of MEAP platform machine. The machine which doesn't support the version declared by the application rejects installation of such an application.

MEAP Specifications for each model

| Product Name | Initial MEAP SpecVer | Remarks |
|---|---|---|
| iR-ADV C5051<br>iR-ADV C5045<br>iR-ADV C5035<br>iR-ADV C5030 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45 | Ver.37.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46<br><br>Ver.38.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49<br><br>Ver.50.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59<br><br>Ver.65.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 74 |
| iR-ADV C9075<br>iR-ADV C9070<br>iR-ADV C9065<br>iR-ADV C9060<br>iR-ADV C7065<br>iR-ADV C7055 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45 | Ver.37.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46<br><br>Ver.38.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49<br><br>Ver.50.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59<br><br>Ver.65.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 74 |

| Product Name | Initial MEAP SpecVer | Remarks |
|---|---|---|
| iR-ADV 6075<br>iR-ADV 6065<br>iR-ADV 6055 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49 | Ver.20.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59<br><br>Ver.42.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 74 |
| iR-ADV 8105 PRO<br>iR-ADV 8095 PRO<br>iR-ADV 8085 PRO | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49 | Ver.20.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 1, 32, 33, 34, 35, 36, 37, 38, 39, 40 , 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59<br><br>Ver.42.xxor later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25 ,26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 74 |
| iR-ADV C2030<br>iR-ADV C2025<br>iR-ADV C2020 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49 | Ver.10.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19,25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 53<br><br>Ver.32.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 53, 74 |
| iR-ADV 4045<br>iR-ADV 4035<br>iR-ADV 4025 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59 | Ver.11.xx or later<br>5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 74 |
| iR-ADV C5255<br>iR-ADV C5250<br>iR-ADV C5240<br>iR-ADV C5235 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 70, 71, 72, 74, 78, 80 | - |

| Product Name | Initial MEAP SpecVer | Remarks |
|---|---|---|
| iR-ADV C9280 PRO<br>iR-ADV C9270 PRO<br>iR-ADV C7280<br>iR-ADV C7270<br>iR-ADV C7260 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45,46,47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 70, 71, 72 ,74 ,78 ,80 ,82 | - |
| iR-ADV 6275<br>iR-ADV 6265<br>iR-ADV 6255 | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 69, 70, 72, 74, 78, 79, 80, 82 | - |
| iR-ADV 8205 PRO<br>iR-ADV 8295 PRO<br>iR-ADV 8285 PRO | 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 69, 70, 72, 74, 78, 79, 80, 82 | - |

T-2-106

## MEAP Specifications List

| Ver | Description |
|---|---|
| 1 | MEAP basic function |
| 2 | MEAP Spec Version 1 function and SSL/TSL + Proxy |
| 5 | MEAP Spec Version 1 function and CPCA V2 + ERS (Error Recovery Service) + New SSL/TSL |
| 6 | Reserved |
| 7 | MEAP Spec Version 5 function and Compact PDF + OCR PDF (Text Searchable) + USB Host (Buffering of Interrupt Transfer) |
| 9 | Reserved |
| 10 | MEAP Spec Version 5 function and USB-Host (Exception + Clear Feature + Set Feature+ Hot Plug) + WINS address acquisition using MIB Agent + Timer Service + SSL client authentication |
| 11 | MEAP Spec Version 5 function and AMS |
| 13 | MEAP Spec Version 5 function and J2ME1.1 Support + Encrypted PDF + Trace and smooth PDF + CTK2.0 |
| 14 | Device signature PDF |
| 15 | IMI + ERS (API addition for IMI) , IPv6, Extended encryption function (AES/RC4) |
| 17 | Acquiring images of JBIG format |
| 18 | Parsing XML documents (XML parser) |
| 19 | Enhancement of IMI function (IMI Version1.2 series) |
| 21 | Reserved |
| 25 | API to access the HID/Mass Storage class devices. |
| 26 | MEAP driver preference function |
| 27 | Symbols that can be used with MibAgent added. (symbols for IPv6 address acquisition) |
| 29 | IMI API added (IMI version 1.2.1 enabled) |
| 30 | Extended address book function. (e-mail/group/i-FAX/file) |
| 31 | Integrated ERS function |
| 32 | Extended Imaging function (function to generate PDF/OOXML (PowerPoint) with visible signature) |
| 33 | Extended function for imageRUNNER / iR ADVANCE series (API for address book/ CTK/ TopMenu) |
| 34 | Extended IMI Box function (v1.3.0) |

| Ver | Description |
|---|---|
| 35 | Extended SIS function (function to check the network cable status, function to check PS print server unit status) |
| 36 | Reserved |
| 37 | CLS (Contextual Login Service) Supporting API Added |
| 38 | imageRUNNER / iR ADVANCE Series administrative privileges supported |
| 39 | MEAP Specifications added according to Jcrypto API Specification Change |
| 40 | ImagingAPI (Creation API of Visible Signature PDF) added |
| 41 | Reserved |
| 42 | Reserved |
| 44 | imageRUNNER / iR ADVANCE Series Remote Address Book Supported, RemoteFAX Supported |
| 45 | Addition of API that allows acquisition of the HID installation status |
| 46 | Multilingualization of the USB keyboard of the System Driver |
| 47 | Addition of API which executes a print order from the MEAP application of the IMI encryption PDF document |
| 48 | ID expressing the scan function for iR-ADV C2030/C2025/C2020 series |
| 49 | Reserved |
| 50 | SecurityOptionalPackage |
| 51 | IMI function expansion of iR-ADV C5051 series (Ver.50.xx or later) or later |
| 52 | (iR-ADV C5051 series (Ver.50.xx or later)) Addition of registered API to enable SSL communication setting (On/Off) for each URL |
| 53 | Disclosure of registration/deletion function to/from Quick Menu |
| 54 | Function to notify an event to the application at recovery from the sleep mode. |
| 55 | System account release function |
| 56 | MEAP User Preference Service |
| 57 | MEAP Application Configuration Service |
| 58 | MEAP Application Log Service |
| 59 | Integrated authentication service |

| Ver | Description |
|---|---|
| 60 | SFP basic functions |
| 61 | AVS (Lightweight Applet Viewer Service) for LBP |
| 62 | SIS (Lightweight System Interface Service) for LBP |
| 63 | LDT |
| 64 | IMI customization |
| 65 | Extension of MEAP User Preference Service (Ver56) (preference shared among applications) |
| 66 | Reserved |
| 68 | Addition of Office Open XML's Word creation API |
| 69 | Extension of the encryption PDF function (AES 128-bit/256-bit) |
| 70 | Addition of 3 formats (uncompressed searchable PDF, XPS, and linearized searchable PDF) |
| 71 | Reserved |
| 72 | Reserved |
| 73 | IMI: API that supports A4 scanners and allows for specifying of the direction of the original image |
| 74 | SSL: Support for addition of the CN validation function |
| 75 | Reserved |
| 76 | Addition of the SFP ExtendedTextInputView class |
| 77 | Reserved |
| 78 | Reserved |
| 79 | Reserved |
| 80 | Reserved |
| 81 | Reserved |
| 82 | API to recover from Sleep 1 |

T-2-107

# MEAP Application Management

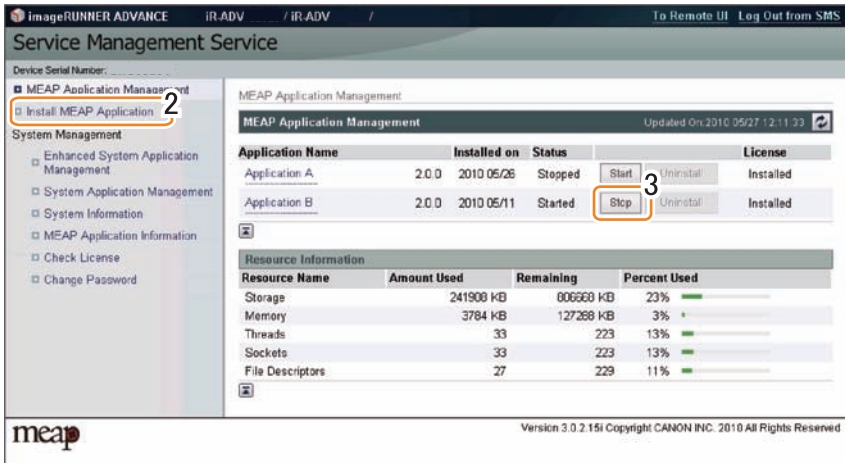
## Outline

You can use the MEAP application management screen to perform basic management tasks of the MEAP application (start, stop, uninstall), or check the device's resource information.

## Starting, Stopping, or Uninstalling the MEAP Application

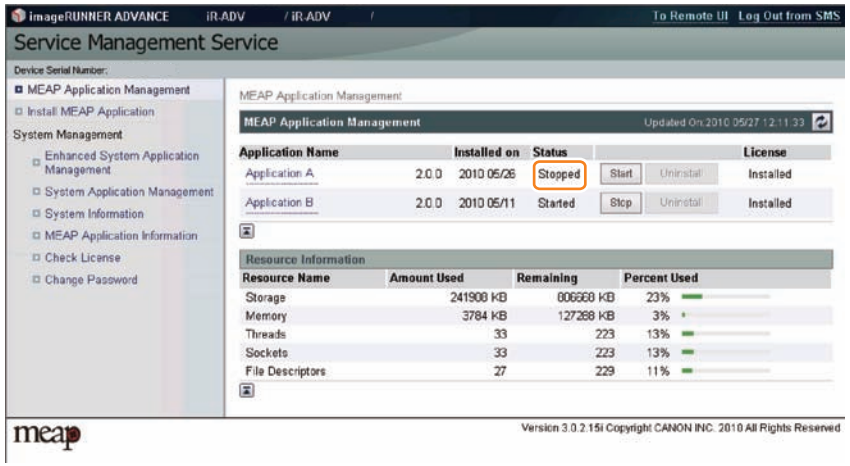
### Procedure to start and stop a MEAP application

1) Log in to the SMS. (Refer to "Login to SMS" in this manual.)
2) Click [ Application List ]. (If the Application List is already being displayed, this operation is not necessary.)
3) Click [ Start ] or [ Stop ] button shown for the MEAP application to be started or stopped.




F-2-270

4) Check to see that the status of the MEAP application in question is either [ Started ] or [ Stopped ].




F-2-271

## If the MEAP application cannot be started

If the conditions to start the MEAP application are not satisfied, the MEAP application cannot be started.

If the MEAP application cannot be started, check the following items.

### Is a valid license installed?

If the license has expired, you cannot start the application. If the license has already expired, obtain a new license and then update the license. ( See "Managing the License File" in this manual.)

### Are the necessary resources available?

If the resources such as memory capacity or number of threads are not sufficient, the application also cannot be started.

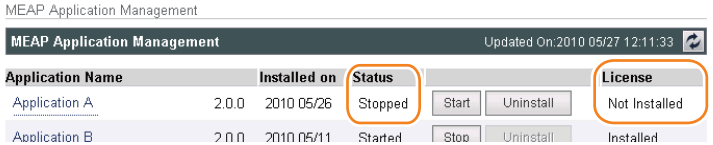
Delete any unnecessary data to secure sufficient resources.

If the application still cannot be started after checking the foregoing conditions, contact the support department of the sales company.

## Procedure to uninstall the MEAP application

Before uninstalling the MEAP application, check that the following conditions are met.

- The MEAP application has stopped.
- The license has been disabled or deleted. (The status is "Not Installed".)

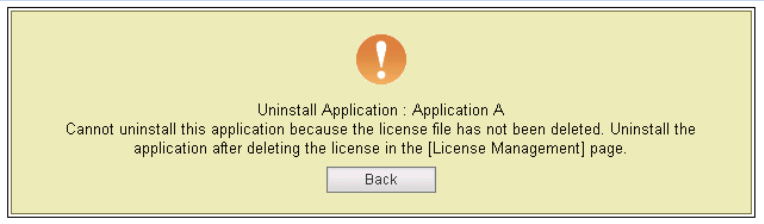



F-2-272

For information on the procedure to stop the MEAP application, see the previous section "Procedure to start and stop a MEAP application".

For information on the procedure to delete the license file, see the following section "Managing the License File".

Note:
When a user tries to uninstall an application before deleting the license, the following message is shown.



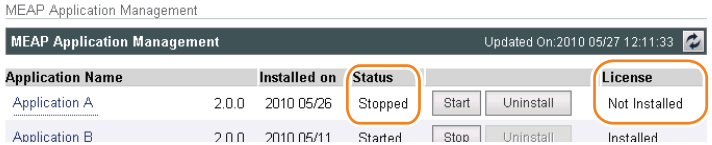

F-2-273

If the license file of the selected application cannot be deleted, the [Uninstall] button is grayed out and therefore the application cannot be uninstalled.

CAUTION:

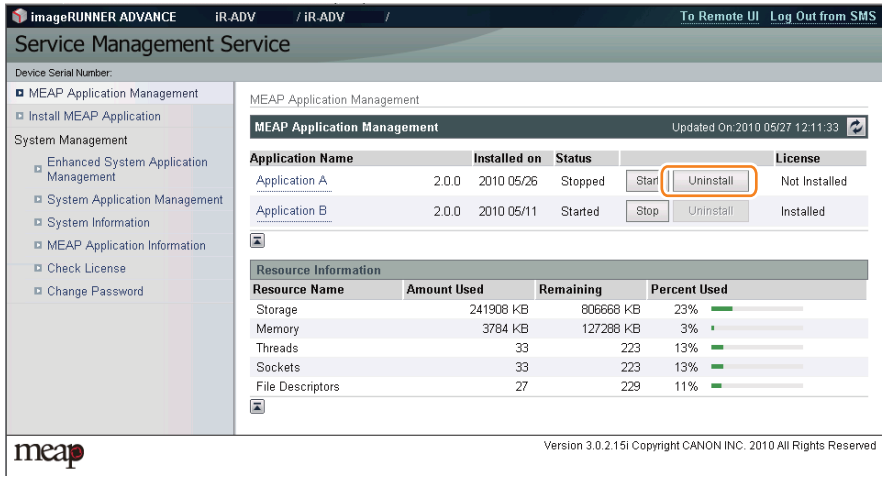
If the application you are uninstalling is associated with another application, a message will appear to indicate that the package exported by the application will no loner be available. Uninstalling such an application may also disable its associated applications.

1) Log in to SMS to click [ MEAP Application Management ] on the menu.
2) Check that the status of the application you want to uninstall is [ Stop ] and the license has been disabled. (The status is "Not Installed".)



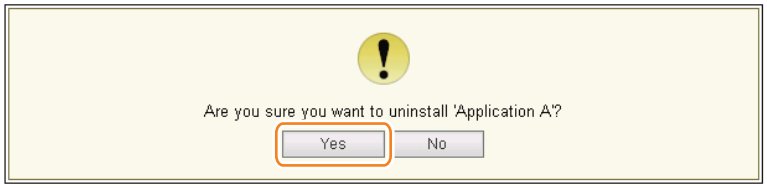

F-2-274

3) Click [ Uninstall ] button for the application to be uninstalled.




F-2-275

4) Check the application name to be uninstalled shown on the screen to click [ Yes ] button. Upon [ Yes ] button clicked, uninstallation process is started.




F-2-276

## Managing the License File

### Outline

The license file management functions allow you to perform the following operations related to the license file necessary for the MEAP application to run.

- Update the license which has already expired.
- Disable or delete the license file in order to uninstall the MEAP application.

These license management functions can be performed from the [ MEAP Application Management ] screen.
The main license management functions are as follows:

#### Adding a license

When the license has expired, you can add a license file.

#### Disabling a License File

Before uninstalling the MEAP application, the license needs to be deleted. In that case, you must first disable the license file because a license file which has not been disabled cannot be downloaded or deleted.

#### Downloading / Removing an Invalidated License File

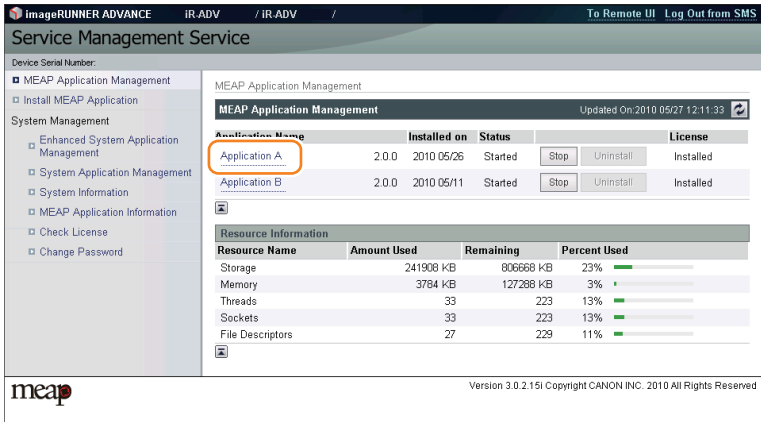
Before uninstalling the MEAP application, you need to delete its license file which has already been disabled.
By downloading the license file to your PC before it is deleted, you can use it when installing the application again to the same device.

WARNING:
After deleting the license file which has been disabled, you can no longer download the license file.

## Procedure adding a license file

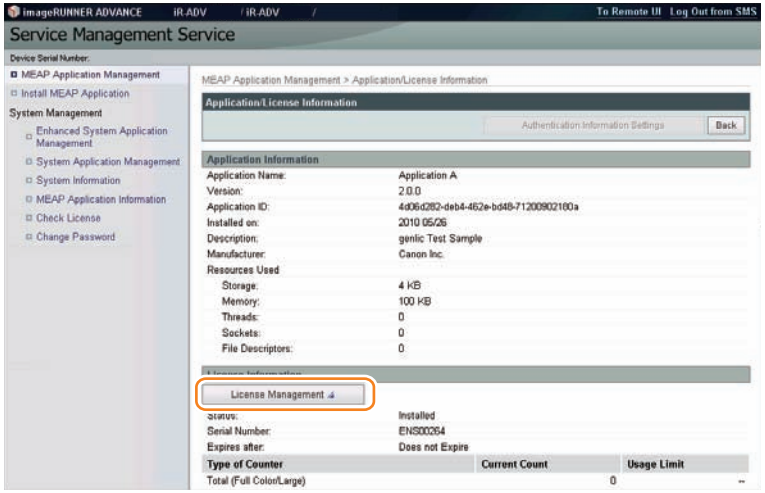
1) Log on to SMS.

2) On MEAP Application Management, click the name of the application to which you want to add a license file.




F-2-277

3) In [ Application / License Information ] page shown on the screen, click [ License Management ] button.

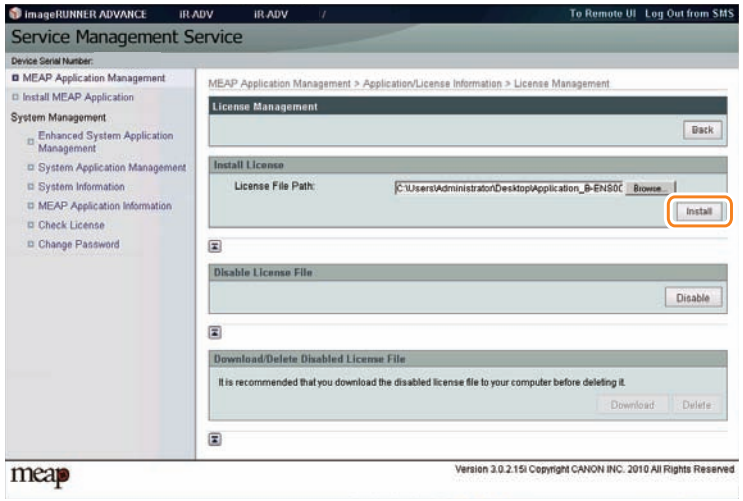



F-2-278

4) Click [ Browse ] button, and select the license file you want to install.

F-2-279

5) Click [ Install ] button.




F-2-280

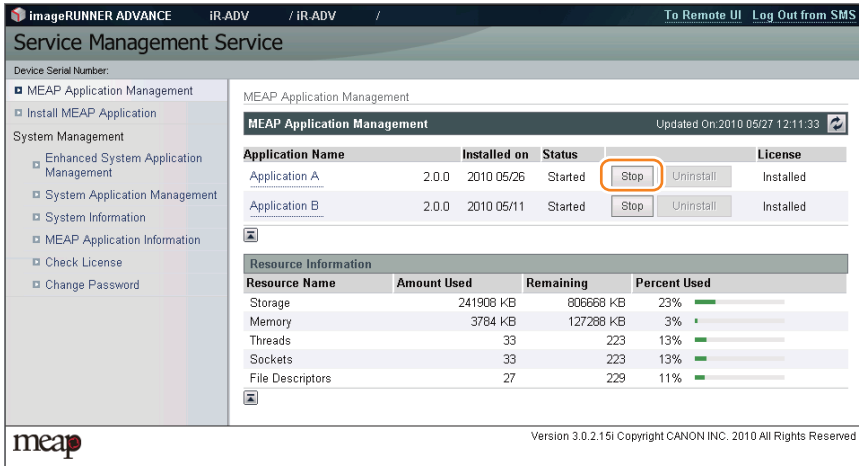
6) Check the content of the confirmation page, and click [ OK ] button.

## Procedure disabling a license file (suspending a license)

CAUTION:

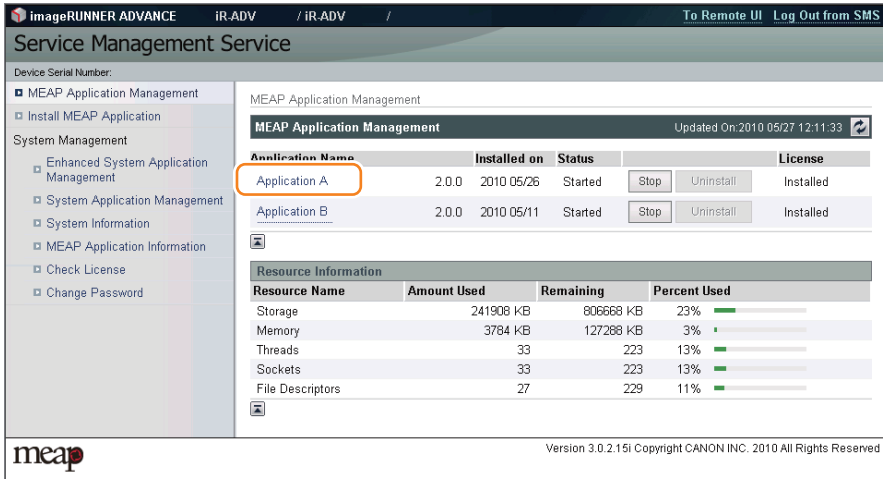
- Since the license file cannot be disabled when the application is still running, the application needs to be stopped before disabling the license file.
- Once suspended, the status of the license will be 'Not Installed', and its application will no longer be available for use.
- You can later restore a suspended license file as long as you are doing so on the same iR, the device with the same device serial number.
- If the machine needs to be replaced due to a device failure, use the transfer license during the replacement. (See "License for forwarding")

1) Stop the application you want to uninstall on MEAP Application Management page.



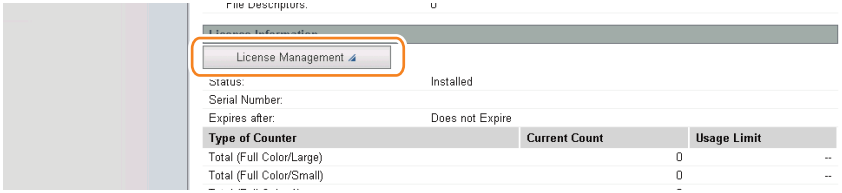

F-2-281

2) Click the name of the application that you want to disable.



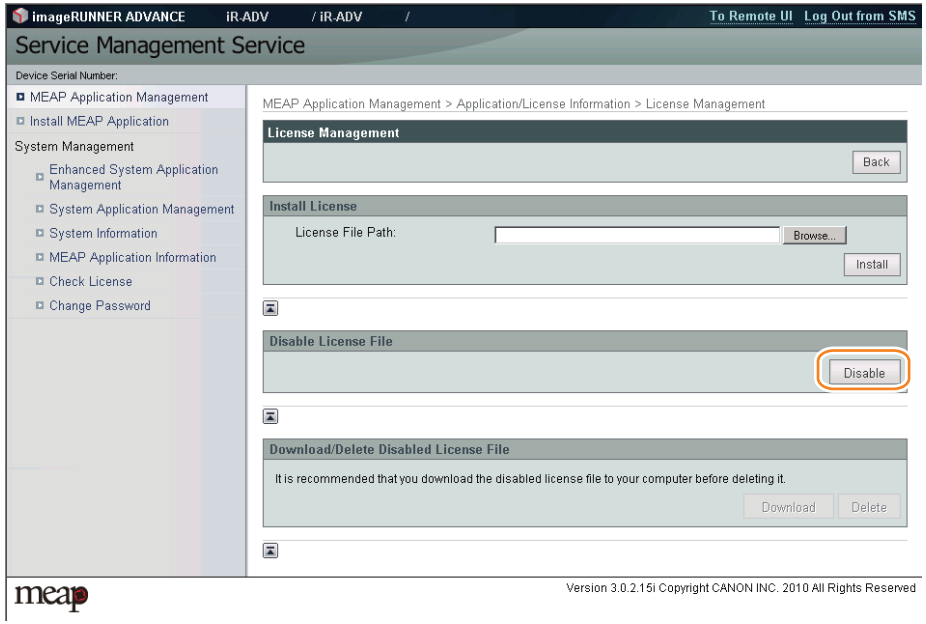

F-2-282

3) On Application/ License Information page, click [ License Management ] button.



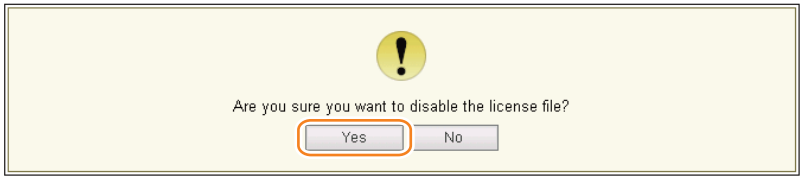

F-2-283

4) License Management page appears. Click [ Disable ] button.




F-2-284

5) Click [ Yes ].



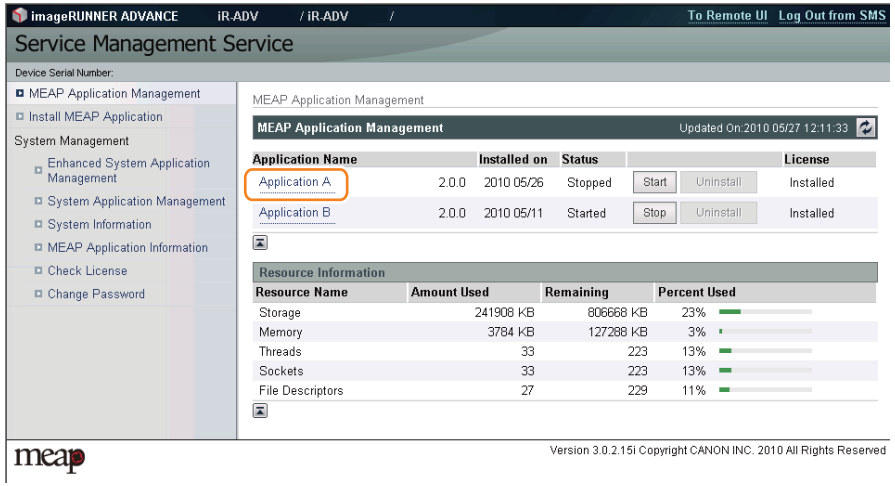

F-2-285

## Procedure downloading / removing an invalidated license file

Note:
The downloaded license file can be used for reinstallation only in the same iR device (with the same device serial number).

1) Login to SMS. (See Chapter 2, "Login to SMS.")

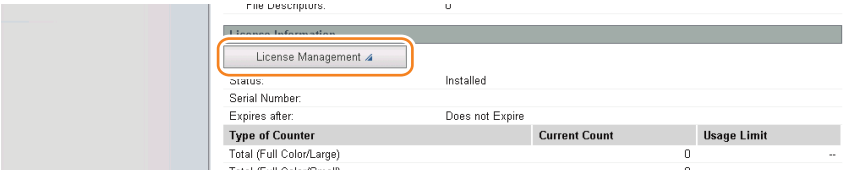
2) Application List page appears. On MEAP Application Management page , click the name of the application you want.




F-2-286

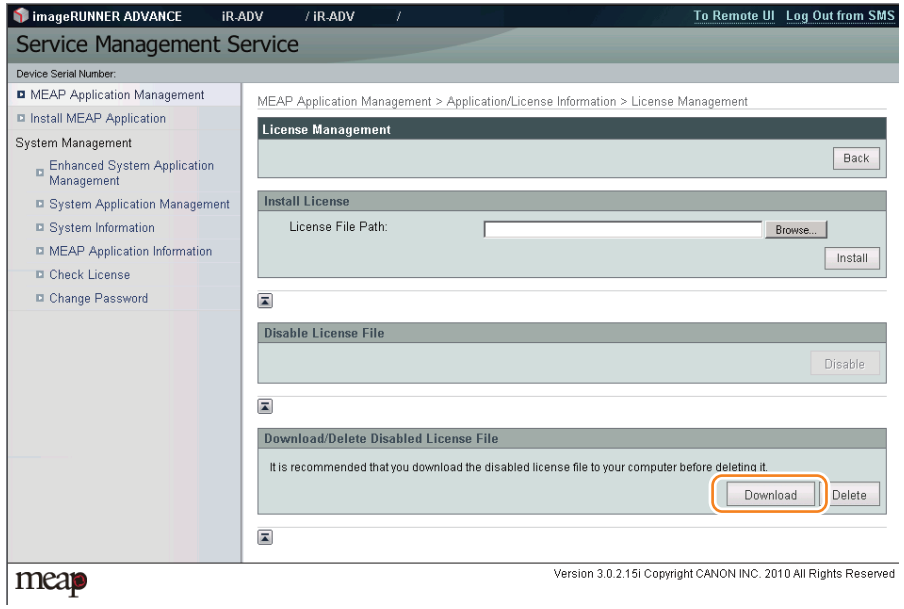
3) Check Application/ License Information page appears.

4) On Application / License Information page, click [ License Management ] button.




F-2-287

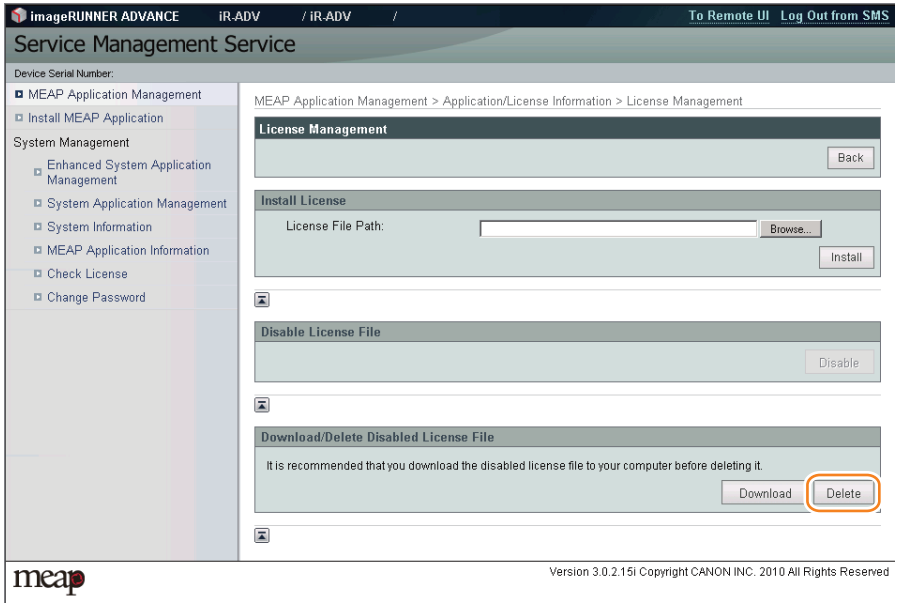
5) License Management page appears. To download, click [ Download ] button.




F-2-288

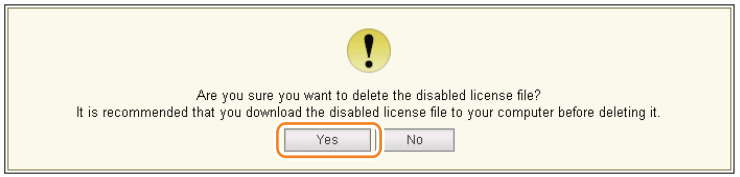
6) When you have selected [ Download ] button, specify where you want to store the file by following the instructions on the screen.

7) To delete, click [ Delete ] button.




F-2-289

8) When the dialog to confirm deletion is shown, click [ Yes ] button.




F-2-290

WARNING:

Without the license file, an application cannot be reinstalled even to the MEAP de-vice that the application had been installed last time. Download and save the license file before deleting the application.

# Other License File Management Functions

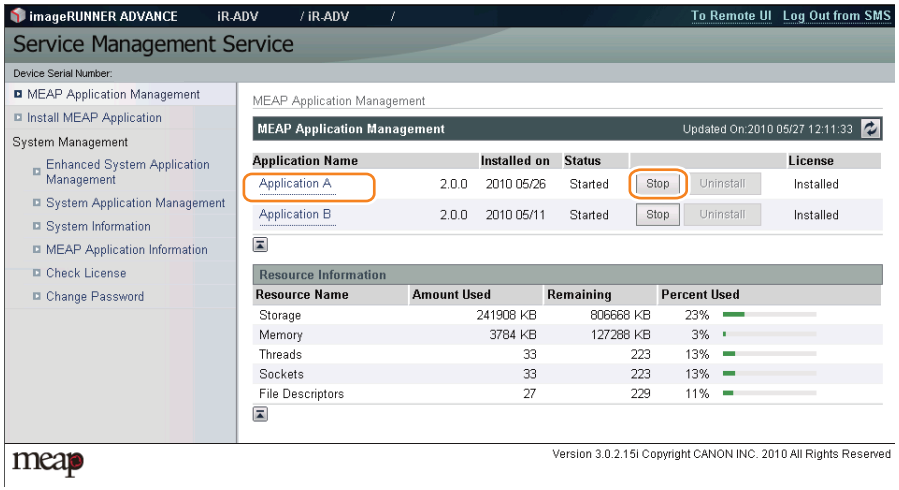
## Reusable license

When reinstalling, Disable License file should be downloaded (see Chapter 0, “Disabling a License File .” and see Chapter 0, “Downloading / Removing an Invalidated License File.” in this manual) or a license for reinstallation should be obtained from LMS, before reinstallation. This specification aims to prevent misuse of applications.
To increase convenience of users, only application with unlimited validity date and application counter (e.g. Portal Service, SDL, SSO) has been made to be able to install as many times as needed by the same license file. This kind of license is called 'Reusable license'.

## License for forwarding

If the machine needs to be replaced due to a device failure, you can transfer the license information used in the MEAP application to the new machine and continue its usage. Service engineers are responsible for license transfer as this task requires the SMS hidden page (not open to users).
The procedure is shown below.

1) Log in to SMS, stop the application to be forwarded (see Chapter 0, “Starting and Stopping a MEAP Application.” in this manual).

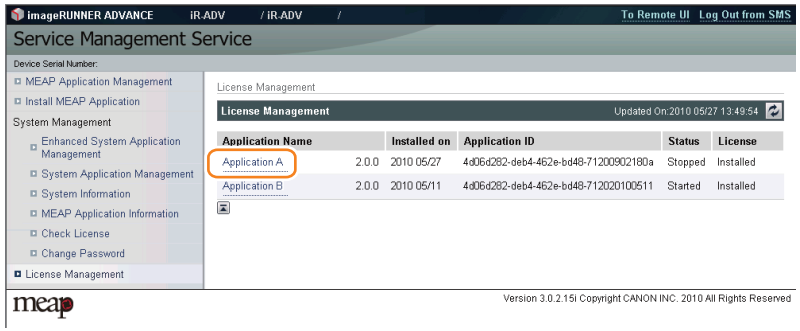



F-2-291

2) Move to the download page of license forwarded for the device as sender (https:// IP address of device: 8443/sms/ForwardLicense).

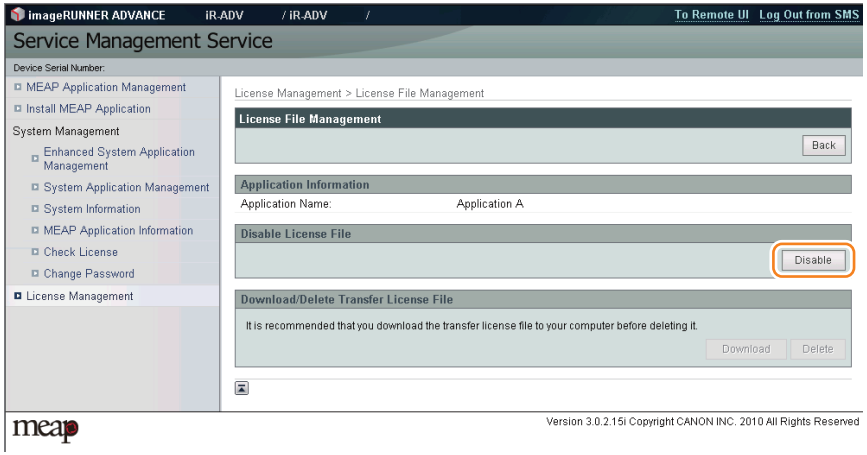
F-2-292

3) Specify the application to be forwarded.



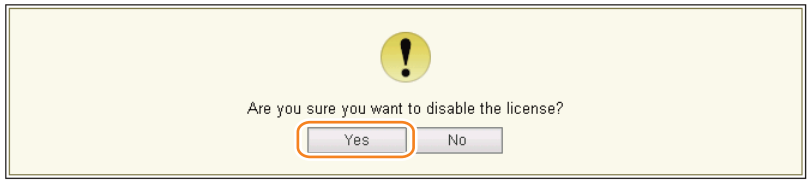

F-2-293

4) Click [ Disable ] button on the [ Disable License File ].




F-2-294

5) The window to confirm whether to create a transfer licence will be displayed. Click [ Yes ].

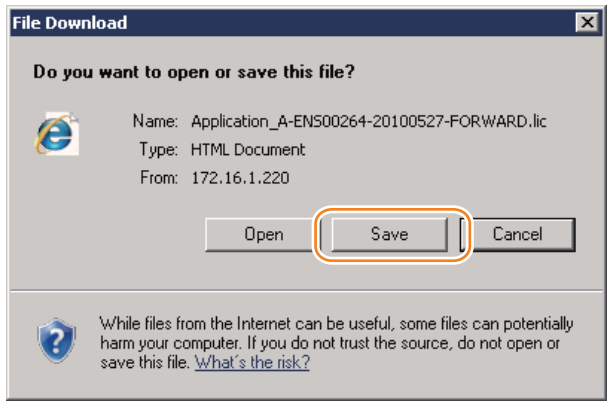



F-2-295

6) When [Download] button on the [ Download / Delete Transfer License File ] becomes effective, click [Download] button.

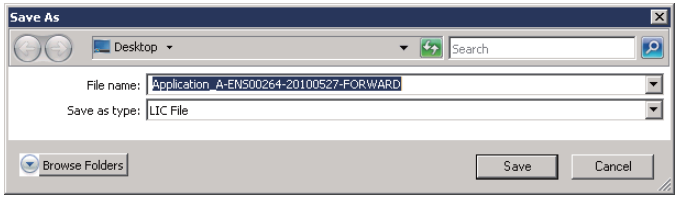
F-2-296

7) The dialogue [ File Download ] is displayed. Click [ Save ].



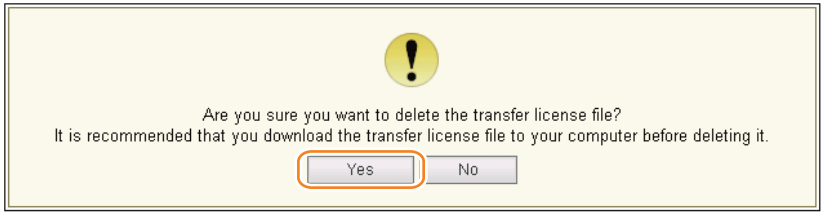

F-2-297

8) Specify the download destination, click [ Save ].




F-2-298

9) After downloading the license file for forwarding, click [ Delete ] to display the confirmation screen and click [ Yes ] to delete the file (in consideration of breakage of license for forwarding, deleting disabled license can be executed after all steps have been completed).




F-2-299

10) Log out of SMS.

11) Since this downloaded transfer license is the file only to prove the license invalidation, it cannot be used for installation to the other device as it is. Send the transfer license to the service support contact of your nearest sales company to request issuance of the new license for installation in the new device.

> Note:
> When requesting issuance of license for forwarding, inform the sales company of the name of product name and serial No. of the device as sender, and of the name of product name and serial No. of the forwarding destination.

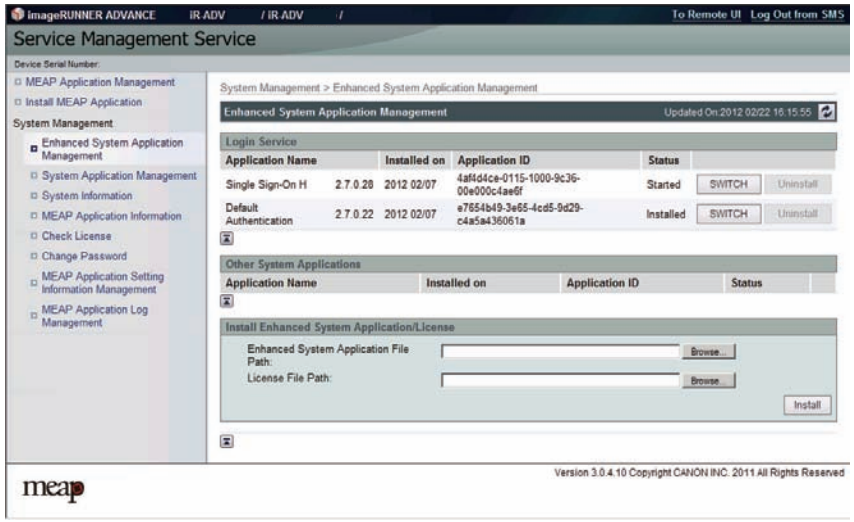
12) Install application using the license for forwarding issued by the sales company.

# Enhanced System Application Management

## Outline

[ Enhanced System Application Management ] mainly manages the login services for logging in to devices.

- Installing and uninstalling Enhanced System Application Management (login services, etc.)
- Switching login services (switching the method to log in to devices)
- Checking installation status of other System Applications




F-2-300

## About Login Service

The login service is started up to authenticate the user when MEAP-enabled iR device is booted up. Login service changes and install/ uninstall are carried out from the [ System Management ] page.
The preinstalled login applications are Default Authentication and Single Sign On-H, and Default Authentication is enabled by default.

CAUTION:

- This device does not support SDL, conventional SSO and Security Agent.

## Default Authentication overview

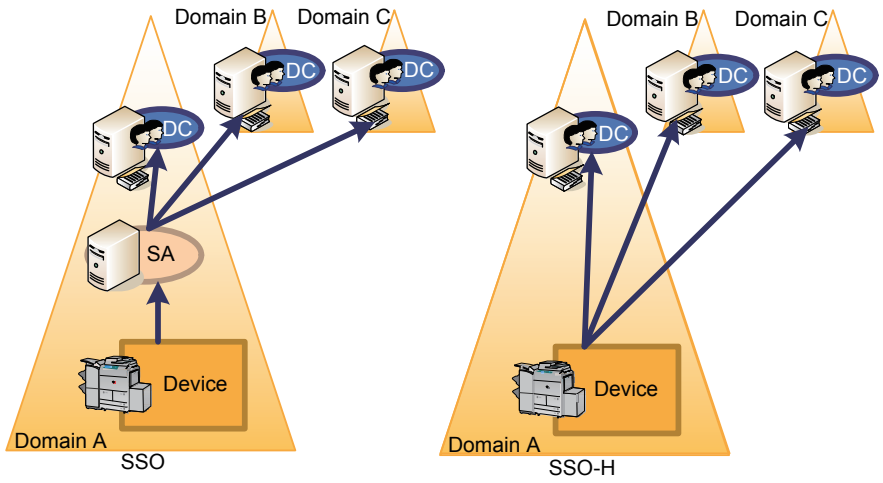
This login service is selected when the department ID management is enabled or no authentication function is set. Set the department ID management to [ON] on Setting / Registration (Additional Functions mode) of this device and register 7-digit ID and PIN by department. This setting restricts the use of this device only to users keying the registered ID and PIN. Department IDs/ and PINs can be registered on the touch panel of this device or Remote UI.

## SSO-H (Single Sign-On-H) overview

This is a merger of the existing SDL and SSO login services and has the following features.

- The following three authentication methods may be selected from.
  - Server authentication
  - Server authentication and local authentication
  - Local device authentication
- Active Directory or LDAP can be used as the server for server authentication.
- It is not necessary to prepare a server for Security Agent (SA). (In the case of SSO, SA is necessary.)

Differences from conventional SSO




F-2-301

CAUTION:

- When the setting is SSO-H, the card reader for the option controller card cannot be used.
- When the setting is SSO-H, start up takes a little longer when compared to Default Authentication (because of the time required for object initialization).
- To use the SEND function when the setting is for SSO-H, when sending email, mail addresses need to be programmed against each user. If they are not, email cannot be sent. Note, however, that when sending i-Fax, the mail addresses set in the device are used.
- The system configuration is different from previous SSO, so individual management is required.
- Data porting of user information that was being used with the earlier SSO local device authentication and SDL can be done by exporting/ importing. However, application settings information cannot be ported.

## Environment confirmation

Refer to the section of "Preparation for Using SSO-H" of this manual for system requirements needed in each login service.

## Specification of SSO-H

| Item | | Specification |
|---|---|---|
| No. of local device users | | Up to 5000 |
| Maximum number of domains | | Active Directory : 200 domains (“this device” not included) |
| IPv6 | | Authentication provided in IPv6 supports AD/KDC/DNS of Windows Server 2008 only) |
| Resource used | | Memory : 3584KB<br>Storage : 25000KB<br>File Description : 27<br>Thread : 33<br>Socket : 33 |
| Network ports used | Connecting | 88 : KDC<br>53 : DNS<br>1 - 65535 ( Default : 389) : LDAP |
| | Listening | 10000 - 10100 |
| Supported authentication server | | Active Directory :<br>Windows 2000 Server SP4/ Windows Server 2003 SP1 * / Windows Server 2003 R2 * / Windows 2008 Server *<br>*64-bit OS is not supported.<br><br>LDAP :<br>Novell eDirectory V8.8 SP6 for Windows<br>Lotus Domino V8.5 for Window |
| Supported Active Directory | | Windows 2000 Server SP4/ Windows Server 2003 SP1/Windows Server 2003 R2/ Windows 2008 Server(64BitOS not supported) |
| Availability of Department Management Linkage | | Available only in local authentication |

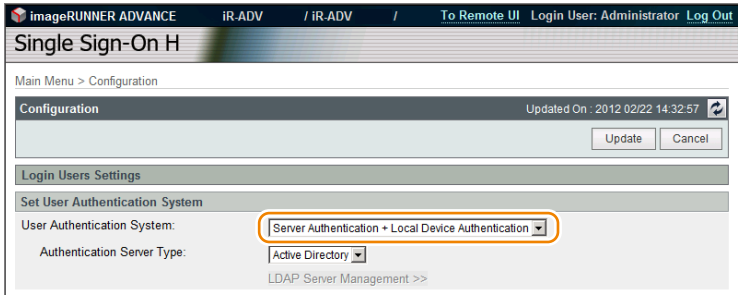
T-2-108

### SSO/SDL handling

This model does not support older versions of SSO or SDL released in the past.

## Setting the Authentication Method

In the case of SSO-H, it is possible to use a combination of multiple authentication methods. The combination can be changed from the SSO-H setting screen. (For details, refer to e-Manual > MEAP > Menu for Administrators > Setting the SSO-H > "Setting the User Authentication System".)




F-2-302

Note:
The default settings are shown below.
- User authentication method : "Server Authentication + Local Device Authentication"
- Type of authentication : "Active Directory"

CAUTION:
- To ensure the security, it is recommended to change the password and the user name of the Local Device Authentication administrator from those at the time of shipment immediately after you have started using SSO-H.
- Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

## Using an Accounting Product When SSO-H Is Used

SSO-H has collaborative linkage with NetSpot Accountant, imageWARE / iW Accounting Manager, imageWARE Enterprise Management Console / iW Management Console Access Management Plug-in, imageWARE Enterprise Management Console / iW Management Console Accounting Management Plug-in.
For details on the combination, refer to the User's Manual or Service Manual of the product.

## Conducting Department ID Management When SSO-H Is Used

Department ID Management can be conducted also when SSO-H is used for login service.

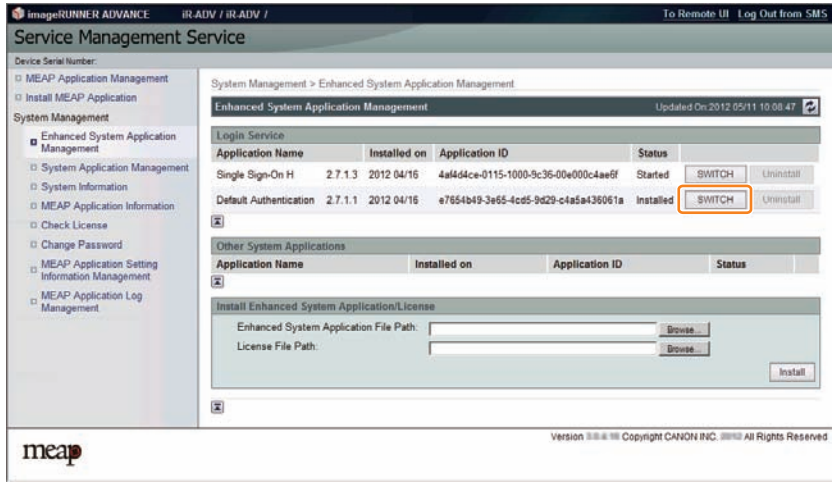
### Usage Conditions

In order to allow coexistence of SSO-H and Department ID management, the following conditions need to be satisfied.
- Only "Local Device Authentication" can be used as the user authentication method.
- The department ID and password have been already set for the SSO-H login user before enabling department ID management.
- The information (the department ID and password) set for the login user coincides with the information registered in Department ID Management.

### Setting Procedure

In order to allow coexistence of SSO-H and Department ID management, the following procedure needs to be performed to enable the setting.

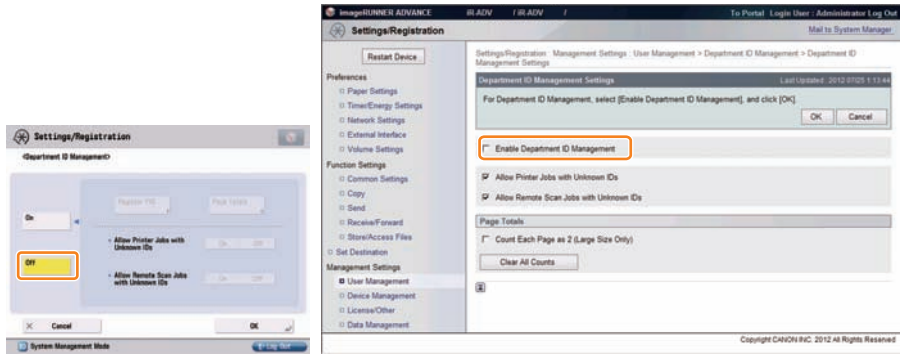
1) Change the authentication method to DA (Default Authentication).
Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)




F-2-303

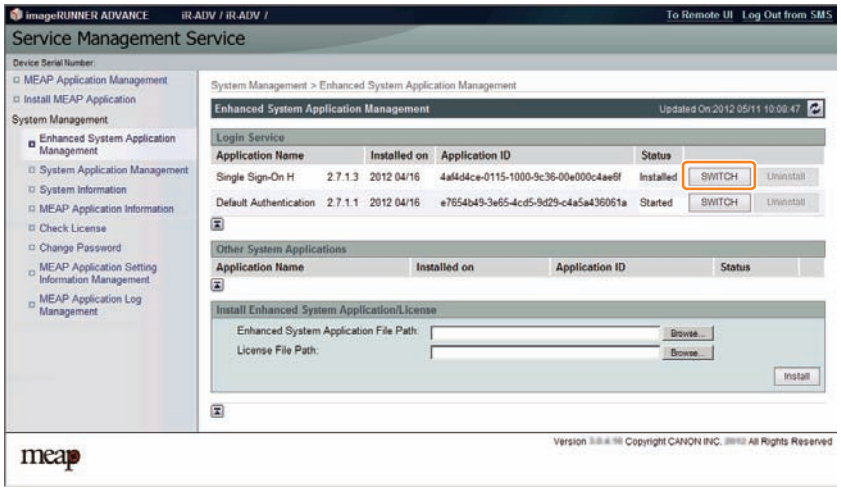
2) Restart the device.
Restart the device in order to reflect the changes in login service.

3) Disable Depart ID Management.
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].




F-2-304

4) Change the authentication method back to SSO-H authentication.
Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS". )

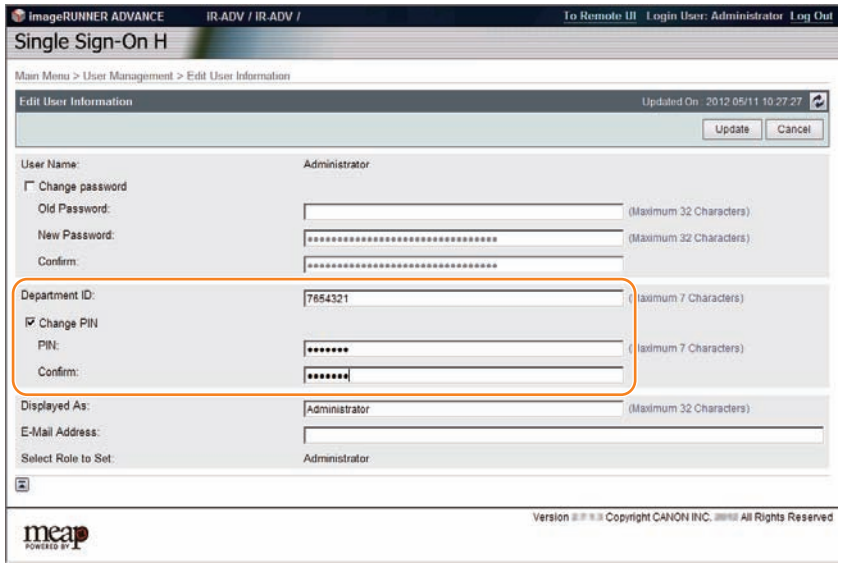



F-2-305

5) Restart the device.
Restart the device in order to reflect the changes in login service.

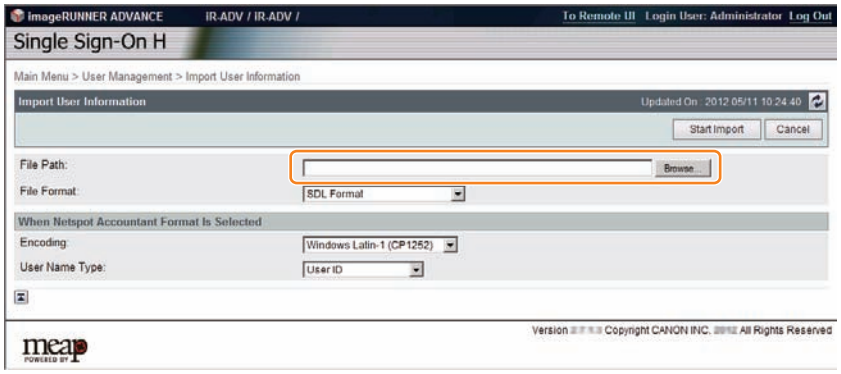
6) Change the user registration information of SSO-H.
Access the URL shown below, and change the content to the information registered in Department ID Management.
Or, import the setting file whose content you want to use.

SSO-H user registration information edition screen
(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or https://<IP address>:8443/sso/Edit).



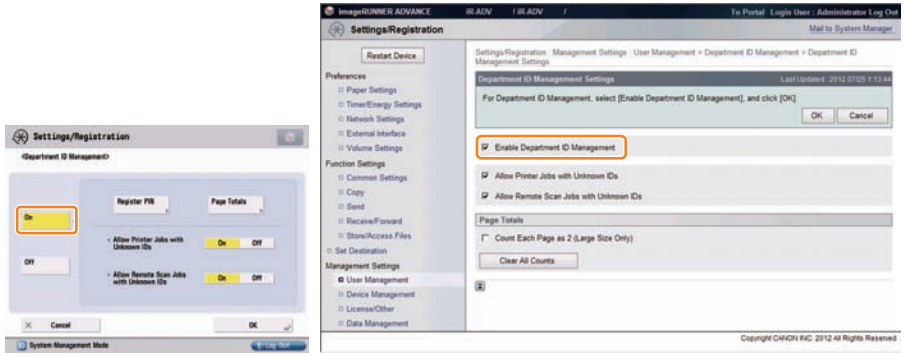

F-2-306

SSO-H user registration information import screen
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (https://<IP address>:8443/sso/Import).



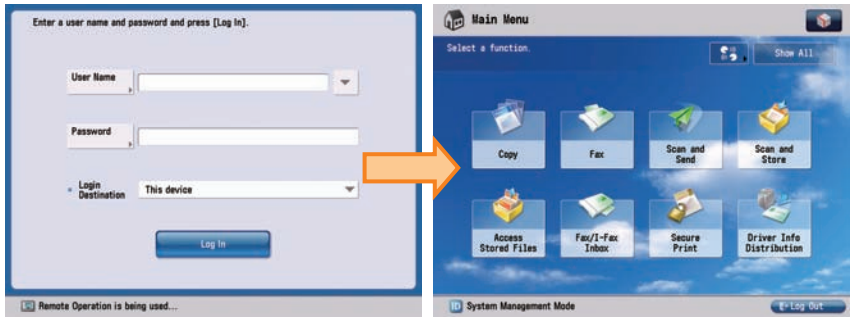

F-2-307

7) Enable Depart ID Management.
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].




F-2-308

8) Check that the device can be logged in.
Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.




F-2-309

Note:
In the case of conventional SSO, department management can be conducted also when server authentication is used provided that iWAM/iW EMC account management is used, which is not supported by SSO-H.

## Setting the Administrator for Server Authentication

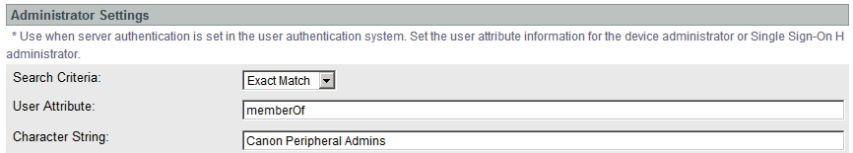
When using Server Authentication, the user who satisfies the specified conditions (user attribute and its match criteria) becomes the administrator (the device administrator and the SSO-H administrator).

The default user attribute and whether the setting value can be changed or not are shown below.

| Item | Default value | Active Directory | LDAP |
|---|---|---|---|
| Search Criteria: | Exact Match | Not Available | Available |
| User Attribute: | memberOf | Not Available | Available |
| Character String: | Canon Peripheral Admins | Available | Available |

T-2-109

The settings of the administrator can be changed on the following screen: remote UI > Single Sign-On H > Configuration (http://device's IP address:8000/sso/ActionSet)



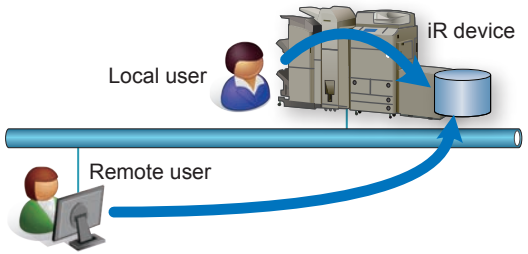

F-2-310

## System Manager Linkage (automatic ID allocation to SystemManagers)

SSO provided the automated function conventionally on Security Agent (hereinafter “SA”) to authenticate System Manager by allocating IDs set on SA to domain authentication managers (users belonging to Canon Peripheral Admins group). However, SSO-H does not support this function.

## Local device authentication

It is one of the user authentication methods using SSO-H, and is used for an iR device on a stand-alone basis.

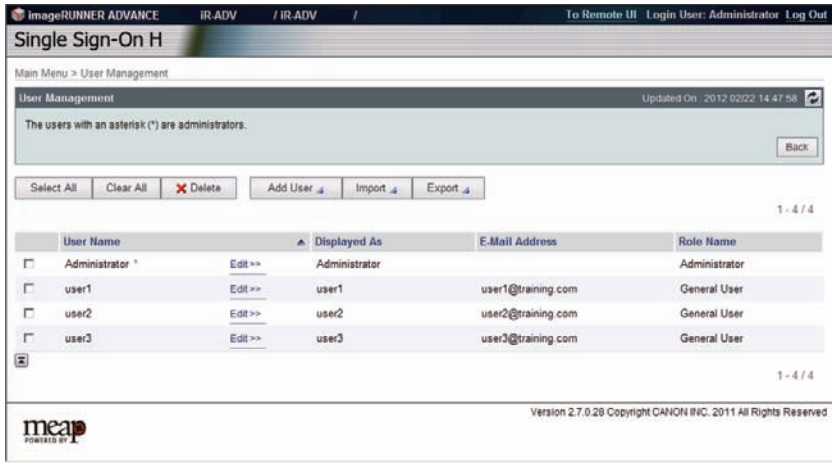



F-2-311

Register the user to be authenticated on the database in the device.

User management can be performed from the User Management screen (http://device's IP address:8000/sso/) or imageWARE Enterprise Management Console. The login destination is [This device].

User Management screen

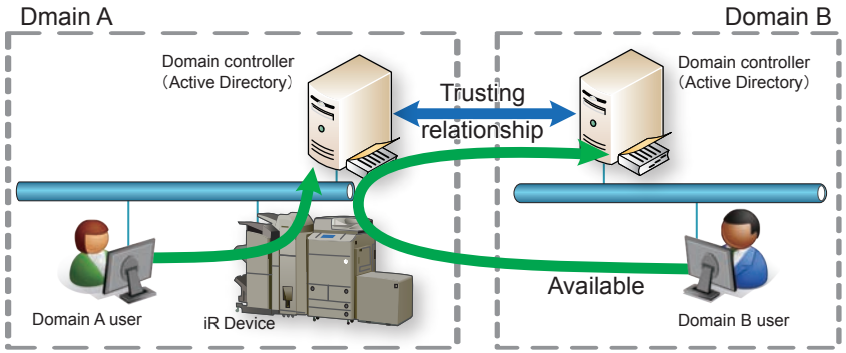



F-2-312

# Server authentication (Active Directory authentication)

## Outline

It is one of the user authentication methods using SSO-H. User authentication is performed with the device linked with a domain controller on the network in an Active Directory environment. It is a user authentication where the user is authenticated by the domain on the network when the user logs into the device. In addition to users belonging to the domain that includes the iR device, users belonging to domains that have a reliable relationship with the domain (multi-domain) can also be authenticated. The domain name of the login destination can be selected by the users themselves upon login.
Using one of the options (Net Spot Accountant, imageWARE Accounting Manager, or imageWARE EMC Accounting Management Plug-in) makes it possible to analyze/manage the iR device usage.




F-2-313

The protocol used is as follows.

- Kerberos:LLS/RLS/ILS
- NTLMV2:WLS(Web Service Login Service)

User information acquisition is done by LDAP, so the Active Directory LDAP port needs to be made accessible. If LDAP connection fails, the authentication will end in error.
No. of supported domains: 200 (unchanged from SSO) Site access supported.

CAUTION:

In the case of using Server Authentication (Active Directory authentication), it is necessary to synchronize the time settings of the Active Directory server and the machine (and the PC for login). If the difference in time setting is 5 minutes or longer, an error will occur at the time of login. (The setting of the allowable difference in time can be changed.)

CAUTION:

Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

## Access Mode in Sites

With SSO-H, access to Active Directory within site can be prioritized or restricted, so there is a setting called 'Access Mode in Sites'. Sites programmed in Active Directory comprise multiple subnets. In this mode, SSO-H uses site information to access the same site as the device, or the subnet Active Directory.

- The SSO-H default setting is with the site internal access mode OFF.
- Access Active Directory within same site only.
- If there is no Active Directory within the same site, or if connection fails, there will be an authentication error.
- Access another site if Active Directory within the same site cannot be located.
- If there is no Active Directory within the same site, or if connection fails, an Active Directory external to the site will be accessed.
- If all attempts to access Active Directory fail, there will be an authentication error.

The operating specifications of the site internal access mode are as described below.
When first logging in to the login service after booting iR, the domain controller (DC) is obtained from the site list.
However, upon the first login, even if the site functionality is active, connection to DC is random. (This is because, if connection to DC should fail, the site to which the device belongs cannot be ascertained.)
If the device IP address or the domain name are changed, the site settings are acquired once more.

In this mode, at the first login (first authentication of domain to which the device belongs) LDAP-Bind is performed directly to DC and site information acquired by LDAP from DC.

From the acquired site list, the site to which the device subnet belongs is extracted and this becomes the site to which device belongs. Active Directory address is acquired (retrieved from DNS)

Note:
- The Active Directory subnet is assumed to be the same subnet as the device sub-net.
- In the Active Directory addresses, the Active Directories of the same site are listed.
- Active Directories of the same subnet as the device are listed first.
- If there is no Active Directory with the same subnet as the device, Active Directories belonging to different subnets than the device are listed.
- The Active Directories within the same site are accessed in order. Note, however, that where there are multiple Active Directories within the same site, access to those Active Directories will be in the order in which the address list was obtained.
- If there is no Active Directory within the same site, if access outside of the site is programmed, Active Directories outside of the site will be accessed in the order in which the address list was obtained.

## Site list acquisition

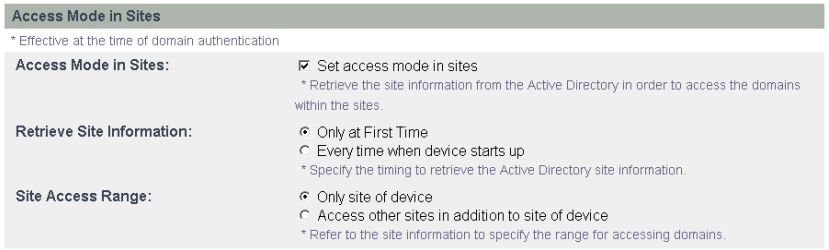
After booting up, upon the first login by LLS or ILS/ RLS, the site list is obtained from the Active Directory. In order to obtain the site list from the Active Directory, Active Directory needs to be accessed in LDAP, so SASL-Kerberos-Bind is used by the login user account. If authentication by Active Directory should fail, an authentication error will be generated and the site list will be acquired again from Active Directory upon the next login.

In SSO-H, the Active Directory to be accessed when acquiring the site list cannot be specified. In other words, if there is no site list, which site's Active Directory is accessed depends upon the order of the Active Directory addresses returned by DNS. Therefore, when acquiring the site list, LDAP may access the Active Di rectory of a different site. Therefore, in such cases, it is sometimes necessary to access across sites or subnets, which means that LDAP protocol needs to have continuity across sites (subnets) (normally, LDAP is port No. 389). Further, if connection with Active Directory fails when acquiring site information, another Active Directory will be accessed.
Site information, once it has been acquired, is cached within the device. The life settings of the cache can be set so that site information in the cache is updated upon the first login after the device boots up, or so that the cache is not updated once acquired.

## Settings for access mode in sites

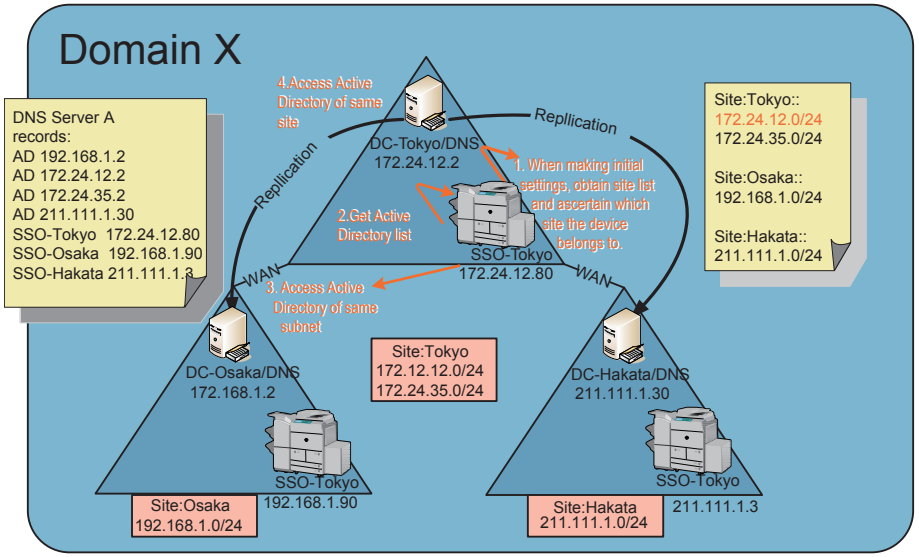
Switching between site internal access mode/ non site internal access mode, as well as detailed mode settings, are done via DMS or iWEMC.

Site internal access mode settings window (DMS)




F-2-314

The figure below shows a sample of processing Access Mode in Sites.
Sample of Processing Access Mode in Sites




F-2-315

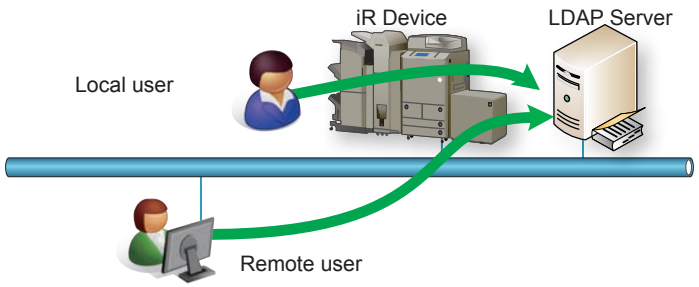
1) SSO-Tokyo acquires site lists from Active Directories.
Note, however, that the Active Directories accessed in order to acquire site lists are in the order in which they were returned by DNS, so there is no guarantee that the same Active Directory will be accessed as in the initial settings (upon device settings or changes to NW settings, etc.).
[Site subnet list]
Site: Tokyo: = 172.24.12.0/24, 172.24.35.0/24
Site: Osaka: = 192.168.1.0/24
Site: Hakata: = 211.111.1.0/24
As a result, since SSO-Tokyo is 172.24.12.80, the subnet is 172.24.12.0/24, and is judged as belonging to site Tokyo.
2) The DNS server obtains its Active Directory list from the primary or secondary DNS, as set in the device.
[Active Directory]
172.24.12.2, 172.24.35.2, 192.168.1.2, 211.111.1.30
3) Of the Active Directories in 2), above, the ones that belong to the same site (Tokyo) are 172.24.12.2 and 172.24.35.2.
Of these, the Active Directory that is the same subnet as SS-Tokyo is 172.24.12.2.
Therefore, this one will be accessed.
4) If access fails at step 3), above, the other Active Directory of the same site, 172.24.35.2, will be accessed.
5) If access fails at step 4), above, also, SSO-Osaka and SSO-Hakata will be accessed (the order will depend on the order of the Active Directories in DNS). Note, however, that this is an optional operation.

### Logging into other domains at multi-domain

At multi-domain, if another domain is logged into, based on the site/ subnet information retrieved in the home domain, the Active Directories of the login destination domain/ KDC address list are computed. In the event that the domain controller IP addresses of other domains are outside of the site access range, and only the domain controller within the site is programmed for access, an error message will be displayed to the effect that the site information is incorrect.

## Server Authentication (LDAP Authentication)

It is one of the user authentication methods using SSO-H. User authentication is performed with the device linked with the LDAP Server on the network in an LDAP environment.




F-2-316

LDAP server authentication can be used for devices that support MEAP User Preference Service (MEAP Specification Ver.56) and MEAP Application Setting Information Management (MEAP Specification Ver.57).
As for models that do not support MEAP User Preference Service and MEAP Application Setting Information Management , [LDAP Server] cannot be selected as the type of the authentication server on the SSO-H Configuration page. Moreover, it is not possible to access the LDAP Server Management screen and the Add Server screen.

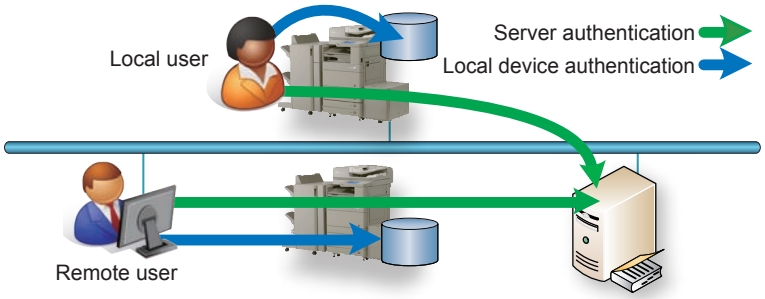
Simple bind (a method where the password is not encrypted) is used as the bind (authentication) between SSO-H and LDAP server. It is therefore strongly recommended to always use SSL connection from a security standpoint.
As for the version of LDAP, only Ver.3 is supported.

ON/OFF of SSL connection can be changed on the LDAP Server Management page.
The time-out value of connection is 60 seconds.
In the case of using LDAP server authentication, the characters entered as the user name are not case-sensitive, but the characters entered as the password are case-sensitive.
In the case of SSO-H, authentication is not allowed when the user name includes "* (asterisk)".
If authentication is performed with "* (asterisk)" used in the user name, an authentication error occurs.

CAUTION:
Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

## Server authentication and local device authentication

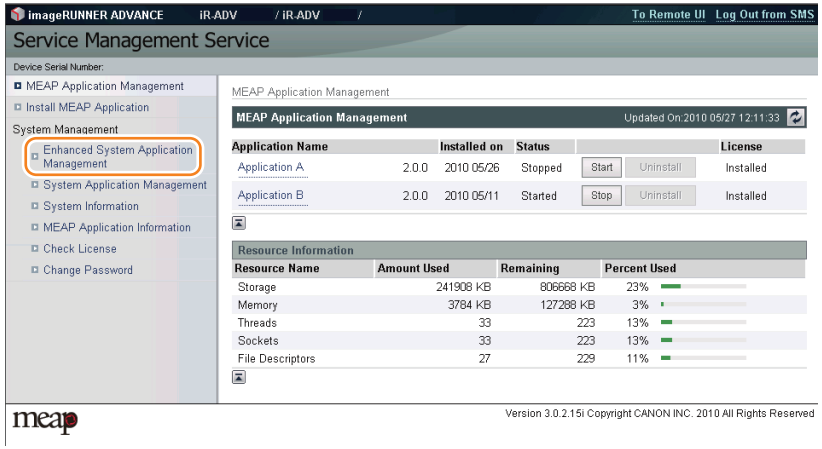
It is a user authentication method provided with both the "server authentication" function and the "local device authentication" function.
It is possible to use server authentication to authenticate the users registered on the authentication server under normal conditions and use local device authentication when a user who cannot be added to the authentication server needs to be temporarily authenticated.
If a trouble occurs in the authentication server, local device authentication can be used as an emergency measure until recovery from the trouble.




F-2-317

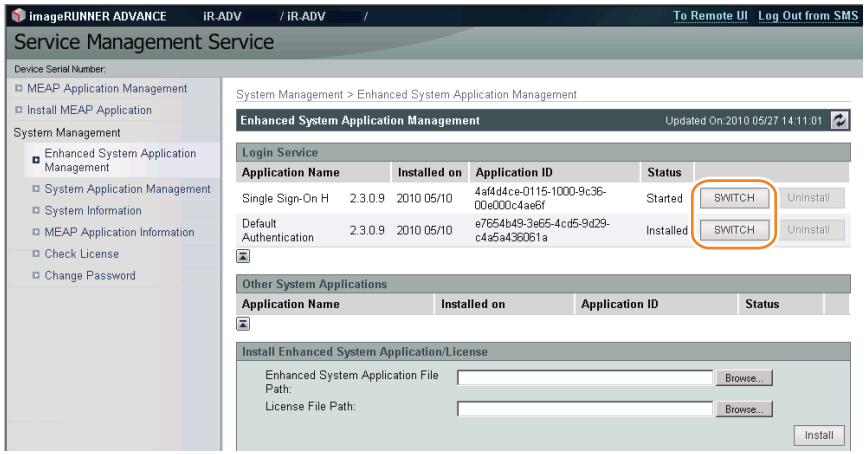
## Steps to Change Login Services

1) Click [ Enhanced System Application Management] on [System Management ].



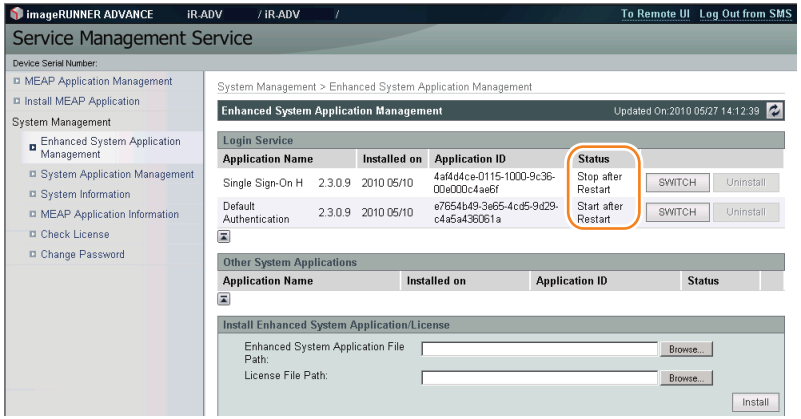

F-2-318

2) A page will appear showing the various selections you can make for the login service. Click [SWITCH] button for the login service to be used.




F-2-319

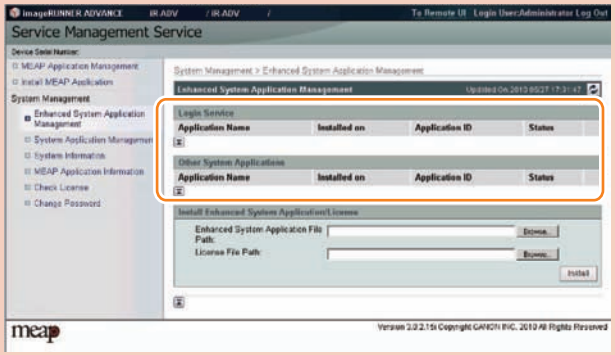
3) When login service application you have selected turns to Start after Restart, restart the device.




F-2-320

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.




F-2-321

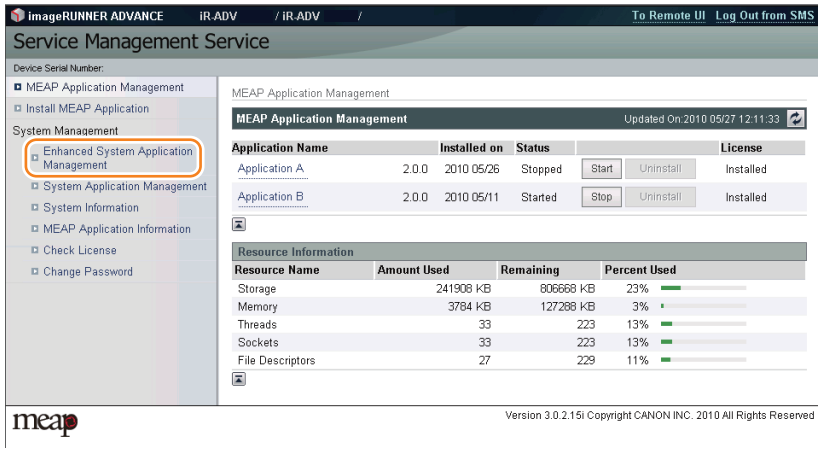
This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

## Login Service Installation Procedure

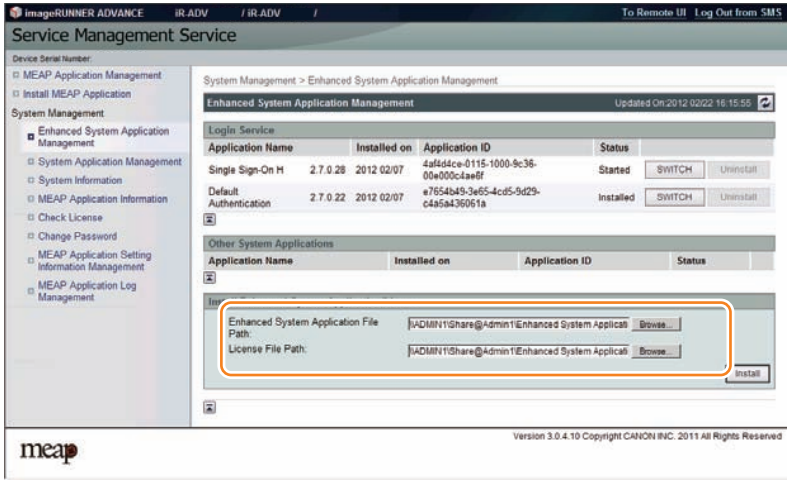
Follow the procedure show below to install login services.

1) Access SMS, and select [System Management] > [Enhanced System Application Management].



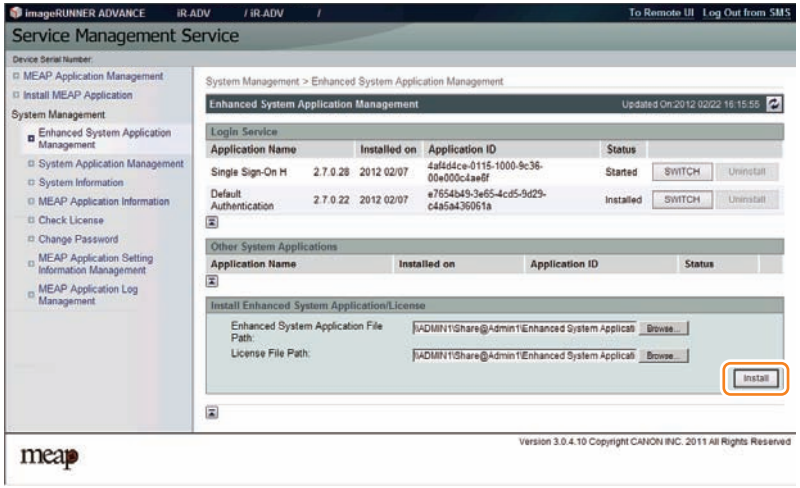

F-2-322

2) Click the [Browse] button, and specify the enhanced system application file and license file.




F-2-323

3) Click [ Install] button.

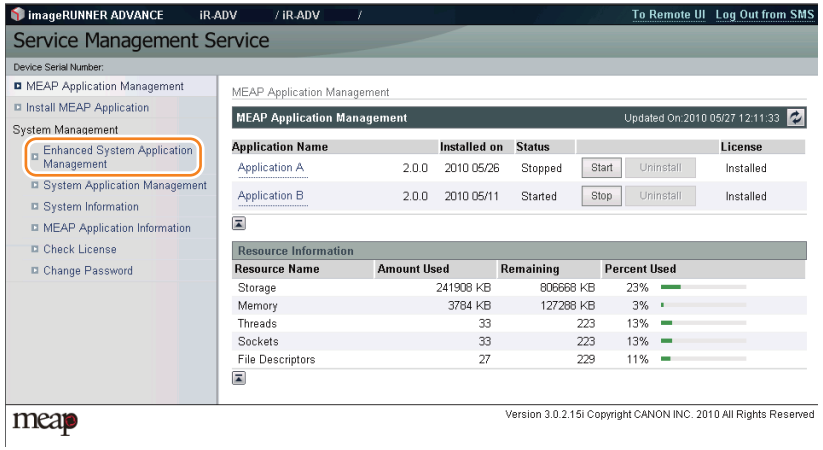



F-2-324

## Login Service Uninstallation Procedure

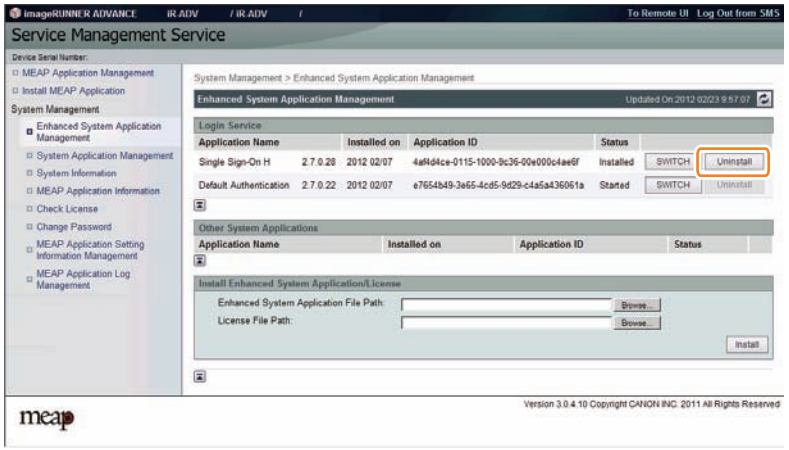
Follow the procedure show below to uninstall login services.
In order to uninstall a login service, the service needs to be stopped ("Installed" status).
Default Authentication cannot be uninstalled even when the service is stopped.

1) Access SMS, and select [System Management] > [Enhanced System Application Management].




F-2-325

2) Click the [Uninstall] button of the login service you want to uninstall.




F-2-326

# System Application Management

This function manages the login services for logging in to SMS.
There are two login methods: one is "password authentication" where you enter the password for SMS on the SMS login screen and log in, and the other is "RLS authentication" where you do not use the SMS login screen but enter the user ID and password on the RLS (Remote Login Service) screen for authentication.

## Password authentication

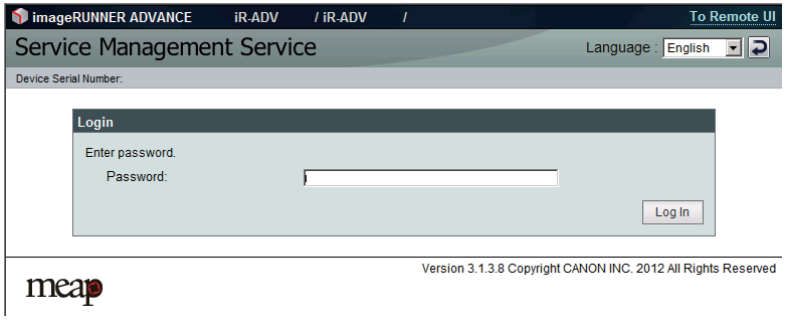
Enter the password on the SMS login screen for authentication. Only one password can be set for SMS.
The login procedure is shown below.

1) Access SMS from the browser of a PC on the same network as the MEAP device. The URL is as follows.

URL: https://<IP address of MEAP device>:8443/sms/
Ex.) https://172.16.188.240:8443/sms/

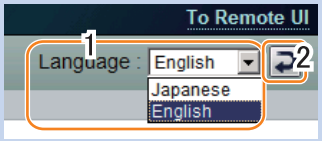
Note:
To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

2) Enter the password in the password entry field, and click the [Log In] button. The default password is “MeapSmsLogin.” (The password is case-sensitive.)



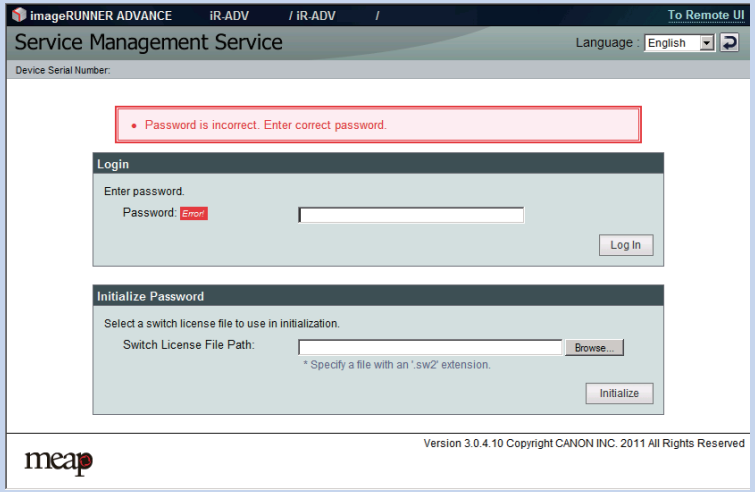

F-2-327

Note:
If you want to change the display language, select the language from the drop-down list of [Language] at the upper right of the login screen, and click the update button.




F-2-328

Note:
If the wrong password is entered, the following window is displayed. The user's system administrator may have changed the password, so confirm the password with the system administrator. Note that there is no special password for service.




F-2-329

## RLS Authentication

Login without using the SMS login window but by entering the user ID and password for authentication in the RLS (Remote Login Service) window. The user information (user name and password) used is the information for server authentication or local device authentication. The login procedures are as follows.

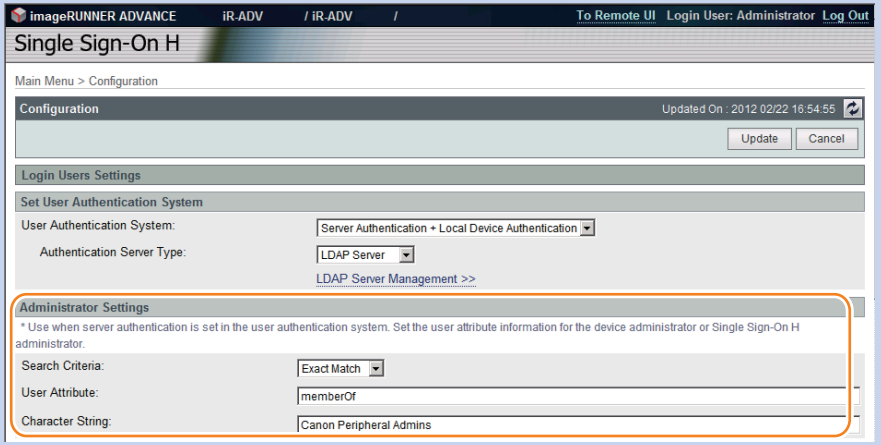
1) Access SMS by RLS Authentication from the PC browser on the same network as the MEAP device.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls/

Note:
- To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

F-2-330

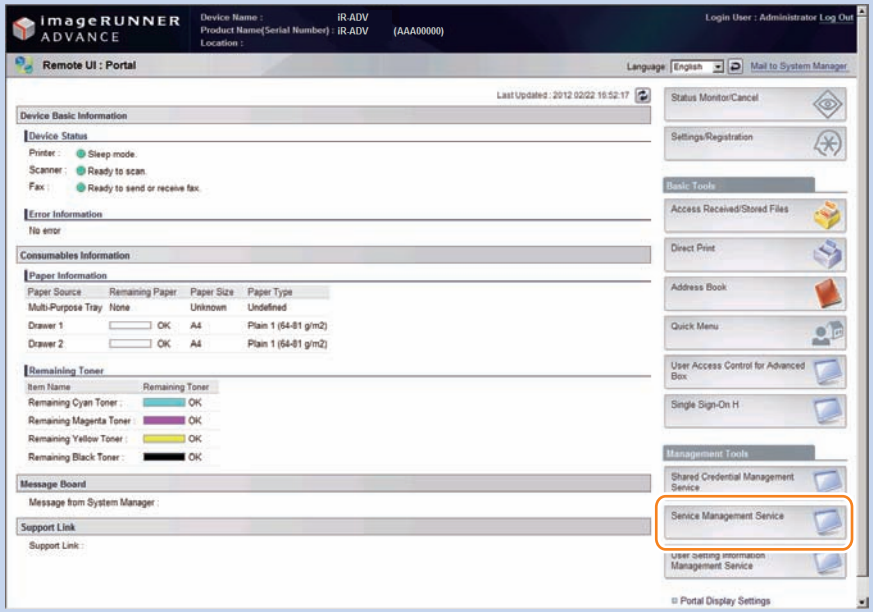
Note:
- When the device authentication method used is server authentication, enter the user name, password and login destination registered with authentication server and then click 'Log In'.
- If the authentication method used is local device authentication, enter the user name, password and login destination registered in the device and click 'Log In' button.
  The user information is set as below for local device authentication by default. Both are case sensitive.
  - User Name: Administrator
  - Password: password

Note:
Only the following users may us SMS via RLS.
- For local device authentication, users with Administrator or Device Admin authority.
- In the case of server authentication, the users who belong to the group (default: Canon Peripheral Admins) specified as the device administrator on the SSO-H Configuration screen.




F-2-331

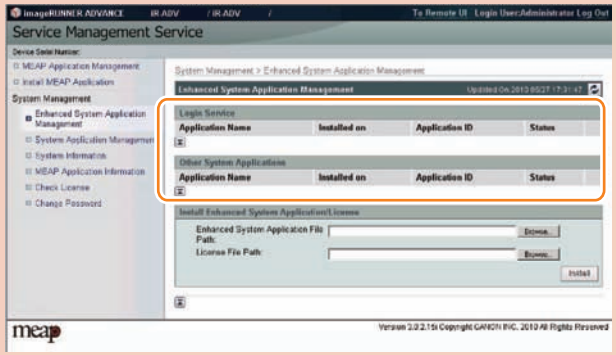
Note:
SMS Access can be gained also from Remote UI.
Access Remote UI and click on SMS shortcut shown on the lower right of the screen to gain access to SMS.
When only the password authentication is enabled, the password authentication screen is shown.
When only the RLS authentication is enabled, no further authentication is needed to access SMS. This is because users have already authorized upon accessing to Remote UI.




F-2-332

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.




F-2-333

This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

# Setting the method to login to SMS

## Outline

The method to log into SMS can be specified by one of the following methods.

- If you want to change the password authentication settings: Use RLS authentication to log in, and change the settings.
- If you want to change the RLS authentication settings: Use password authentication to log in, and change the settings.

The following table shows the start/stop combinations of the two login methods.

Combination of Login Methods

| | Start RLS Authentication | Stop RLS Authentication |
|---|---|---|
| Start Password Authentication | Login available with either method | Login available only with |
| Stop Password Authentication | Login available only with RLS Authentication | Setting unavailable |

T-2-110

CAUTION:

If only login via RLS is programmed, login may be disabled for the following reasons.

- Authentication server is down
- Network problem, no communication with authentication server

In the event of either of these cases, try the following.

1. If local device authentication is active, try logging in with local device authentication.
2. If only server authentication is active, launch in MEAP safe mode from the device service mode.

After launching in MEAP safe mode, the Default Authentication will become active, and you will be able to login to SMS with password authentication. After logging into SMS, set the password authentication login to ON (active) and restore the device from MEAP safe mode to normal mode. Until the problem blocking authentication is resolved, log into SMS with password authentication.

## Setting for login by Password Authentication

The procedures for changing the password authentication Start/ stop settings are as follows.

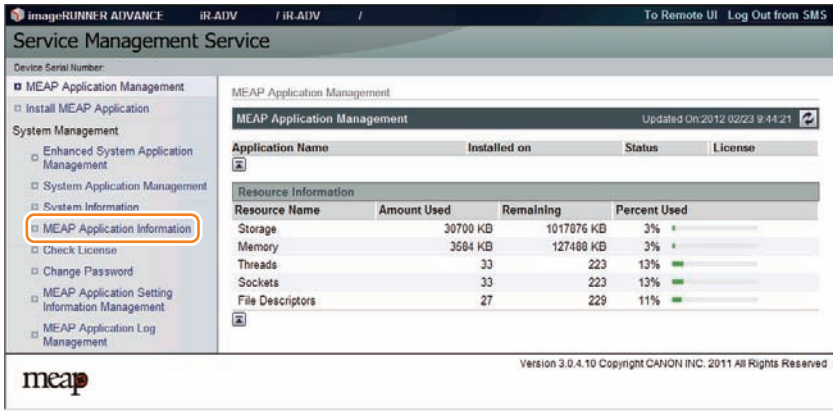
1) Access SMS login screen by RLS Authentication from the PC browser on the same network as the MEAP device.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls

2) Enter the user name and the password of the user registered as an administrator, select the login destination, and then click the [Log In] button.

Login screen (In case authentication method is SSO-H)

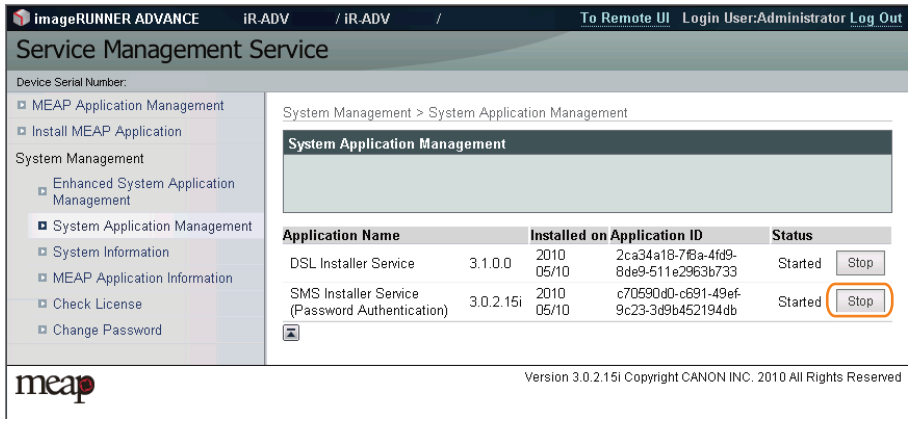
F-2-334

3) Select [System Application Management]




F-2-335

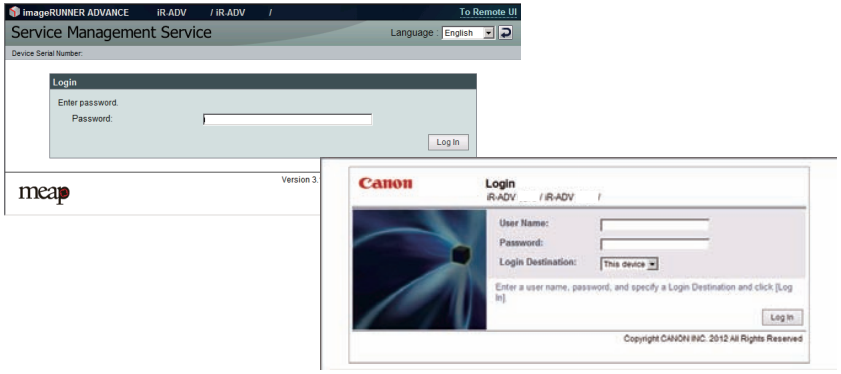
4) Click [Start] or [Stop] button shown in Status field of SMS Installer Service (Password Authentication) to check if the status is changed.




F-2-336

5) Logout once and login again to check to see that the setting is applied properly.
When clicking [Stop] to change the status to [Start], another password authentication login screen is firstly shown. When trying to access the password authentication screen after clicking [Start] to change the status to [Stop], the user is automatically redirected to RLS authentication screen.

Password authentication started screen and Password authentication stopped screen




F-2-337

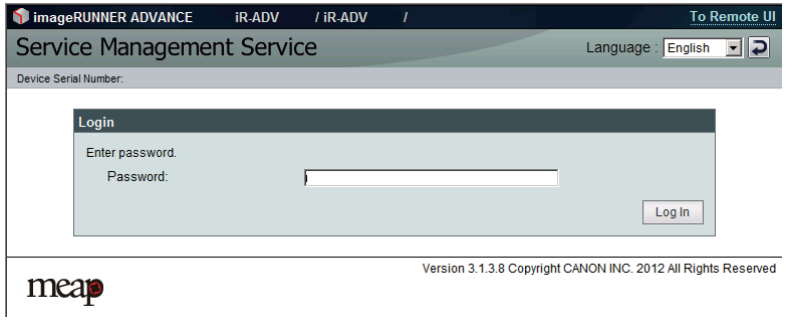
## Setting for login by RLS Authentication

The procedures for changing the RLS authentication Start/ Stop settings are as follows.

1) Access the SMS login screen using the normal method (password authentication). The URL is shown below.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls

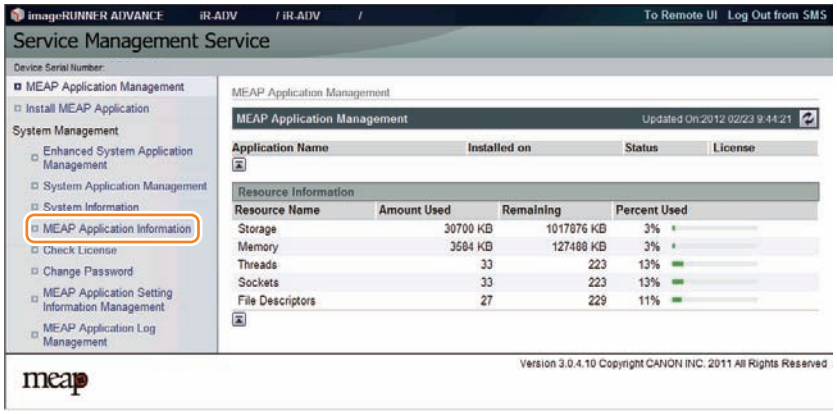
2) Enter the password in the password entry field, and click the [Log In] button. The default password is "MeapSmsLogin". (Case sensitive)

Login screen by Password Authentication



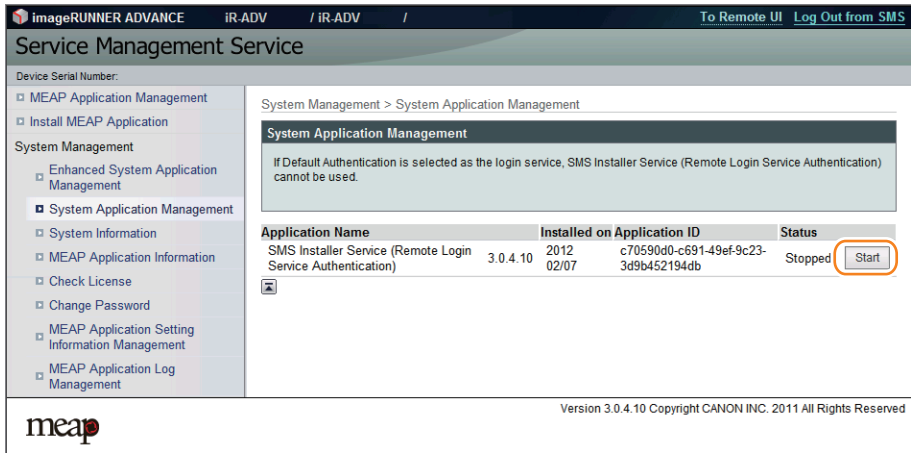

F-2-338

3) Select [System Application Management] on System Management menu.




F-2-339

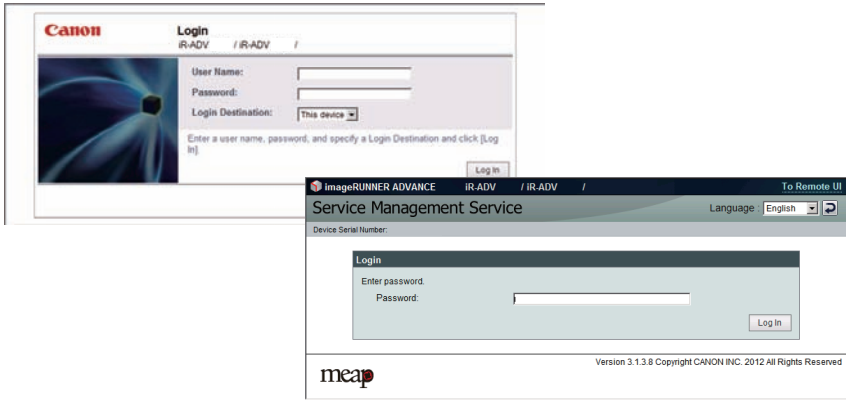
4) Click on [Start] or [Stop] button shown on Status field of SMS Installer Service (Remote Login Service Authentication) to check if the status is changed.




F-2-340

5) Log out and then log in again and access via the RLS authentication login window.
When RLS authentication is set to [Start], another RLS login screen is firstly shown. When accessing to RLS status screen with the setting of [Stop], the user will be redirected to the password authentication screen.

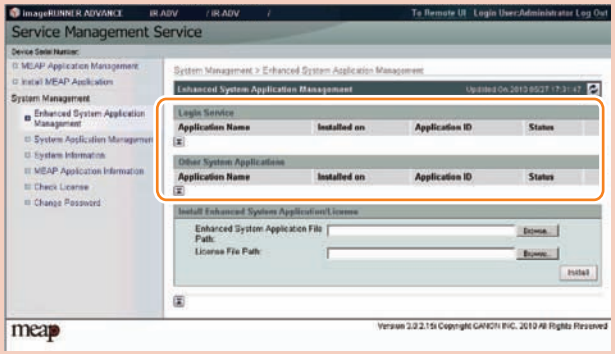
RLS authentication started screen and RLS authentication stopped screen




F-2-341

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



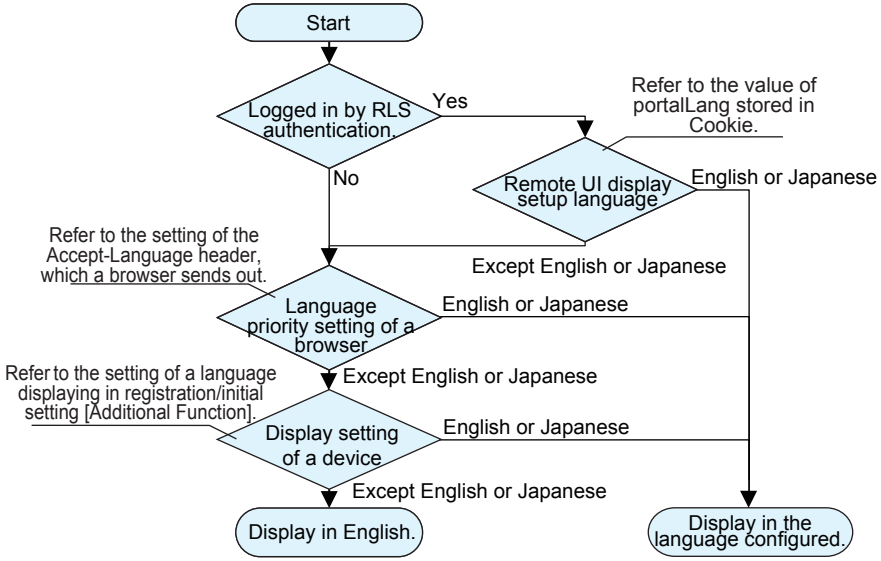

F-2-342

This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

## Initial Display Languages of SMS

SMS supports English and Japanese. Display language can be changed with selecting by the drop down list on a login page.
The initial display language at the time of accessing SMS depends on the setting.




F-2-343

### When accessing by SMS Installer Service (Password Authentication)

It is referred in order of the language priority (setting of the Accept-Language header which a browser sends out) and the display-language setting in the "user mode". When the language setup is other than English or Japanese, it is displayed in English.

### When accessing by SMS Installer Service (Remote Login Service Authentication).

Initial display language is set by the language setting (value of portalLang storing in Cookie) selected by the remote UI screen. When the setting is other than English or Japanese, Selection of display language is performed in a similar way with the SMS Installer Service (Password Authentication) mentioned above.

# MEAP Application System Information

## Outline

You can check the device's platform information and the MEAP application's system information.

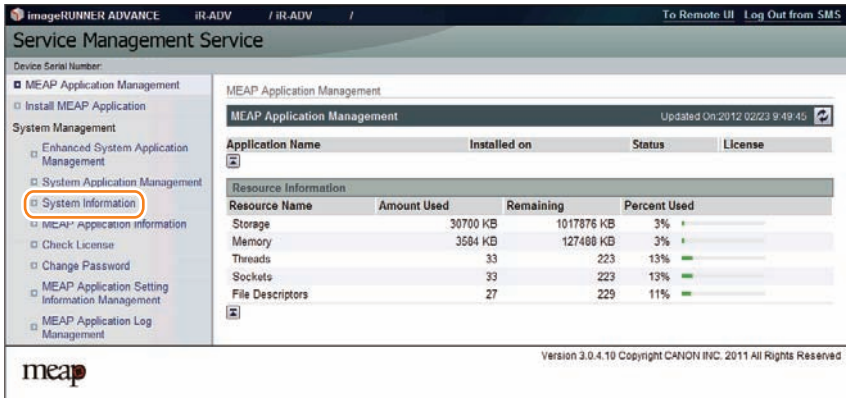
## Checking the System Information

System information that can be checked from the screen

- MEAP Specifications version (MEAP Spec Ver)
  - MEAP Contents version
  - Java Virtual Machine version
  - System application information
- The name of the installed system application
  - The installation date of the installed system application
  - Application ID of the installed system application
  - The status of the installed system application

The checking procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [System Information] on System Management menu.

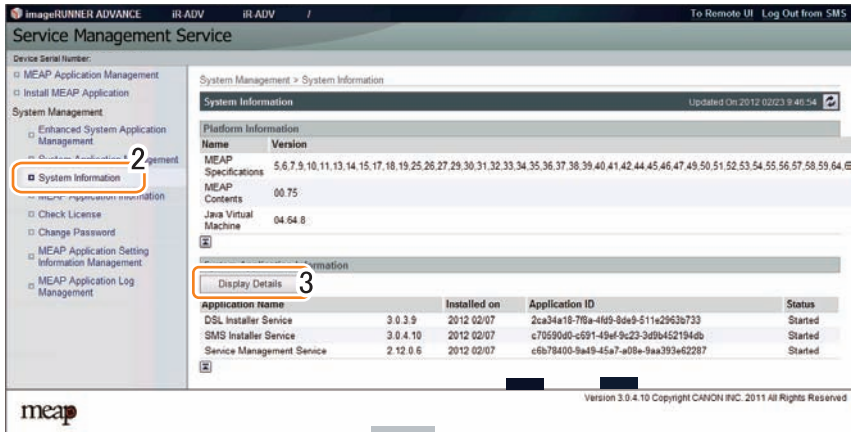



F-2-344

## Display of System Information Details

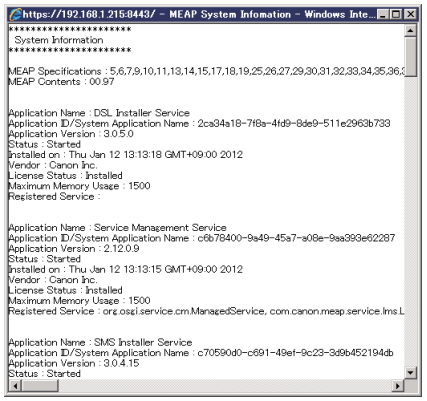
The system information details can be displayed to check more than one pieces of information all at the same time: platform information, system application information, information on the installed MEAP applications, etc.

1) Log in to SMS.
2) Select [System Info] on System Management menu.
3) Click [Display Details] button.




F-2-345

4) System information of each application (including system applications) is shown in an additional window. Copy and paste all the information in a file to attach to AR reports as text information. This function is useful to check status information of each application.




F-2-346

## Printing the System Information of a MEAP Application

MEAP system information can be printed out with iR device for confirmation.

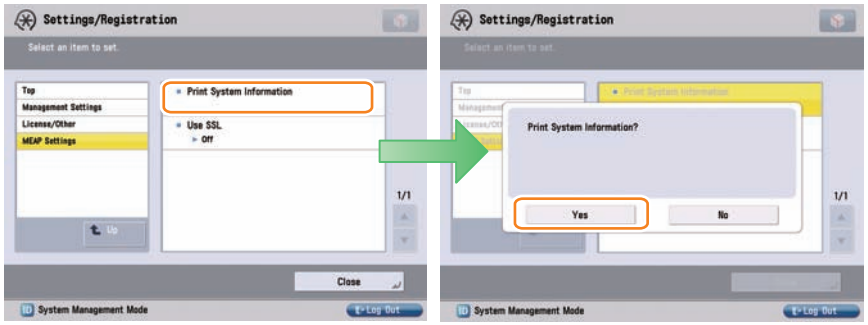
> Note:
> The system information of the MEAP application that you checked in the previous section is exactly the same as the system information of the MEAP application that is output.

Follow the steps below when confirming information:

1) Select [ Settings/ Registration] > [ Management Settings] > [ License/ Other] > [MEAP Settings] > [ Print System Information] .

> Note:
> When System Manager ID and PIN are set, go to Top screen and log in as System Manager to continue jobs.

2) Press[ Yes] button.




F-2-347

> Note:
> MEAP system information was printed out in PDL format conventionally. However, the information has been printed out in text format instead of PDL format, enabling iR devices without PDL installation to print out information (iR C3220 and later).

## Content of MEAP system information

Application System Information

```
Application Name: C-Cabinet Gateway for MEAP
Application ID/System Application Name: 03a46668-63e4-4636-9cbb-492b6cef05d5
Application Version: 1.0.0
Status: Resolved
Installed on: Tue Oct 21 14:00:11 GMT+09:00 2003
Vendor : Canon Inc.
License Status : Installed
Maximum Memory Usage : 1024
Registered Service :
```

| item | content |
|---|---|
| Application Name | It is the name (bundle-name) declared in a statement within the application program. It may not necessarily be identical to the name of the program. |
| Application ID/System Application Name | Application ID (application-id) items which are declared on the declaration statement in the application program are printed. |
| Application Version | It is the version of the application (bundle-version) declared in a statement within the application program. |
| Status | It indicates the status of the application in question; specifically,<br>Installed: the application has been installed.<br>Active: the application is being in use.<br>Resolved: the application is at rest. |
| Installed On | It indicates the date on which the application was installed. |
| Vendor | It is the name of the vendor that developed the application, and is the name (bundle-vendor) declared in a statement within the application program. |
| License Status | It indicates the status of the license; specifically,<br>None: no license is needed.<br>Not Installed: no license has been installed.<br>Installed: the appropriate license has been installed.<br>Invalid: the license has been invalidated.<br>Overlimt: the license has been used beyond its permitted limit. |
| License Expires After | It indicates the date after which the license expires. If the status of the license is 'none', this item will not be printed. |
| License Upper Limit | It indicates the limit imposed on individual counter readings. If the status of the license is 'none', this item will not be printed. |
| Counter Value | It is the current counter reading of a specific counter. If the status of the license is 'none', this item will not be printed. |
| Maximum Memory Usage | It indicates the maximum amount of memory that the application uses. It is the amount (maximum memory usage) declared in a statement within the application program, and is expressed in kilobytes. |
| Registered Service | It is a list of services that have been registered by the application with the MEAP framework.Some services may not have printable data. |

T-2-111

# MEAP Application Information

## Outline

You can check the MEAP application installed on the device.
The following information can be checked on the MEAP application information screen.

Application Information

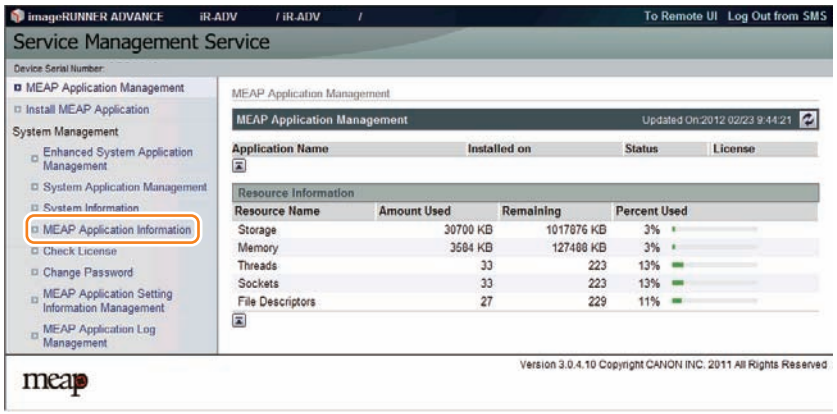
- Application Name
- Application ID
- Installed on
- Applet Number
- Description
- Manufacturer
- ContactAddress
- Category
- Version
- Copyright
- Applet-Name
- URL
- Export Package
- Export Service
- Import Package
- Import Service
- Resources Used (Storage, Memory, Threads, Sockets, File Descriptors)

License Information

- Status
- Serial Number
- Expires after

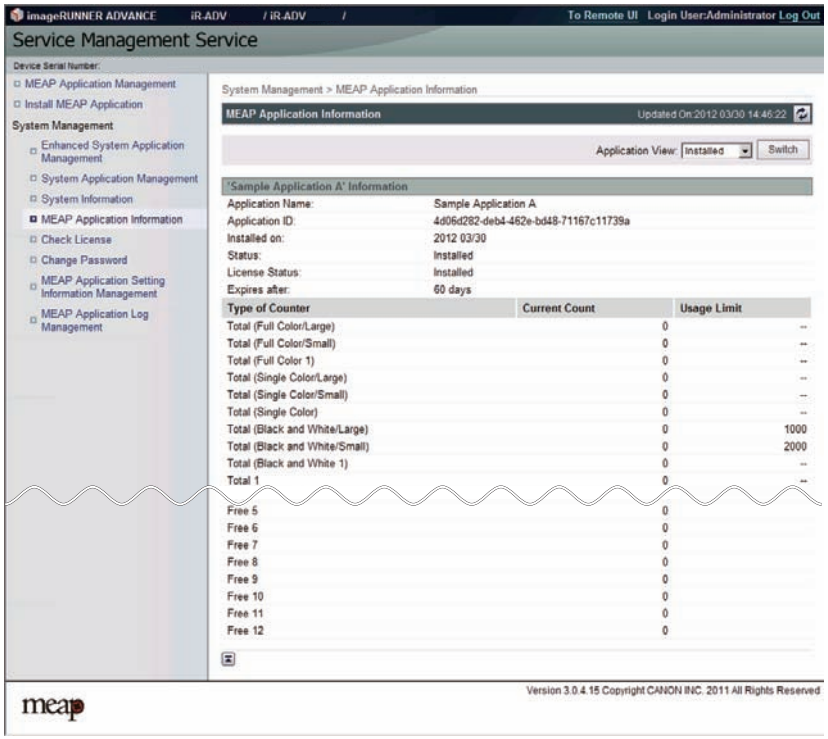
## Procedure to Check MEAP Application Information

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Information] on System Management menu.




F-2-348

3) The MEAP application information screen appears. Scroll the screen and check the information of the target application.




F-2-349

# Check License

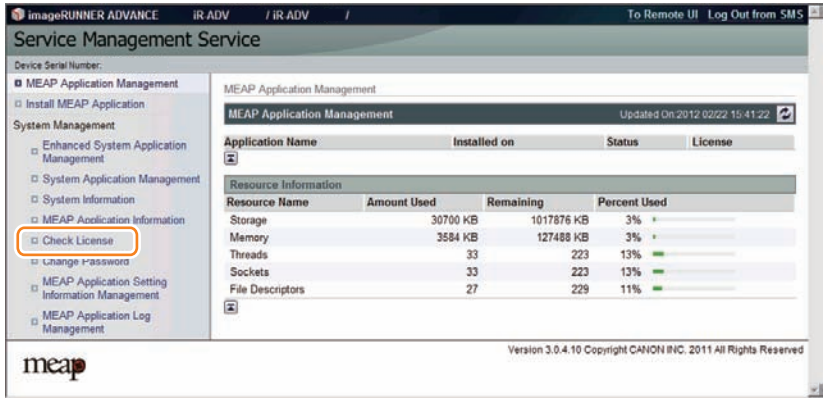
## Outline

You can check the contents of the license file.

## Procedure to Check the License File

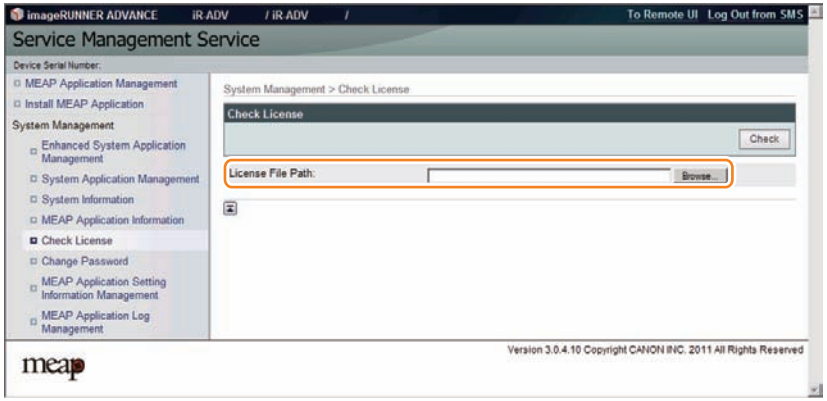
1) Log in to SMS.

2) Select [System Management] > [Check License] on System Management menu.




F-2-350

3) Click the [Browse..] button, specify a license file, and click the [Check] button.




F-2-351

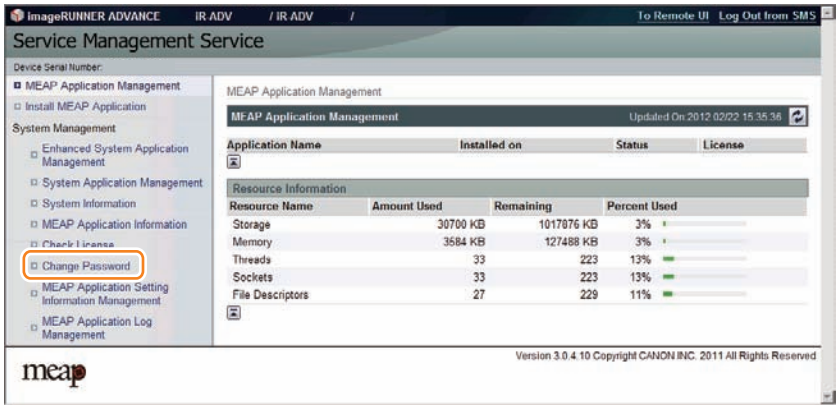
# Changing SMS Login Password

## Outline

You can change the password for logging into SMS.
If you forgot the login password and you want to change the password back to the default value (MeapSmsLogin), see "If you forgot the password (SMS login password initialization)" in this chapter.

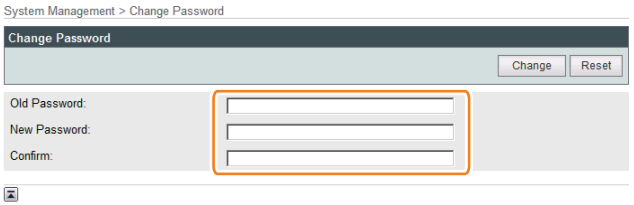
## Procedure to Change the SMS Login Password

1) Log in to SMS.
2) Select [System Management] > [Chage Password] on System Management menu.




F-2-352

3) Enter the current password and a new password, and then click the [Change] button.



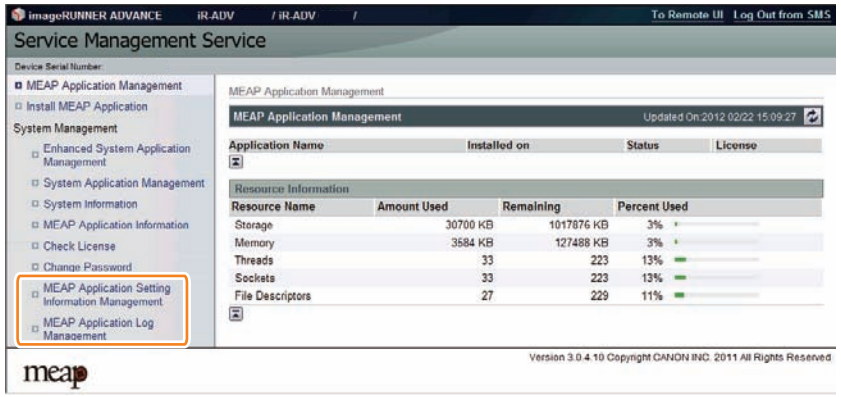

F-2-353

Note:
The [Reset] button on the [Change Password] screen is used to clear the value entered in the text field. It is not a button for changing the SMS login password back to the default value.

# MEAP Application Setting Information Management and Log Management

## Outline

The MEAP Application Setting Information Management page and the MEAP Application Log Management page provide menu related to "MEAP Application Configuration Service" for managing MEAP application setting information and menu related to "MEAP Application Log Service" for managing log information respectively.




F-2-354

### MEAP Application Configuration Service

This service is used to manage the MEAP application setting information. It has functions such as saving setting information to the MEAP area. Ver 57 of MEAP Specifications supports this service.

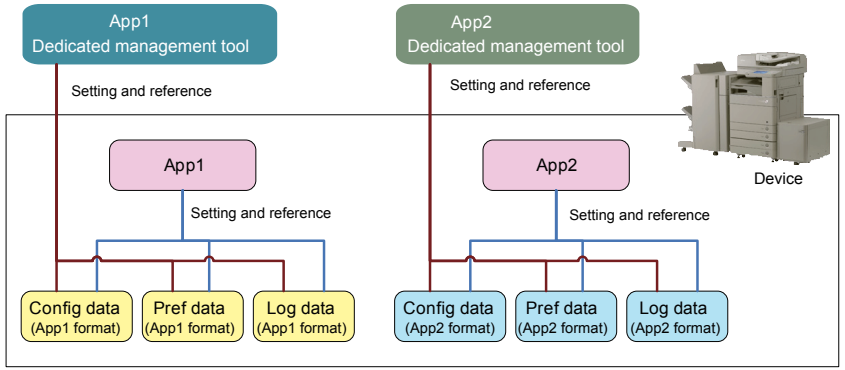
### MEAP Application Log Service

This service is used to collect MEAP application logs (debug logs and authentication logs). Ver 58 of MEAP Specifications supports this service.
The collected logs can be downloaded or deleted in user mode.
The settings such as the log level to be saved cannot be made from SMS.
These settings depend on the MEAP application. For detailed information, refer to the manual for the application.

## Advantages Obtained When Using the Services

By using MEAP Application Setting Information Management and MEAP Application Log Service, as long as the MEAP application supports these services, you can collectively perform data management tasks.

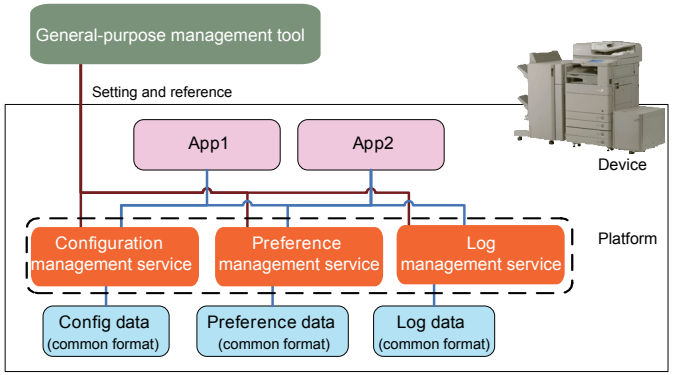
### Devices and MEAP applications which do not support new functions




F-2-355

As for devices and MEAP applications that do not support the service, the setting information and log data are managed on an application-by-application basis.

### Devices and MEAP applications which support new functions



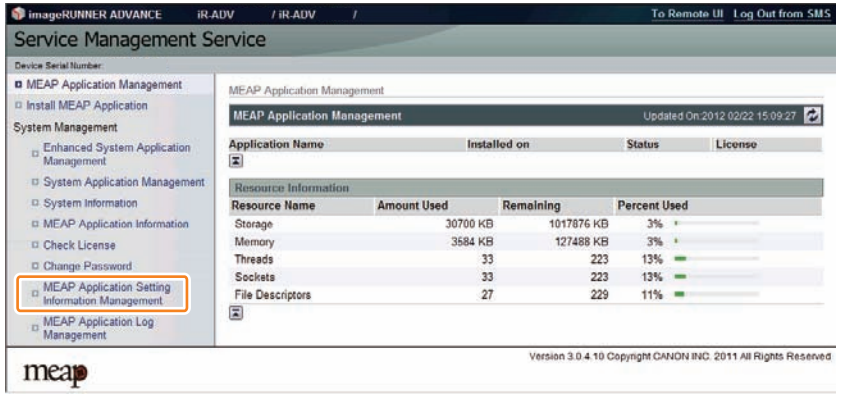

F-2-356

As for devices and MEAP applications that support the service, information can be collectively managed.

## MEAP Application Setting Information Management

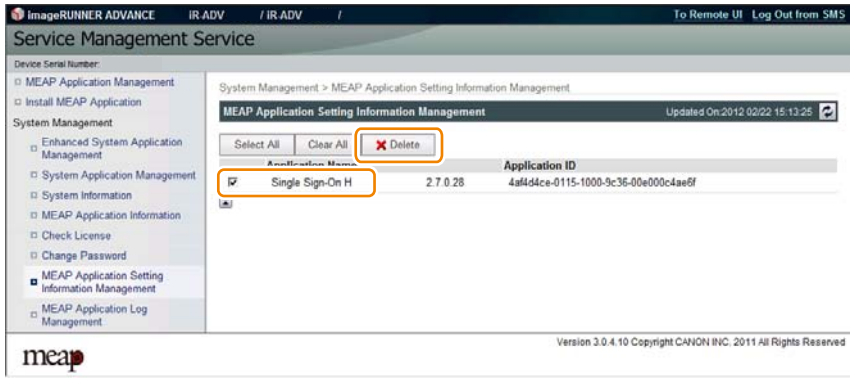
The setting data (stored on the device) of the MEAP applications which support MEAP Application Setting Information Management can be deleted. The procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Setting Information Management] on System Management menu.




F-2-357

3) Select an application you want to delete, and click the [Delete] button.



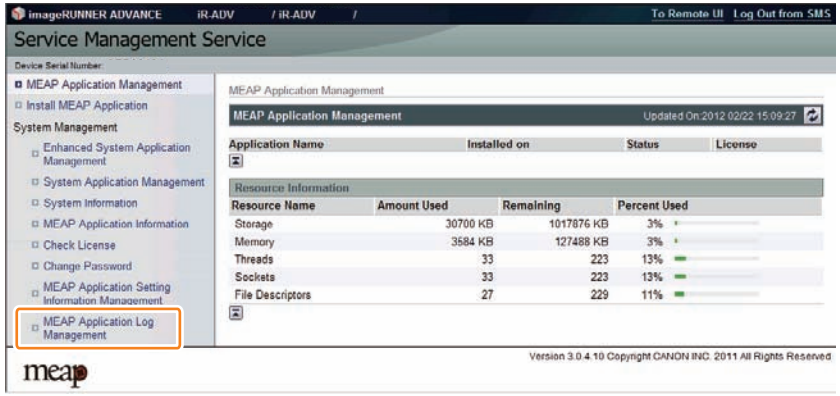

F-2-358

Note:
If a MEAP application that contains setting data which can be shared (not dedicated to the application) is installed, the application name [Shared Setting Information of Applications] is displayed.

## MEAP Application Log Management

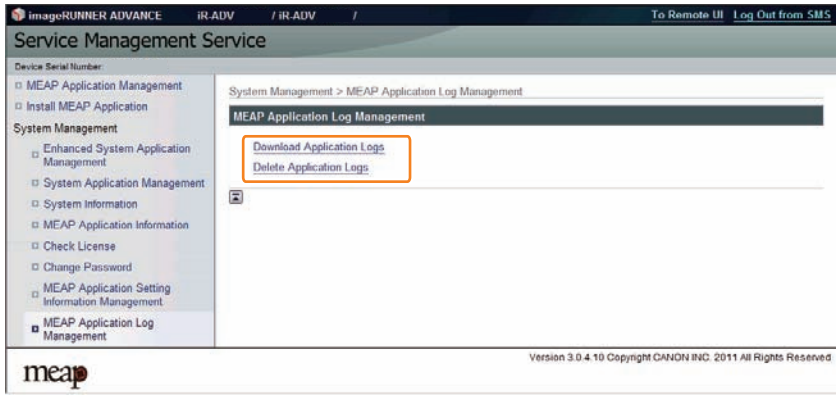
The log data (stored on the device) of the MEAP applications which support MEAP Application Log Service can be downloaded or deleted. The procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Log Management] on System Management menu.



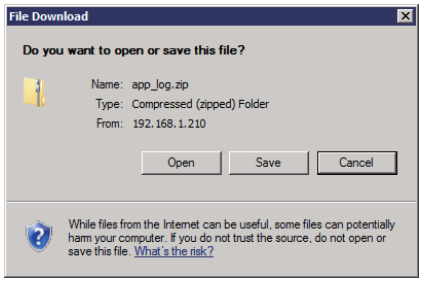

F-2-359

3) Select [Download Application Logs] or [Delete Application Logs].



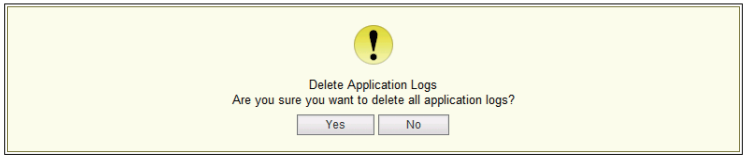

F-2-360

4) To download the logs
The file save dialog for the log file will appear. Specify the destination and save the file.




F-2-361

5) To delete the logs
The confirmation screen will appear to prompt you to delete the logs. Click the [Yes] button to delete the logs.




F-2-362

# Maintenance

## Backup of the MEAP Application Area and Recovery of the Backup Data Using SST

### Outline

When replacing or formatting the HDD, the data in the MEAP application area needs to be temporarily saved to your PC.
This chapter describes information on backing up the data in the MEAP application area and recovering the backup data.

In the case of MEAP-installed devices, the application is license-managed, so the application needs to be reinstalled and reconfigured when replacing or formatting the HDD.
In that case, a license for reinstallation needs to be downloaded and the customer data and configuration information need to be recovered, and these procedures pose heavy burdens on the service technician.

The area used for the MEAP application can be easily saved/recovered by using the backup function of SST (Service Support Tool).
This greatly reduces the work burden on the service technician.
Please note that the application cannot be illegally copied because the backup data can be recovered only when the iR device has the same serial number.

WARNING:

You must not perform any other work (including checking operation) until the HDD has been backed up. This arrangement is to prevent a mismatch of MEAP counter readings and the HDD contents, and any fault in operation arising as the result of failure to observe this will not be covered by the guarantee of operation.

Note:
The application that is installed with a reusable license can be reinstalled by using the same license.

### Backup Item Automatically Copied

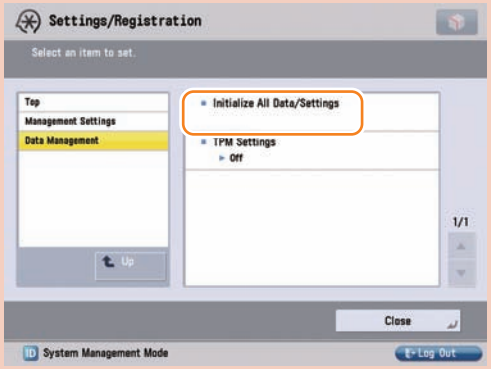
The following data are backed up using SST:

The following data are backed up (saved as Meapbackup.bin) using SST.

- MEAP applications.
- Setup data generated by MEAP applications (Note that image data stored in BOX will not be saved for MEAP applications using BOX function).
- User information data registered for local device authentication in SSO-H
- SMS password

CAUTION:

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.




F-2-363

When [Initialize All Data/Settings] is executed, the key used to combine encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to combine the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

## Data backed up using SST in the case of iR-ADV devices

In the case of iR-ADV devices, menus are implemented as MEAP application. Therefore the following items can be also backed up (stored as Meapbackup.bin).

- Setting items of each menu in the main menu ( Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox, ).
  - Favorite settings
  - Default settings
  - Settings of option shortcuts
  - Previous settings
- Settings of quick menu
  - Button size information
  - Wallpaper settings
  - Quick menu button information
  - Restrict quick menu use

## Requirements for Backup Using the SST

The following conditions must be met for use of the function:

1) Device Firmware Version
Device Firmware Version for SST (Ver4.2x)

| | Boot ROM | System | SST |
|---|---|---|---|
| iR-ADV C2030/C2020 series | Boot ROM is not equipped. | Already supported since the 1st version. | The version supporting the corresponding devices. |
| imageRUNNER ADVANCE series other than iR-ADV C2030/C2020 series | Already supported since the 1st version. | Already supported since the 1st version. | The version supporting the corresponding devices. |

T-2-112

2) SST Version
Version 4.2.x or later. An earlier version will not permit the use of the function. If needed, upgrade the SST.

3) Space for backup
To back up the HDD of the iR, the PC must have approx 1024MB of free space at maximum. Sizes of backup files depend on actual data capacities to be backed up.

## Procedure for backing up the MEAP application area using SST

1) Switching Login Service / Backup of Login User Information
If SSO-H is used for the login service, switch to default authentication before backing up the user information. Although SST will back up local device user information, it is recommended to export the user information just in case. For local device user information backup, go to User Management page of SSO-H site and export the data. (The SSO-H login page opens with the URL "https://<device IP address>:8443/sso/").

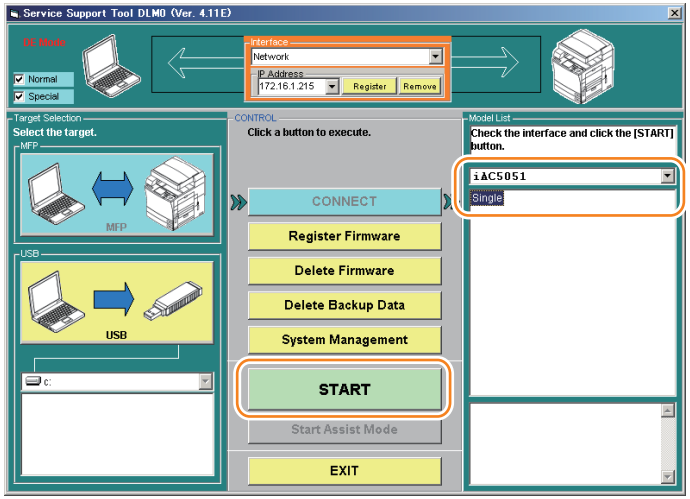
CAUTION:
- If a HDD of a system that uses SSO-H is formatted without changing the login service to the default authentication, the error message “The login service must be set again with SMS” appears and the system cannot start up when you attempt to restart the system after formatting.
- If this problem occurs, change the login service to SSO-H with SMS. If you cannot access to SMS since you do not have the IP address of the device, start the system with FIXIP mode -hold down the numeric keys 1 and 7 and turn the power switch on. The IP address “172.16.1.100” will be automatically assigned for the device. Then log in to SMS specifying the address.

2) Starting the device in Download Mode
Press [2] and [8] buttons at the same time on the control panel and turn on the main power switch to start the device in Download Mode. Note that SST backup function is enabled only in Download Mode.

3) Connecting the main unit to the PC to start SST
Connect the main unit to the PC with SST installed using the crossing cable and the like to start SST on the PC.

4) Connecting the device using SST

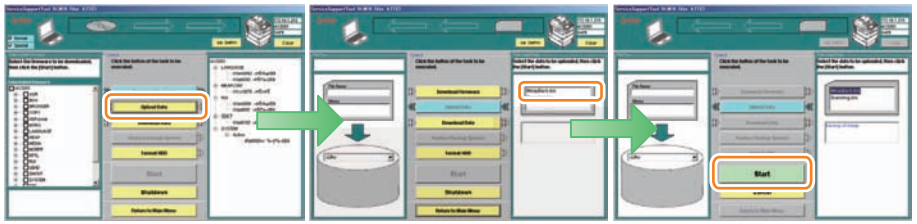
When starting SST, select the target device type as Single and click [Start] button.




F-2-364

5) Generating backup data to transfer it to the PC (uploading)

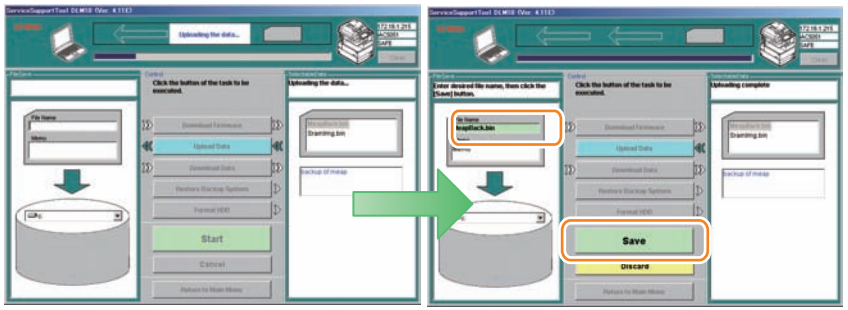
Click [Upload Data] button of SST and select “Meapback.bin” as the item to be backed up to click [ Start ] button.



F-2-365

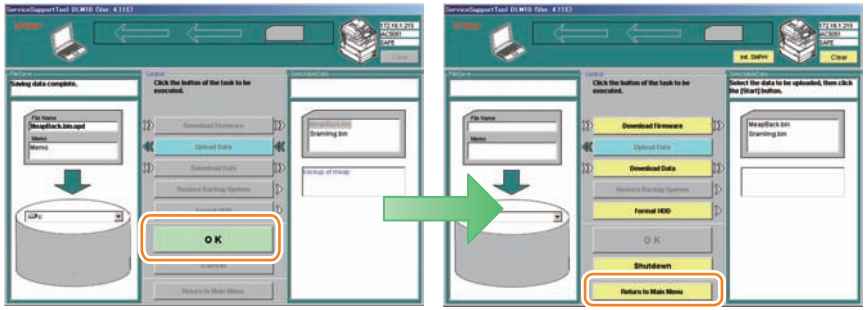
6) Saving backup data

Upon the backup data transferred to the PC, enter an appropriate file name and click [OK] to save the backup data on the PC.



F-2-366

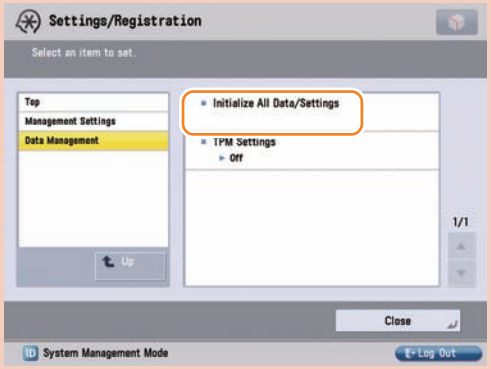
When the file is successfully saved, click [OK] button, and then click [Return to Menu] button.



F-2-367

CAUTION:

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.




F-2-368

When [Initialize All Data/Settings] is executed, the key used to combine encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to combine the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

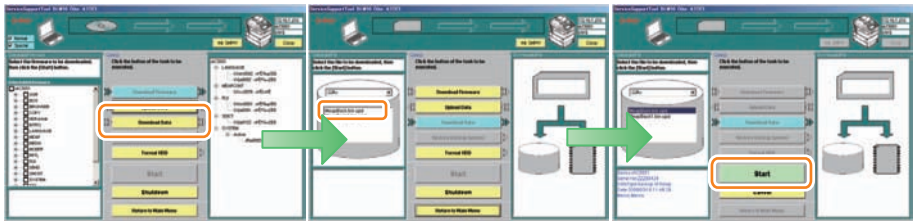
## Procedures to Restore Backup Data

1) Connecting to the device

Connect the device using SST by following step 1 to step 4 of the Procedure for backing up the MEAP application area using SST.

2) Restoring backup file

Click [Download Data] button and select the data backed up in the previous step (Meapback.bin) to click [Start Restoring Data]. Note that the data backed up in a different version cannot be restored.



F-2-369

3) Transferring Data

When the data is successfully transferred, click the [OK] button shown on the screen. To continue other jobs, click [Return to Menu] button.

F-2-370

4) Turn off and on the main power switch of the device to gain access in SMS to check that MEAP applications are surely restored.

5) Restore the backup data and setting saved. Note that the user information of the local device is included in the backup data, thus does not need to be restored.

# Formatting and Replacing the HDD

## Outline

If the HDD is broken or does not function correctly due to failure of the system (excluding the MEAP application), it needs to be formatted or replaced.
When the HDD is formatted or replaced, the files of the MEAP application stored in it will be lost, so make a backup of the MEAP application area according to “Procedure for backing up the MEAP application area using SST” if possible. If a backup cannot be made, the MEAP application and the license files need to be reinstalled.
As for the MEAP counter information, it will not be lost because it is backed up just like the conventional counter.

If a backup cannot be made, a special license file (a license file for installation with the expiration date carried over from the current counter value) is required to reinstall the MEAP application. This special license file is treated as a service tool and cannot be obtained by a general user.
In order to obtain a special license file, a service technician needs to contact a person in charge of support of a sales company.
When contacting the person in charge of support, the service technician also needs to provide the serial number of the device and the name of the MEAP application installed.

In the support departments of regional headquarters of Canon, all license files of the applications that have been issued are filed according to device serial numbers, enabling you to obtain a series of license files through a single screen as long as you can identify the serial number of the device in question.

Note:
The application that is installed with a reusable license can be reinstalled by using the same license.

## Formatting the HDD

### Procedure to format the hard disk

Follow the following procedure to format the HDD.

1) Connecting to the device
   Connect the device using SST by following step 1 to step 4 of "Procedure for backing up the MEAP application area using SST".

2) Formatting the HDD
   Select “Format HDD” from SST menu to format the HDD.

Note:
HDD can be formatted also by starting Download mode using the USB memory and executing formatting from the displayed menu.

## HDD replacement procedure

### Outline

The procedure for replacing the HDD differs according to whether the HDD functions normally or not.

### If the MEAP application area cannot be backed up

If the HDD does not function correctly due to failure or for other reason, the MEAP application area cannot be backed up. It is therefore necessary to reinstall the application after replacing the HDD. The procedure is shown below.

1) Preparation for replacement
   Copy a set of license files for reinstalling the MEAP application (special licenses and reusable licenses) to a laptop for service operation.
   Register a set of system files of a target product to SST. Or, prepare USB thumb drive of the System file transfer settlement.

2) Replacing the drive
   Prepare the necessary service parts of the HDD, and replace the drive.

3) Formatting HDD
   Format the HDD referring to Procedure to format the hard disk.

4) Reinstalling the MEAP application
   When the device has started normally, obtain the jar files of the MEAP applications from the user, and install them using the license files for reinstallation.
   Installation method is the same as normal installation.

5) Importing user information
   As necessary, make login service selections and import user information.

Note:
When you replace the HDD without uninstalling MEAP applications, make sure to reinstall the previously installed applications. Unless reinstalling them, MEAP counter will not be released and the message “The number of applications that can be installed has exceeded the limit. Try to install this application after uninstalling other applications.” is displayed so that the installation of new applications may not be accepted. If you want to install new applications in this case, once reinstall the applications in-stalled before formatting and uninstall unnecessary applications.

## If the MEAP application area can be backed up

If the MEAP application area can be backed up, it can be recovered after replacing the HDD, so it is not necessary to prepare the special licenses for reinstallation.

1) Preparation for replacement
   Back up the MEAP application area of the device according to the procedure for backing up the MEAP application area using SST.

2) Replacing the drive
   Prepare the necessary service parts of the HDD, and replace the drive.

3) Formatting HDD
   Format the HDD referring to Procedure to format the hard disk.

4) Restorering the backup file
   Restore the backup data referring to the Procedures to Restore Backup Data.

5) Importing user information
   As necessary, make login service selections and import user information.

# MEAP Safe Mode (level 2)

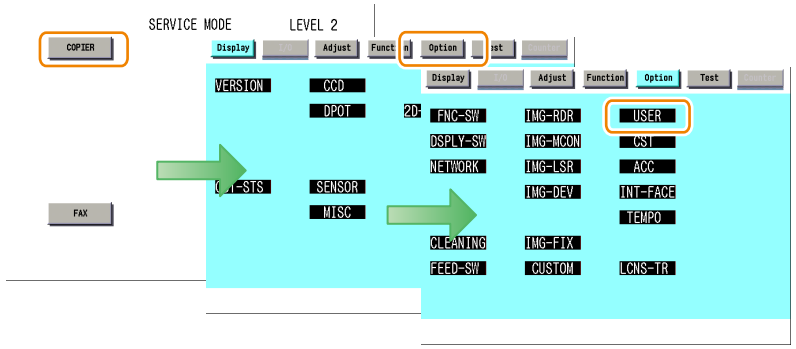
## Outline

Use safe mode if you need to start up the system without worrying about extra applications. It will start up only those system software files (including SMS) that normally start up as default files while preventing MEAP applications and the like from starting up.

When you have made changes and restart the device, the control panel will indicate 'MPSF' in its lower right corner. The MEAP applications that may have been active before you shut down the equipment will not start up on their own. Make use of safe mode when restoring the system software as when MEAP applications or services cause a fault as the result of a conflict or wrong sequence of registration/use. You can access to SMS in this condition so that you can take necessary measures, for example, you can stop application that may cause the trouble.
If default authentication has been selected, the mode of authentication remains valid; otherwise, the message "The login service must be set again with SMS" ap pears. Change the login service as necessary.

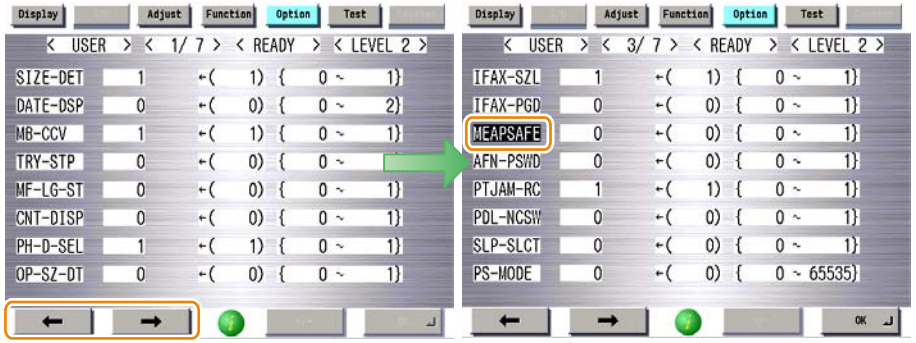
## Starting in Safe Mode

1) Startup [SERVICE MODE] in level 2.
2) Press [COPIER] >[Option] > [USER] buttons.




F-2-371

3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.




F-2-372

4) Press the 1 key on the control panel keypad to change the setting to '1'; then, click [OK] button.

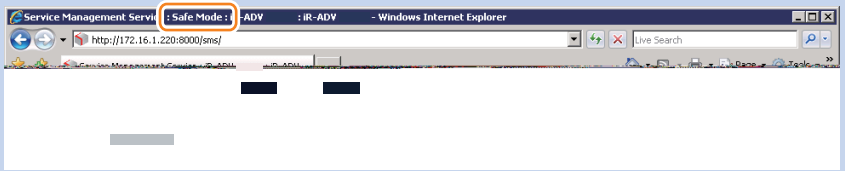
F-2-373

5) Check that the notation 'MPSF' has appeared in the upper left corner of the screen; then, restart the device.

F-2-374

Note:
If accessed to SMS in MEAP SAFE mode, the device started mode is shown on the title bar of the browser.

An example of the title bar displayed at the time of startup in MEAP SAFE mode
Service Management Service : <Device Name>:<Product Name>: Safe Mode

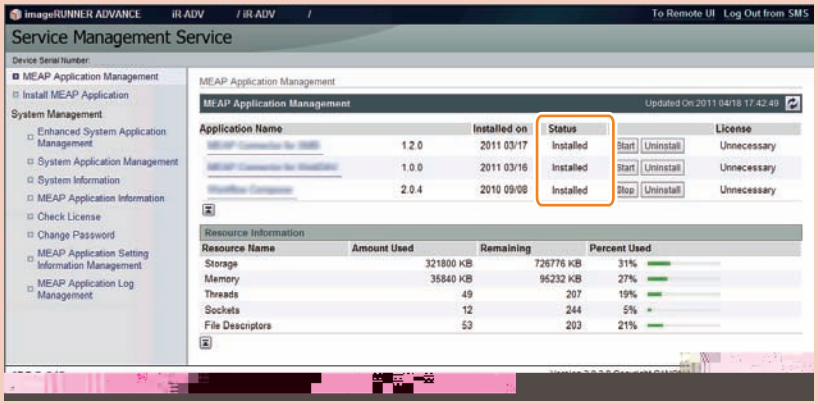



F-2-375

CAUTION:

If the device has been started in MEAP SAFE mode, all the MEAP applications stop and the status becomes "Installed".

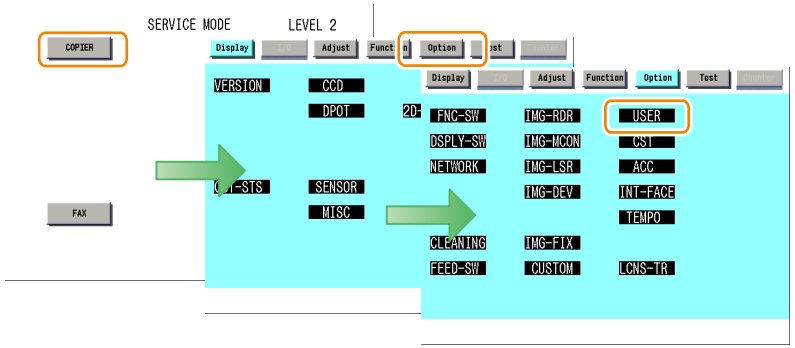
This status remains unchanged even if the MEAP SAFE mode is canceled and the device is started again in normal mode. It is therefore necessary to access SMS after normal startup and start the MEAP application.




F-2-376

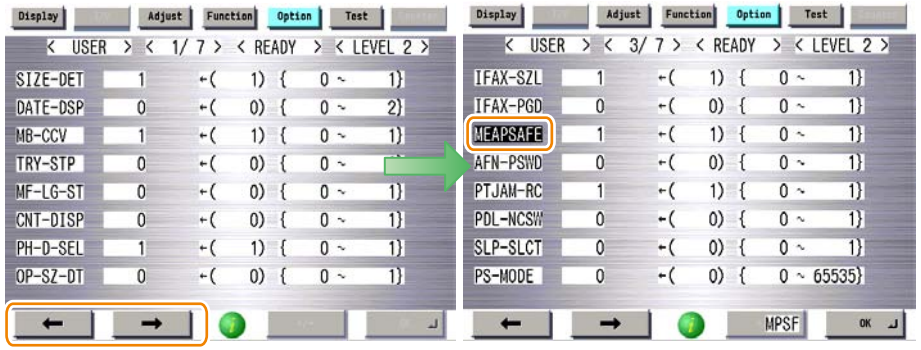
## How to cancel MEAP SAFE mode

1) Startup [SERVICE MODE] in level 2.
2) Press [COPIER] >[Option] > [USER] buttons.




F-2-377

3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.




F-2-378

4) Press the 0 key on the control panel keypad to change the setting to '0'; then, press [OK] button.

F-2-379

5) Start service mode again after rebooting the device, and check that the displayed setting value has changed to "0" and that [MPSF] is no longer displayed at the upper left of the screen.

F-2-380

# Collection of MEAP Console Logs

## Overview

When debugging a MEAP application, console logs need to be collected in some cases. The following shows how to collect MEAP console logs using commercially available terminal software and service mode.

## What to Prepare

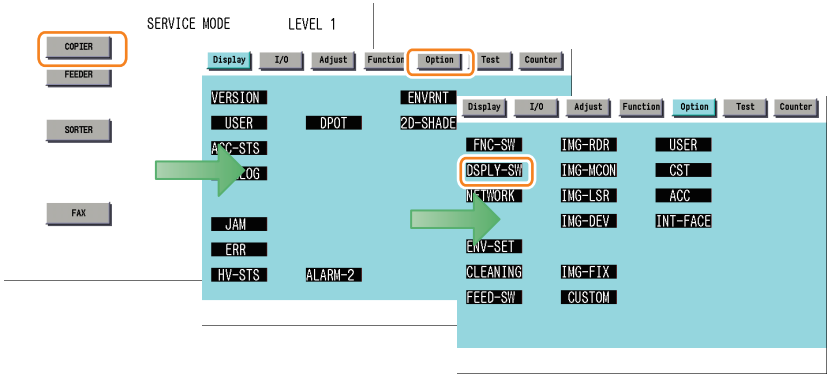
- PC connected with the same network as the device
- Commercially available terminal software

> Note:
> In the procedure shown in this manual, "Tera Term Pro" and "Hyper Terminal" are used as the terminal software.

## Work Procedure

### Device Setting Procedure

1) Start [ SERVICE MODE ] in Level 1.
2) Press [ COPIER ] > [ Option ] > [ DSPLY-SW ] buttons.

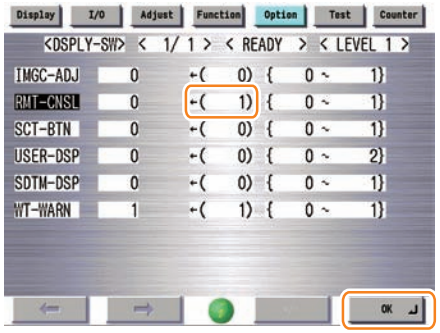



F-2-381

3) Press [ RMT-CNSL] button.

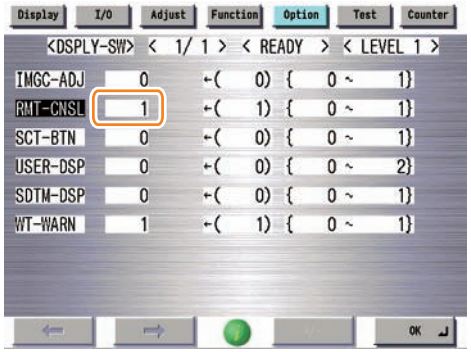
F-2-382

4) Press either 1 (activate remote console function) on control panel (the numerical value input in the field is displayed), and press [ OK ] button.




F-2-383

5) Check to see that it is reflected in setting field, and restart the device.

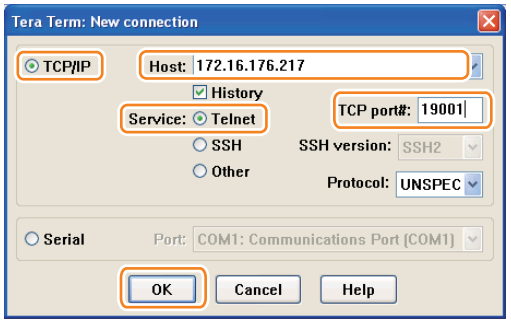



F-2-384

## PC setting procedure (when Tera Term is used)

1) Install the terminal software on the PC.

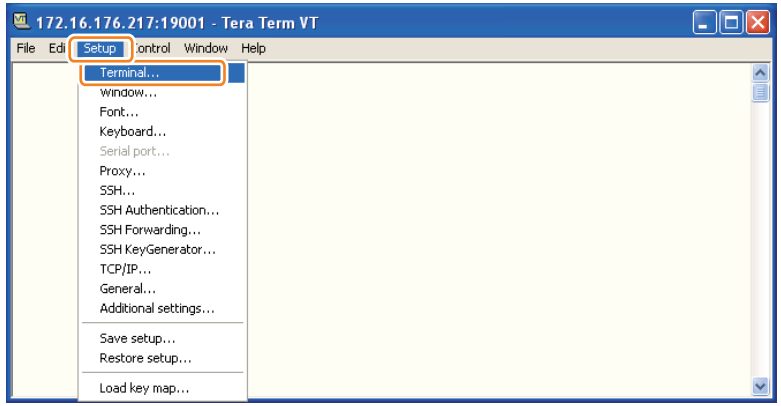
2) Start the terminal software, make the following settings, and then click the "OK" button.




F-2-385

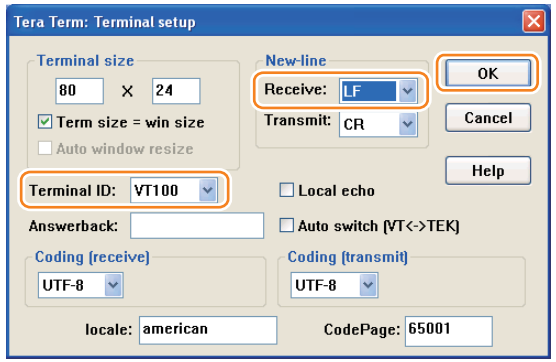
| | |
|---|---|
| Connection | : Select [TCP/IP] (Default) |
| Host | : Device Host Name or IP Address |
| Service | : Select "Telnet" |
| TCP port# | : Enter 19001 |

3) The connection window will open. Select [Terminal…] from the [Setup] menu.




F-2-386

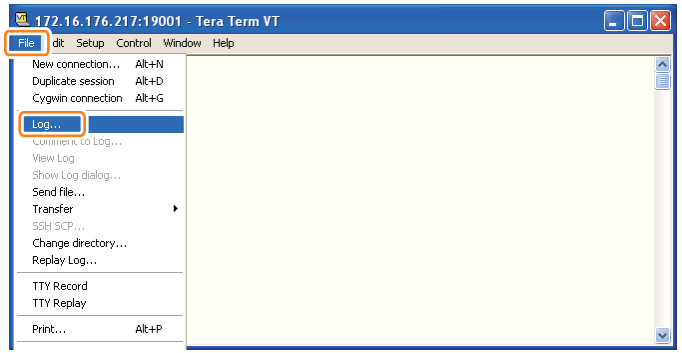
4) The terminal setting screen will appear. Make the following settings, and then click the "OK" button.




F-2-387

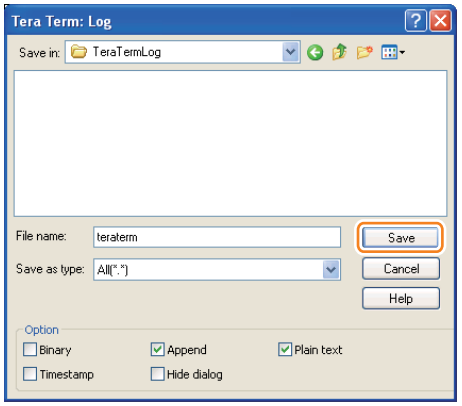
Terminal ID : VT100
New-line Receive : LF

5) Select [Log...] from the [File] menu.



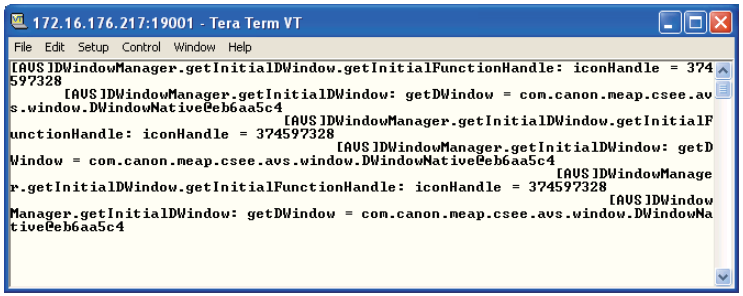

F-2-388

6) The dialog for specifying the save destination of the log file will appear. Set the save destination path and the file name, and then click the [Save] button.



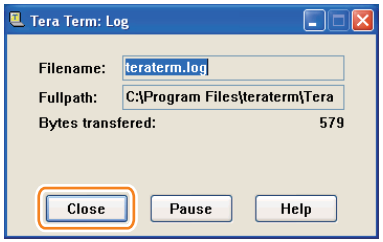

F-2-389

7) Perform the operation whose log you want to collect.




F-2-390

8) Click the [Close] button in the log dialog.

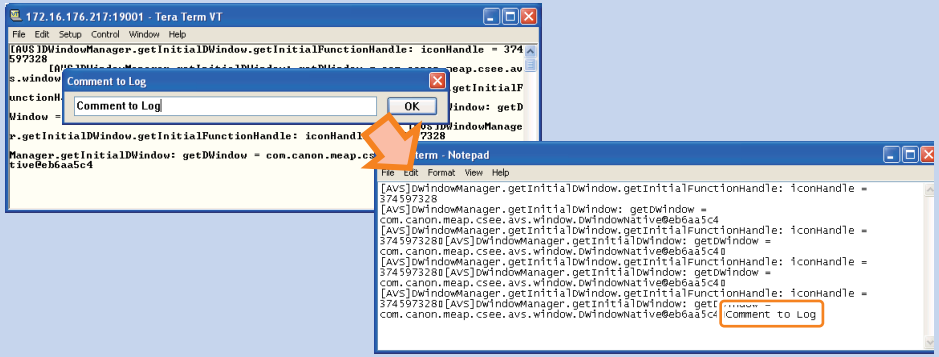



F-2-391

Note:
To suspend log collection, click the [Pause] button.

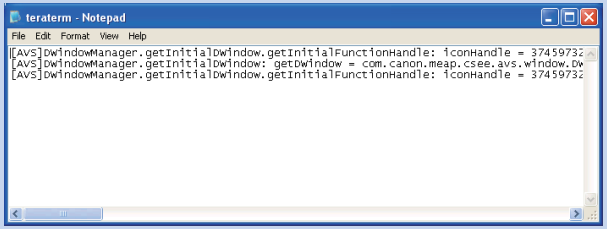
Note:
While collecting logs, the following operations are available from the [File] menu.

Comment to Log... :
You can add a comment to the log being collected. The added comment is reflected in the log file.



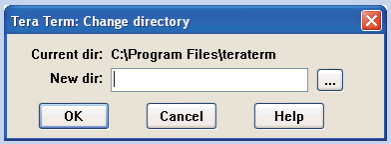

F-2-392

Show Log dialog... :
The logs that have been collected are pasted on Notepad and displayed.



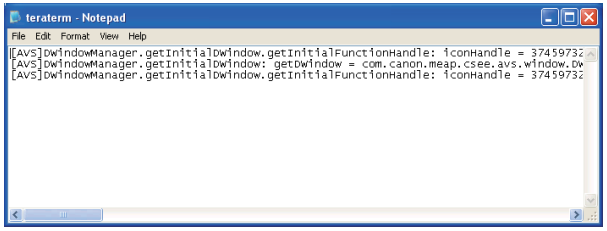

F-2-393

Change directory... :
The preliminarily set save destination of the log file can be changed.




F-2-394

9) Open the file saved in the save destination, and check that the logs are stored correctly.



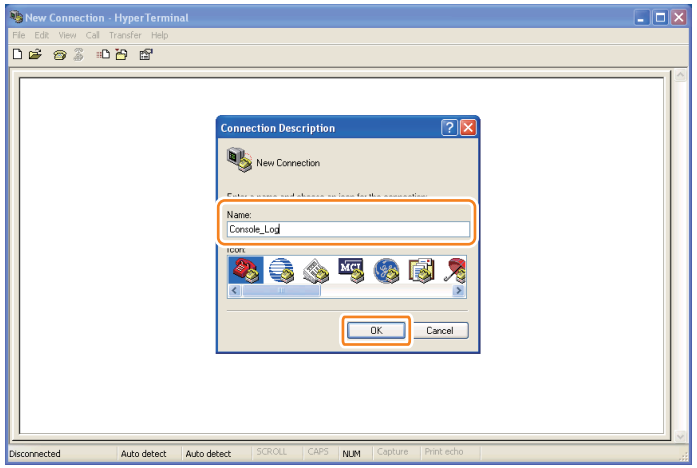

F-2-395

Note:
Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

CAUTION:
After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).

## PC setting procedure (when Hyper Terminal is used)

1) Start Hyper Terminal, set the connection name in the [Connect Description] dialog that appears on the screen, and then click the OK button.

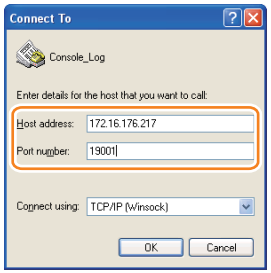



F-2-396

2) Set [TCP/IP(Winsock)] for [Connect using].

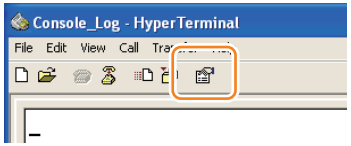
F-2-397

3) Enter the IP address of the target device in [Host address], and enter "19001" (fixed) in [Port number].



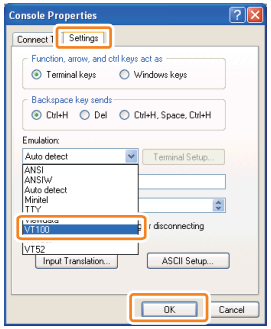

F-2-398

4) Click the "Properties" icon on the Hyper Terminal screen.



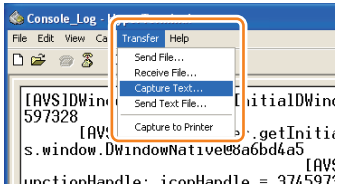

F-2-399

5) The [Console Properties] dialog will appear. Select the [Settings] tab, select [VT100] for [Emulation], and then click the [OK] button.



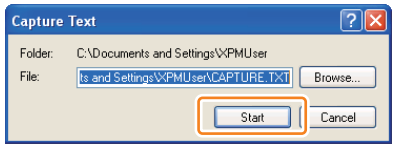

F-2-400

6) Return to the Hyper Terminal window, and select [Transfer] > [Capture Text...] from the menu.



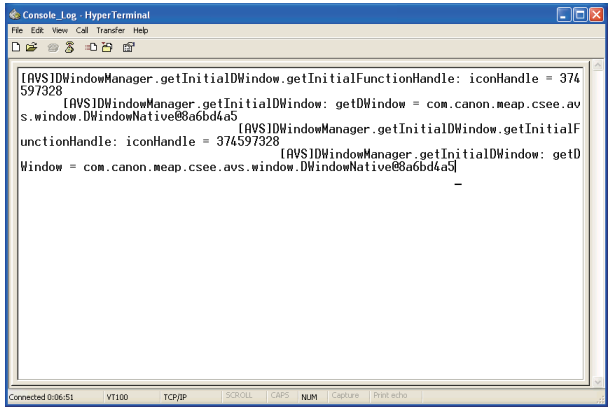

F-2-401

7) The dialog for specifying the save destination of the log file will appear. Specify the save destination.



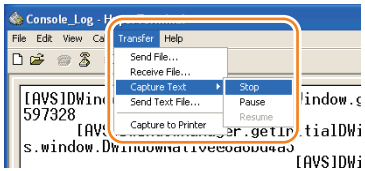

F-2-402

8) Perform the operation whose log you want to collect.



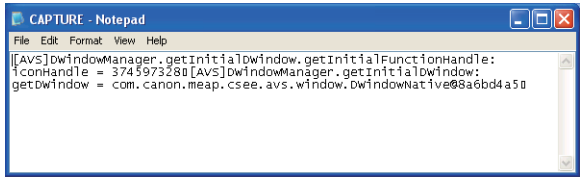

F-2-403

9) Select [Transfer] > [Capture Text...] > [Stop] from the menu.




F-2-404

10) Open the file saved in the save destination, and check that the logs are stored correctly.




F-2-405

Note:
Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

CAUTION:

After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).

# Using USB Devices

## USB Driver

### Two types of USB drivers

While the USB driver that can be used in iR series is only the USB driver designed exclusively for MEAP application (hereinafter referred to as “MEAP driver”), not only MEAP driver but also USB system driver (hereinafter referred to as “system driver”) can be used in iR-ADV series.

System driver and MEAP driver cannot be used together. When either of them is used, the other driver cannot be used.

### USB driver setting (iR-ADV series):

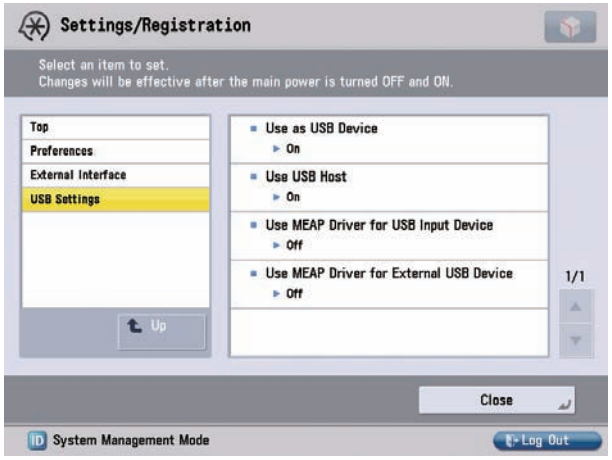
System driver is active by default in iR-ADV series.

The driver can be changed in Settings/Registration (user mode).

Usually, It is not necessary to change the setting because it is specified in the MEAP application side.

Only in the case of a special MEAP application, it is necessary to change the USB driver setting.

For details, refer to specifications of MEAP application side.




F-2-406

| Operating mode settings [Use MEAP driver as USB input device] | Conventional USB keyboard enabled MEAP application | Software keyboard application (System Driver/ MEAP Driver) | System driver supported MEAP application |
|---|---|---|---|
| ON<br>* MEAP driver (conventional compatibility mode) | Can use USB keyboard. Can work only on the conventional applications that support the MEAP application driver. | Cannot use USB keyboards. (Device cannot be detected.) | Cannot use USB keyboards. |
| OFF (*default)<br>* Native driver | Cannot use USB keyboards. (Device cannot be detected.) | Can use USB keyboards. | Can use USB keyboards. Via software keyboards only. |

T-2-113

Note:
When any settings changes are made, the device must be restarted.

### Setting the USB driver for each USB device (MEAP driver preference registration)

If it is set to use the system driver, the conventional applications that support the MEAP application driver cannot use the USB input device.
Therefore, for the USB drivers used by USB devices/MEAP applications, there is setting function (MEAP driver preference registration) to give priority to the MEAP driver.
If you register the ID of the USB device by using this function, the USB device can use the MEAP driver despite the Additional Function settings.

Using this function requires the conditions below:

- Supported MEAP SpecVer: 26
- Describe the idVendeor(VID) and idProdutc(PID) of USB device in the manifest or activate/ deactivate the VID and PID by calling API from MEAP applications.

The driver setting that is used in a manifest file is reflected in the following timing.

When registering from a manifest file.

- The registration will be enabled when an application is activated and device is restarted.
- The registration will be disabled when an application is stopped and device is restarted.

Note:
You can display/check the used driver setting at “USB device report print” described below regardless of whether it is registered from a manifest file or is registered from API.

Availability for MEAP application of the USB device A (either HID keyboard or Mass Storage) plugged to iR device

| Registration status of USB device A | When the HID keyboard is installed > USB Settings: [Use MEAP Driver for USB Input Device]<br>When the Mass Storage is installed > USB Settings: [Use MEAP Driver for External USB Device] | Native application | MEAP application | | |
|---|---|---|---|---|---|
| | | | System driver supported application | System driver not supported/ conventional application | Application with VID/ PID declared in Manifest for x |
| Not registered | OFF | YES | YES | NO | |
| | ON | NO | NO | YES | |
| Registered | OFF | NO | NO | YES | YES |
| | ON | NO | NO | YES | YES |

T-2-114

YES: USB device available NO: USB device not available

Availability for MEAP applications of USB devices B and C (either HID keyboard or Mass Storage) plugged to iR device

| Registration status of USB device B | Setting to use MEAP driver (Additional Functions mode) | USB device | Native application | MEAP application | | |
|---|---|---|---|---|---|---|
| | | | | System driver supported application | System driver not supported / conventional application | Application with VID/PID declared in Manifest for B |
| Registered | Not used (Native driver to be used) | B | YES | YES | NO | |
| | | C | YES | YES | NO | |
| | To be used | B | NO | NO | YES | |
| | | C | NO | NO | YES | |
| Not registered | Not used (Native driver to be used) | B | NO | NO | YES | YES |
| | | C | YES | YES | NO | NO |
| | To be used | B | NO | NO | YES | YES |
| | | C | NO | NO | YES | YES |

T-2-115

YES: USB device available NO: USB device not available

### Specifications for the use of USB keyboards

Characters that could be entered on the software keyboard displayed on the conventional control panel can be entered using a USB connected keyboard.

- When the software keyboard window is displayed, characters can be entered from the USB keyboard (in-line entry not possible).
- When the software keyboard window is not displayed, entered characters will not be remembered.
- The characters, which can be entered from a USB keyboard, is only a character, which can be entered from the software keyboard.
- Even if characters are entered from the USB keyboard, the software keyboard window will not change (the corresponding key does not invert or change color).
- Input from the USB keyboard can be accepted at the same time as input from the software keyboard or numeric keys.
- Since the device supports Plug and Play, the USB keyboard can be disconnected/ connected freely. However, do not disconnect and connect during in deep sleep (when in sleep with setting "low" at "the power consumption in sleep"). It is out of an operation guarantee to disconnect and connect the USB keyboard in deep sleep.
- When USB device is attached to iR device, iR devices do not shift to deep sleep mode.
- Keyboard layout changes according to the keyboard layout settings in the Settings/ Registration screen. In addition, function keys and ten keys which are not displayed in the software keyboard cannot be used. (Keyboard which the operation check was conducted is 84-key Keyboard, but this does not mean that the operation of all 84-key Keyboards is guaranteed.)

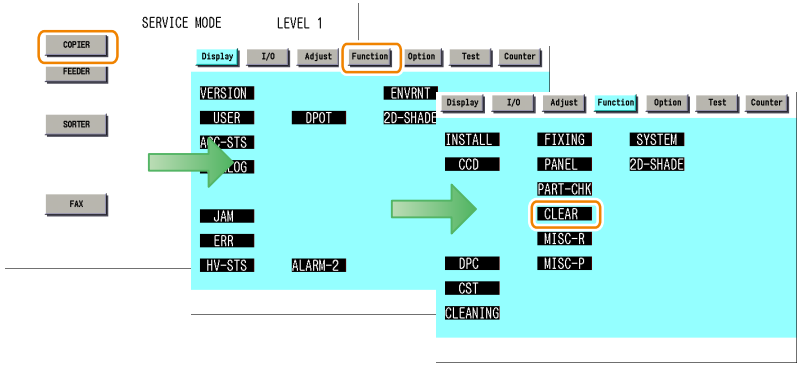
Note:
The factory shipment default setting is to enable the use of native (main unit functionality) USB keyboards. Therefore, in order to use MEAP application keyboards, [Use MEAP driver for USB input device] under [System management settings (initial settings/ registration)] needs to be set to ON (factory shipment setting is OFF).
Operations change as described below in accordance with ON/ OFF settings.
ON: when using MEAP application keyboard
OFF: when using native (main unit functionality) keyboard (factory shipment default)

## Initialization of MEAP driver priority registration

When any trouble occurs regarding USB driver settings and it is necessary to reset the setting information, you can reset the MEAP driver preference registration by using service mode.

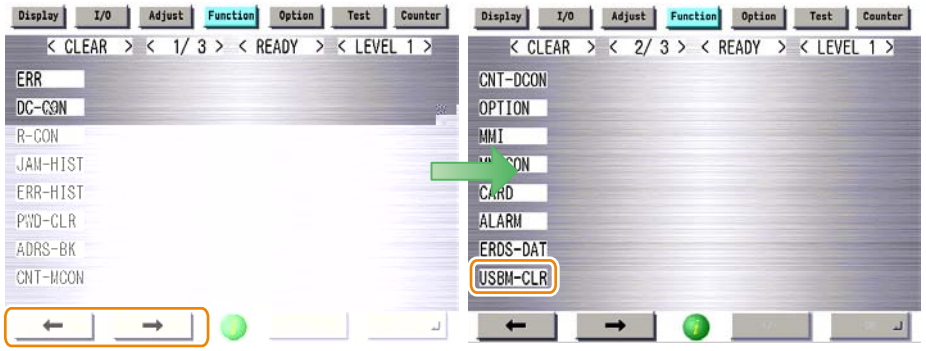
### Steps to initialize preference use registration

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Function] > [CLEAR] > buttons.



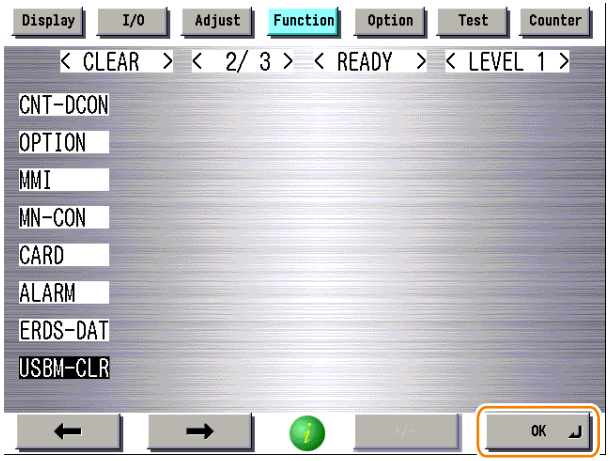

F-2-407

3) Press ← or → button for several times until [USBM-CLR] is shown on the screen. Press [USBM-CLR] button.




F-2-408

4) Press [OK] button to restart this device.



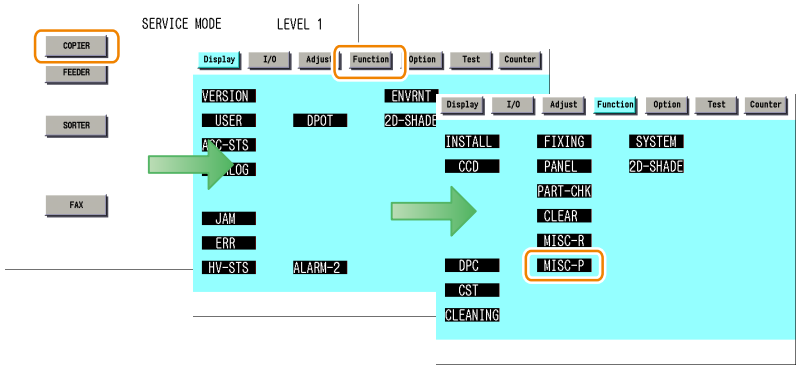

F-2-409

## USB Device report print

To check the vendor IDs (idVendor) and the product IDs (idProduct) registered in this device by means of declaration in Manifest file of MEAP applications, output the USB Device repot report print.

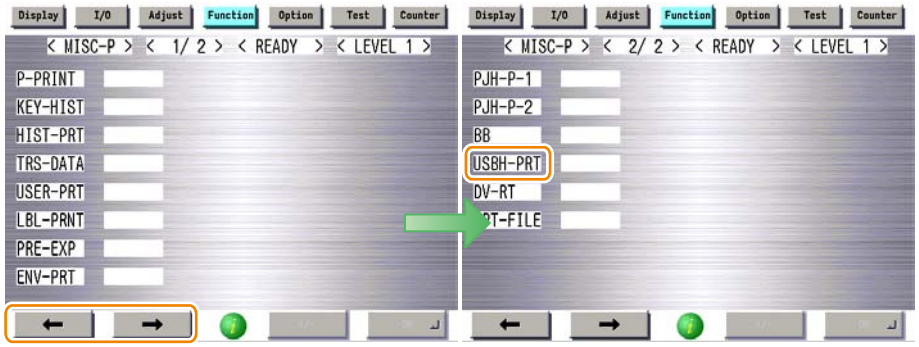
### Steps to output the USB Device report print

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Function] > [MISC-P] > buttons.




F-2-410

3) Press ← or → button for several times until [USBH-PRT] is shown. Press [USBH-PRT] button.




F-2-411

4) When pressing [OK] button, [ACTIVE] blinks on the status field.

F-2-412

5) When [OK] is shown on the status field, the status print is output. Check the contents of the print.

F-2-413

Example of output result

```
*******************************
*** USB Device report print ***
*******************************

USB device information

T: Bus=01 Lev=02 Prnt=03 Port=01 Cnt=01 Dev#= 5 Spd=480 MxCh= 0
D: Ver=2.00 Cls=00(>ifc) Sub=00 Prot=00 MxPS=64 #Cfgs= 1
P: Vendor=066f ProdID=4210 Rev=10.02
S: Manifacturer=SigmaTel, Inc.
S: Product=STIr42xx
S: SerialNumber=0002F0F7261287A5
C:* #Ifs= 1 Cfg#= 1 Atr=80 MxPwr=100mA
I: If#= 0 Alt= 0 #EPs= 2 Cls=fe(app.) Sub=02 Prot=00 Driver=irda-usb
E: Ad=81(I) Atr=02(Bulk) MxPS=512 Ivl=0ms
E: Ad=01(O) Atr=02(Bulk) MxPS=512 Ivl=0ms
```

F-2-414

## USB device information Content

Display the information of the USB device, which the device recognized.
If not displayed, there may be some fault occurred.
Some of standard optional devices are not displayed on a report.
The details of each item are as follows.

T : Topology
Internal hierarchical structure, which a USB device is connected, is shown. The number of a connected bus, the hierarchical structure and connection speed can be indicated.

D : Device
Information of USB devices is shown.

P : Product
Product information of USB devices is shown. Vendor ID and Product ID can be recognized here.

S : String
The character string embedded in a USB device is shown. A manufacture name and a product name can be recognized here.

C : Configure
The configuration information of a USB device is shown. * mark is to know whether it is active.

I : Interface
The interface information of a USB device is shown. Interface class and the driver to handle can be recognized.

The value and the content of Driver are as follows.

| Labeling | Content |
|---|---|
| usbhid | It is displayed when the USB system driver is assigned to the input device connected. |
| usb-storage | It is displayed when storage devices (USB memory storage etc.) are connected. |
| irda-usb IrDA | It is displayed when the dongle is connected. |
| hub | It is displayed when HUB is connected. |
| gpusb | It is displayed when the USB driver only for MEAP application is assigned to the input device connected. |
| gpusbex | It is displayed when a USB device, which specific vendor ID/ Product ID are preferentially registered using a manifest and MEAP API, is connected and the USB driver only for MEAP application is assigned. |

T-2-116

E:Endpoint
The Endpoint information of a USB device is shown.

Right or wrong of report output

| Connecting device | | User installation | Report printing |
|---|---|---|---|
| HID | | Available | Yes |
| Storage | | Available | Yes |
| FAX | | Not available | No |
| USB Device Port | IrDA | Not available | Yes |
| | Multimedia Card Reader | Not available | Yes |
| | IC Card Reader | Not available | Yes |
| Image Data Analyzer Board-A1 | | Not available | No |
| Hub | Internal Hub* | Not available | No |
| | External Hub | Available | Yes |

* USB Device Port-B1 Hub for device ports installed at the introduction

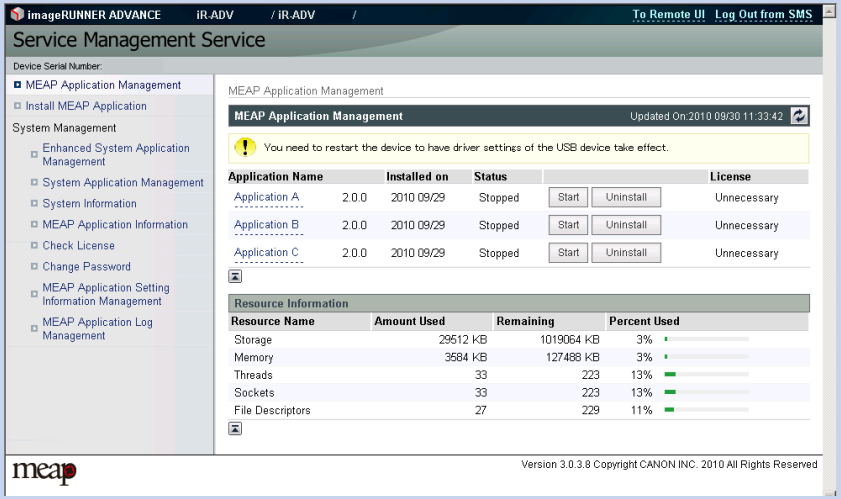
T-2-117

### The content of MEAP preferred device information

Display the information of the application or a USB device, which preferentially registered with MEAP application.
By seeing this information, it can check which Application ID of the MEAP application is in the status using a specific USB device.

AppID : Application ID
VID : Vendor ID
PID : Product ID

Note:
By starting, stopping or uninstalling a MEAP application, the driver settings of the USB device may be changed. If the device needs to be restarted following this setting change, a message prompting the user to restart the device is displayed.




F-2-415

## Integrated Authentication Function

### Sharing the Authentication Information

Separately managing the authentication information at login and the authentication information for MEAP applications creates inconveniences such as that the authentication process is executed many times.
In order to solve this problem, the device has an integrated authentication function. This function allows authentication information to be shared between MEAP applications in a MEAP environment.
The supported version of MEAP Specifications is Ver.59, which needs to be supported by both the device and the MEAP application in order to use this function.
There are 2 types of authentication information that can be shared: Volatile Credential whose registered information is discarded at the time of logout or shutdown of the device and Persistent Credential whose registered information is not discarded at the time of logout.

### Volatile Credential

Volatile Credential is used in cases where the authentication information is shared between applications which use the same security domain for authentication.
The credential is registered mainly by the login application, therefore the applications which access the security domain that was used for authentication by the login application can use the credential.

### Persistent Credential

Persistent Credential is used to help entry of authentication information when accessing a different security domain for authentication.
The credential is registered mainly by general MEAP applications, and the authentication information can be reused when the same user logs in for the second time or later.

## Comparison of Functions

| | | Volatile Credential | Persistent Credential |
|---|---|---|---|
| Registered information | | Character strings and arbitrary Java objects | Character strings only User ID/Password/ Domain/Arbitrary character strings |
| Lifetime | Registration | At login (the login application), and at any timing of registration by an application | At any timing of registration by an application |
| | Deletion | Can be used until logout/shutdown. | Can be used until deletion by the application or management tool. |
| Encryption of credential data | | Not supported | Data retained on the HDD is encrypted. |
| Store (Save) to | | Memory in the device | HDD in the device |

T-2-118

## Disabling the Integrated Authentication Function

If you do not want Volatile Credential to be used from a security standpoint, the function can be disabled.

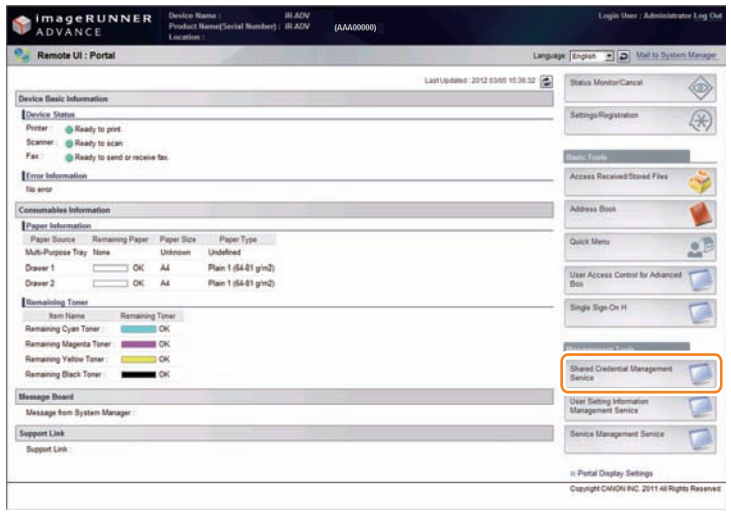
The function can be disabled from remote UI or service mode.

Persistent Credential cannot be disabled.

On the setting screen of remote UI, the function can be disabled on a protocol-by-protocol basis.

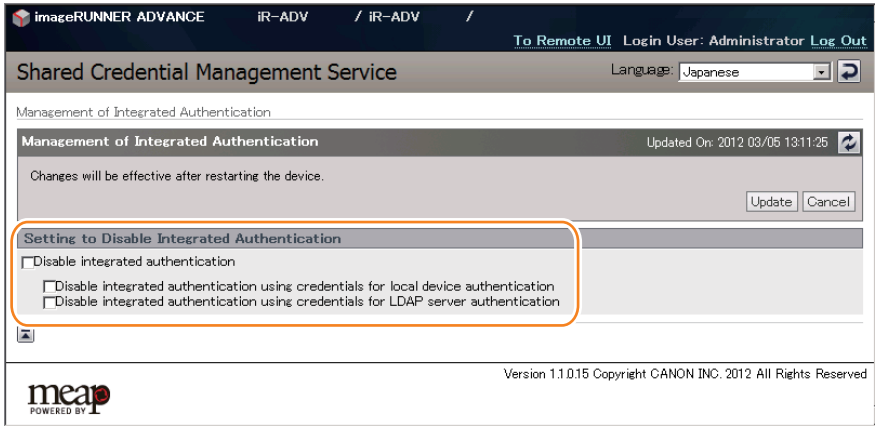
### Remote UI

You can access the setting screen on remote UI for disabling integrated authentication as shown below.




F-2-416

Select the item you want to disable, and click the [Update] button.




F-2-417

- [Disable integrated authentication]: The integrated authentication function is disabled regardless of the authentication method.
- [Disable integrated authentication using credentials for local device authentication]: The integrated authentication function is disabled only at the time of local device authentication.
- [Disable integrated authentication using credentials for LDAP server authentication]: The integrated authentication function is disabled only at the time of LDAP server authentication.

### Service mode

The location of the service mode setting for disabling integrated authentication:

Setting value: 0 = Enabled, 1 = Disabled

F-2-418

## Points to Note When Enabling the [Quick Startup Settings for Main Power] Setting

If some of the MEAP applications are running on the device, the following problems will occur.

### The [Quick Startup Settings for Main Power] setting cannot be enabled.

If a MEAP application that restricts the device from shifting to deep sleep mode is running, even when the setting of [Quick Startup Settings for Main Power] is enabled (On), the device starts normally instead of quick startup.
In that case, it does not affect the behavior of the MEAP application.

### Changes made in the settings of a MEAP application are not reflected.

If the startup setting [Quick Startup Settings for Main Power] is enabled (On), even when the Main Power Supply Switch of the machine is turned OFF, a shutdown process is not executed internally.
Therefore, in the case of a MEAP application where changes in settings are enabled when the device is restarted, changes in settings are not reflected just by changing the settings.
Follow either of the restart procedures shown below to enable the changes made in the settings.

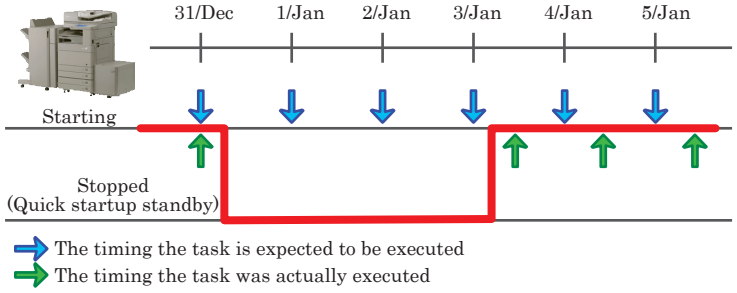
- Execute restart from remote UI.
- Turn OFF the Main Switch, and then turn it ON within 20 seconds.

### After recovery from quick startup, MEAP applications do not work properly.

MEAP applications that are scheduled to execute processes at specified times may not work properly after recovery from quick restart.
Unexpected problems such as that the application executes a task at an unexpected timing may occur.
Problems may occur in the following two cases.

#### In the case of "Schedule: Execute the task every 24 hours"

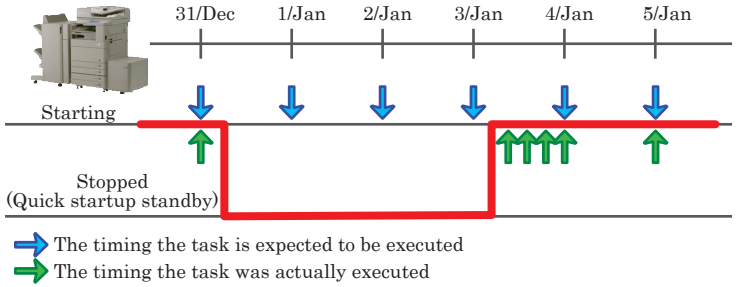
A schedule is set to start the specified task at the specified time and repeat "fixed-delay execution".
If execution is delayed for some reason, the delay time is ignored.
Problem: If 24 hours have passed since the last execution of the task, the task is executed only once.
=> The task may be executed at a timing other than the time the user expects it to be executed.




F-2-419

#### In the case of "Schedule: Execute the task at 00:00 every day"

A schedule is set to start the specified task at the specified time and repeat "fixed-rate execution".
If execution was delayed for some reason, two or more tasks are continuously executed to "make up for the delay".
Problem: The tasks of Jan. 1, Jan. 2, and Jan. 3 are executed after quick startup.

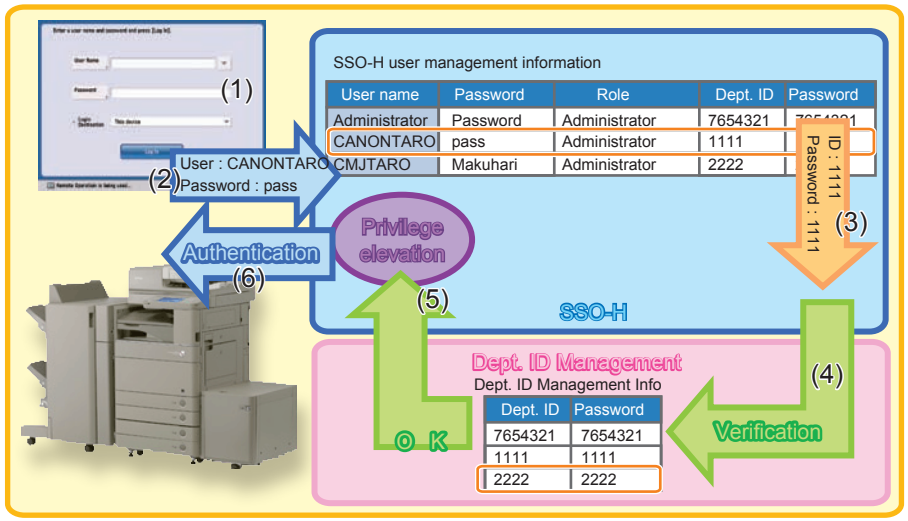



F-2-420

# Remedy to Be Performed When the Device Has Become Unable to Be Logged in

## Overview

Department ID Management and SSO-H (Local Device Authentication) manage user information separately. Therefore, in order to allow coexistence of Department ID Management and SSO-H, it is necessary that the information of SSO-H and the information of Department ID Management are the same.



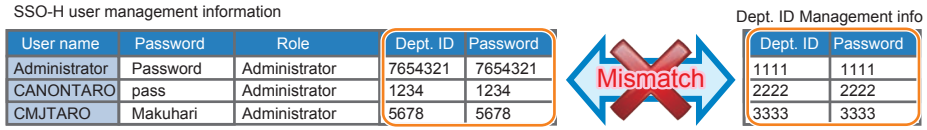

F-2-421

1) The user enters the ID and password of SSO-H to a device where both SSO-H and Department ID Management are enabled.
2) SSO-H checks the entered ID and password with the SSO-H user information table.
3) SSO-H sends the department ID and password which correspond to the entered ID and password to the department ID management function.
4) The department ID management function checks the department ID and password sent from SSO-H with the user information table.
5) The user is elevated to the corresponding privilege.
6) The user is authenticated.

If the department ID and password registered in the user information of SSO-H do not coincide with the department ID and password registered in the Department ID Management, the authentication ends in failure and the user can no longer log in to the device.

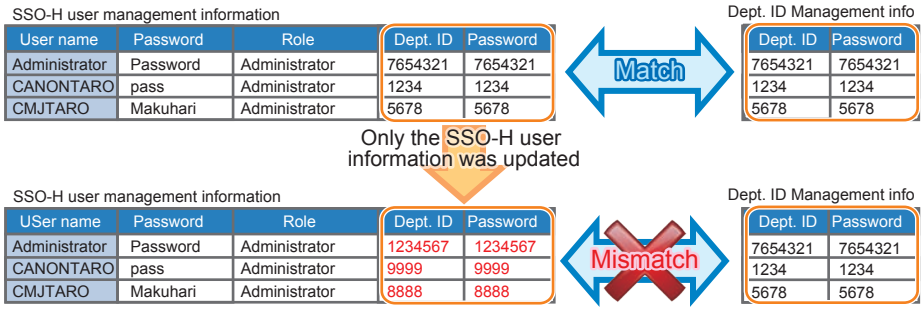
The user information of SSO-H does not coincide with the user information of Department ID Management in the following cases:

- The user information of SSO-H was different from that of Department ID Management when Department ID Management was enabled.
  Department ID Management was enabled before changing the department ID and password registered in SSO-H to match with the information of Department ID Management.



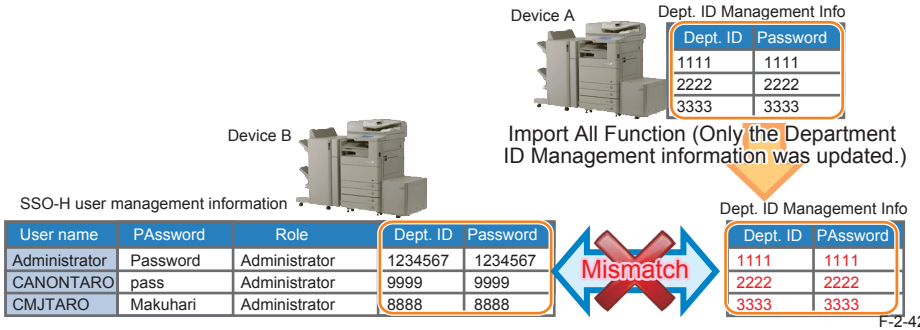

F-2-422

- Only one of information was updated, resulting in mismatch.
  Only the department ID and password registered in SSO-H or those in Department ID Management were changed.




F-2-423

- Only the information of Department ID Management was updated, resulting in mismatch.
  Only the Department ID Management information was changed in "Import All Function", resulting in mismatch. (The SSO-H user information cannot be changed in Import All Function.)



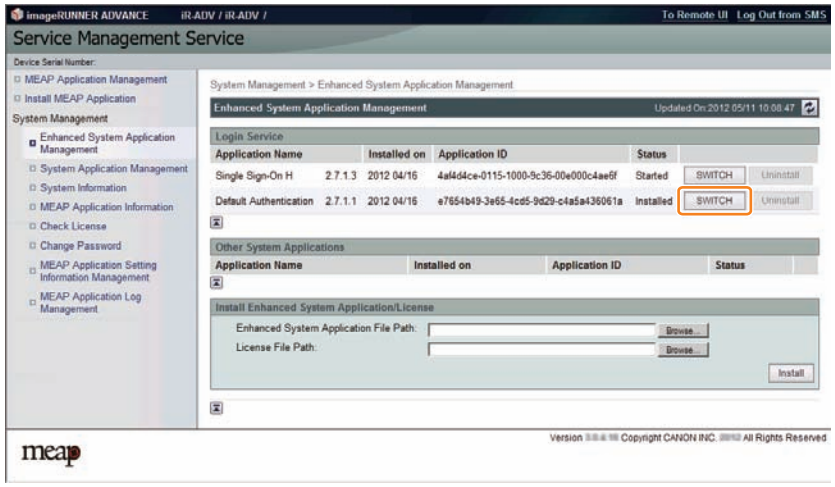

F-2-424

## Remedy

If the device became unable to be logged in due to mismatch of the department ID/password, perform the following remedy.

### Procedure

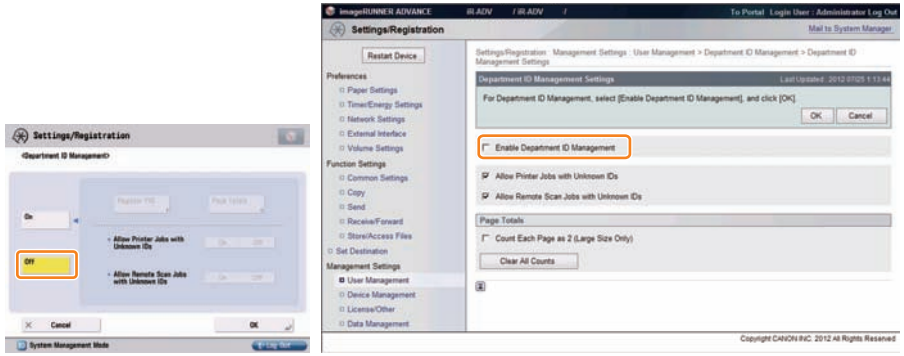
1) Change the authentication method to DA (Default Authentication).
   Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)




F-2-425

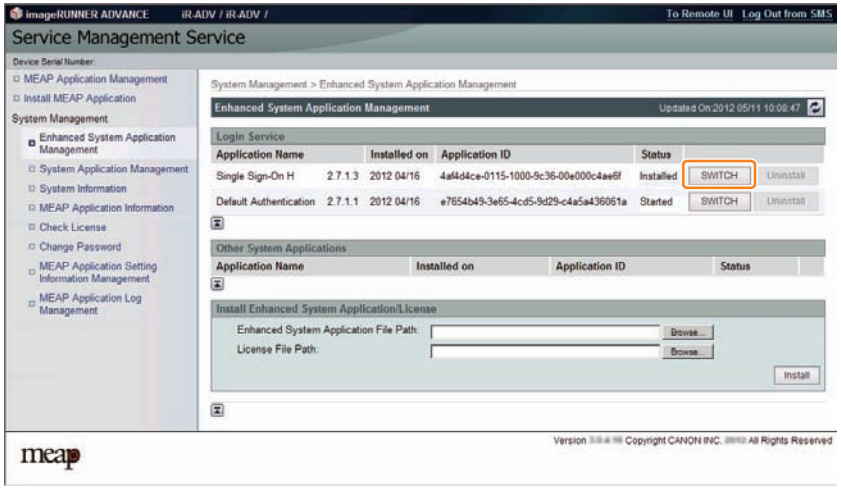
2) Restart the device.
   Restart the device in order to reflect the changes in login service.

3) Disable Depart ID Management.
   In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].




F-2-426

4) Change the authentication method back to SSO-H authentication.
   Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)




F-2-427

5) Restart the device.
   Restart the device in order to reflect the changes in login service.

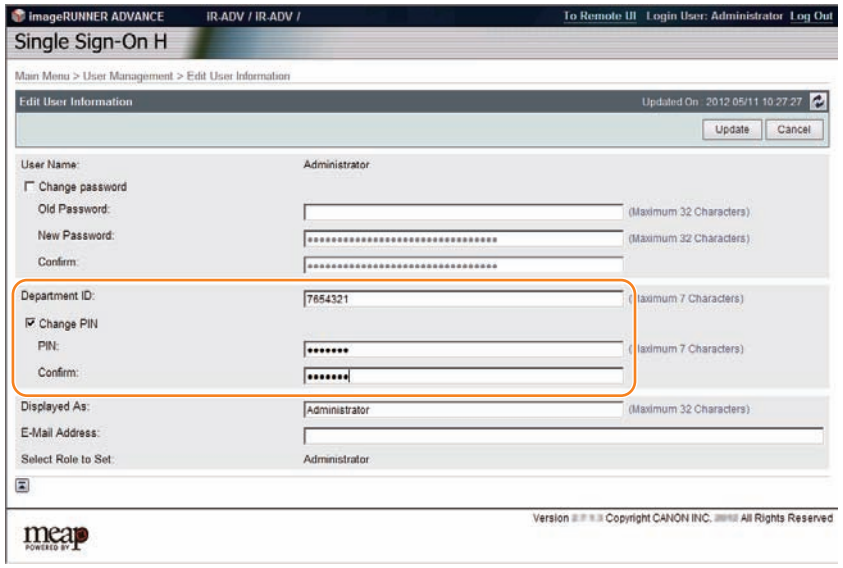
6) Change the user registration information of SSO-H.

Access the URL shown below, and change the content to the information registered in Department ID Management.

Or, import the setting file whose content you want to use.

SSO-H user registration information edition screen:

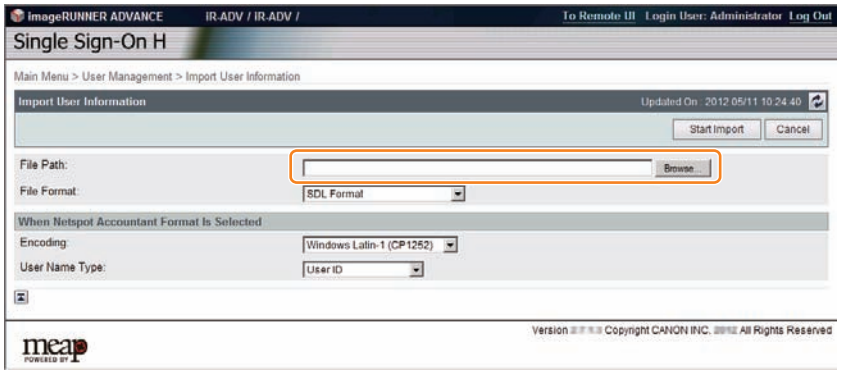
(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or https://<IP address>:8443/sso/Edit).




F-2-428

SSO-H user registration information import screen:

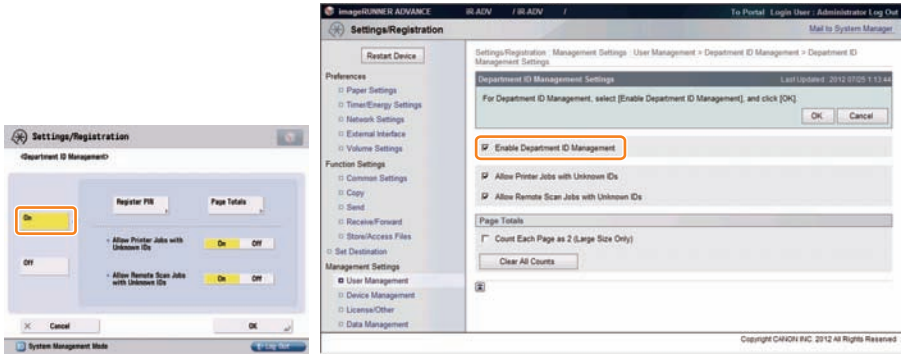
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (https://<IP address>:8443/sso/Import).




F-2-429

7) Enable Depart ID Management.

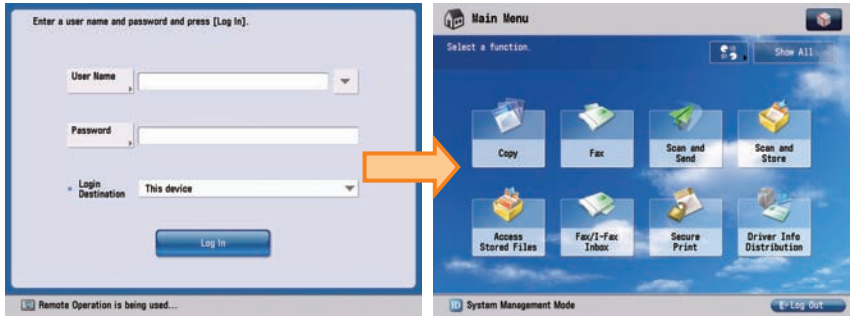
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].




F-2-430

8) Check that the device can be logged in.

Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.




F-2-431

# Reference material

## Glossary

| Terms & Acronyms | Definitions and Explanations |
|---|---|
| Application | A program unit to provide users with solutions. |
| Application ID | An identifier assigned to each application.<br>A unique ID is assigned to each MEAP application. |
| Applet (Applet Type Application) | A MEAP application type created in Java.<br>This type of applications show buttons on the touch panel display. |
| Code Sign | Information to check if an application is genuine. An application marketed in the normal procedure has a code sign assigned by LMS. MEAP platform rejects applications without Canon code signs for being installed or executed on the device. |
| CPCA (Common Peripheral Controlling Architecture) | Common Peripheral Controlling Architecture. CPCA defines an object model of peripheral deices. A client can control a device by creating or modifying objects in the device. |
| CPCA Java CL (Class Library) | CPCA Java Class Library. A Java class library, which is used to control a device. |
| Default Authentication -Department ID Management | The login service used when the department ID control is used but other authentication controls are not used. When the Department ID control is turned on, the login dialog prompts the users to enter the department ID and password. The dialog appears the initial screen of both the control panel on the MEAP device and Remote UI |
| Device Specification ID | ID allocated to each device type. This represents CPCA API specification and the version number to use MFP generic functions or obtain information including maximum allowable copies. |
| Esplet (Esplet Type Application) | A MEAP application type created in Java. This type of applications do not show user interfaces either on Local UI or Web. Esplet is a coined word created by Canon, consisting of [Espresso] or Italian coffee and [let] derived from Applet/Service. |
| File Description | An identifier for the OS to identify the destination file requested by a program. A program descriptor includes an identifier and information such as a file name and size, which helps OS to judge the file to be edited. |
| HID class | HID stands for Human Interface Device, representing man-machine interfaces of PC components and peripheral devices. HID class means USB class classified as HID. |
| iR Native application | The functionalities that existing imageRUNNER has such as Copy, Universal Send and Mailbox. |
| ISV (Independent Software Vendor) | Independent Software Vender. Software manufacturer who develops and/or sells applications and tools but does not entire computer systems. Refers application developer in this document. |

| Terms & Acronyms | Definitions and Explanations |
|---|---|
| J2ME (Java2 Platform Micro Edition) | Java 2 Platform Micro Edition. One of Java Platforms licensed by Sun Microsystems, Inc. It is applied for MEAP. Other devices such as cellular phones and PDA. |
| J2RE (Java 2 Runtime Environment) | A set of basic programs to run applications developed in the programming language of Java2. This set includes Java virtual machine providing runtime environment for Java applications among others. Java applets do not require J2RE since these are executed on Web browsers using Java runtime environment provided on browsers. However, standalone Java applications require Java runtime environment such as J2RE for execution. Runtime environments can be downloaded for free of charge from the Web site of Sun Microsystems, the Java developer. |
| Java | A programming language developed by Sun Microsystems, in the U. S. A. Low dependent on models and OSes and runs on various platforms. Taking advantage of this feature, many applications that runs on web servers uses Java. The MEAP platform uses J2ME - a type of Java. |
| JavaScript | A script language developed by Netscape Communications, in the U.S. A., runs on web browsers such as Netscape Navigator and Internet Explorer. Allows web designers to create interactive pages with HTML files such as animated buttons and display of timetables. |
| Java VM (Java Virtual Machine) | JAVA Virtual Machine. The Java byte code interpreter. The Virtual Machine acts as an interpreter for processing the byte code using the native instruction set. |
| License Access Number | A number issued for accessing license file. The Licensing server requires entries of application ID, expiration date/times information, and the number of access numbers, to issue license access numbers |
| Licensae File | A software manufacture of a MEAP application provides the users with the license files. Specifies the terms of agreement that a user concludes with the manufacturer. Required for installing a MEAP application. |
| LMS (License Management System) | The license is required for installing a MEAP application in a MEAPenabled iR device. LMS is the server issuing [License Files] as well as license access numbers. |
| Login Service | Manages user information of MEAP device. Authenticates users with user names and passwords. Three login services are available for MEAP device - Default Authentication, which provides department ID control, SDL (Simple Device Login) and SSO (Single Sign-On). |
| Mass Storage class | Mass Storage means a storage device with large capacity, generally secondary storage devices. Mass Storage class means USB class classified in the secondary storage device group. |
| MEAP (Multifunction Embedded Application Platform) | Multifunctional Embedded Application Platform. Provides an environment for executing application programs on a peripheral device. Uses the Java platform (J2ME - Java 2 platform Micro Edition) to run Java application for MEAP. |
| MEAP Contents | Required to install an MEAP application to a MEAP device. |

| Terms & Acronyms | Definitions and Explanations |
|---|---|
| MEAP Specifications (MEAP Spec Version) | MEAP Spec Version, the term used for the SDK. The version number that shows the APIs of the MEAP platform other than CPCA, such as network and security. The version number is not assigned for each device model. MEAP Application Runs on MEAP platform. Consists of application files (*.jar) and the license file (*.lic). |
| MEAP-enabled iR device | imageRUNNER (iR) devices with built-in MEAP platform. |
| MFP (Multi Function Peripheral) | Multi Function Peripheral. Peripheral device that supports more than one function, such as digital copier, printer, scanner, and fax. |
| OSGi (Open Service Gateway Initiative) | Open Service Gateway Initiative. See "http://www.osgi.org/". |
| Portal Service | The web portal to gain access to a MEAP-enabled device. This service has been integrated in Remote UI top page in iR ADVANCE series. |
| Protocol | A set of rules applied to data transmission procedures over network. Major communication protocols include:<br>• FTP: File Transfer Protocol. This is a communication protocol or protocolimplemented commands to provide file transfer between a host and clients over TCP/IP network.<br>• DHCP: An upward compatible protocol of BOOTP. This communication protocol allocates a dynamic IP address to each client machine upon communication startup on TCP/IP network and collects the allocated IP address when communication is completed. The server allocates one of multiple IP addresses and notifies the setup information to a client.<br>• BOOTP: A communication protocol to automatically load setup information including IP address and a domain name from the server to a client on TCP/IP network.<br>• RARP: A communication protocol to request IP address information via the network adaptor address (MAC address) of a client.<br>• IPP: A communication protocol to execute remote printing between the print server and clients via Internet.<br>• TCP/IP: A standard communication protocol required to access to Internet and other large-scale network. |
| Proxy Server | Provides functions to store data fetched from remote servers. When a user request to display a web page that has been displayed and stored in the proxy, the proxy server read the stored data but does not access the remote server where the original page is present, for efficient access services. When a proxy server receives a URL from a PC, it searches the file in the cache and sends it to the PC if the requested file is found. If the requested file is not stored in the cache, it accesses the remote server of the URL to acquire the file and, at the same time, stores the acquired file in the cache so that the proxy server can quickly send the file at the next request. |
| Redistribution module | A built-in module of an application created with SDK. Applications without this module cannot work on MEAP platform. |

| Terms & Acronyms | Definitions and Explanations |
|---|---|
| SDK (Software Development Kit) | The kit containing information and tools required for software development. |
| Service | A functional unit or an application program working on MEAP platform. [Applications] are generally termed [Services] in Java world. |
| Servlet (Servlet Type Application) | A MEAP application type created in Java. This type of applications is designed to show user interface on the Web browser. |
| SMS (Service Management Service) | The web-base service to provide user interfaces for application life cycle management. |
| Socket | A virtual interface of an application for network communication. A user only needs to specify a socket as a unit of an address and a port from an application. This establishes the network connection for data transmission, eliminating complication related to detailed communication procedures. |
| SSO-H (Single Sign-On H) | Login service providing features of both local device authentication and domain authentication. The former is the method that iR device independently authorizes users; whereas the latter is that iR device links to the domain controller on the network in the Active Directory environment to authorize users. |
| Thread | A unit for program execution. A multi-task system allowing multiple programs to run concurrently assigns a memory space and other resources independently to each program, providing users with a feel as if only a program is running. At least one thread is generated upon a program generated. |
| URL (Uniform Resource Locator) | The method to denote Web page locations on Internet and the like. For instance, a URL on the Web is denoted as [http://www.w3.org/default. html]. [http] at the beginning means that an address following this is in a web page on the Internet. |
| USB | Abbreviation of Universal Serial Bus. This is the interface standard to link between information devices. |
| USB system driver | The general-purpose driver that control the behavior of the device, there are HID class driver, Mass Storage class driver and so on. |

T-2-119

# Option for exclusive individual measure

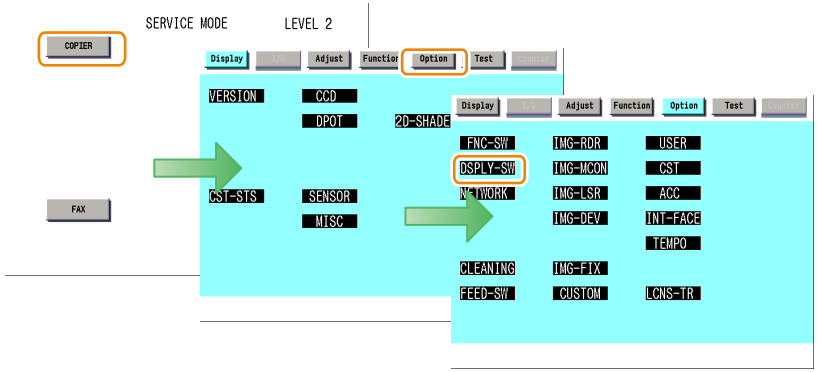
## Display Setting of Copy Icon (level2)

Make a setting as to whether to display/hide the copy screen (copy tab) on the control panel.
This is the specification for users who want to customize hiding it on control panel.

Default value
1: display
Setting range, item
0: hide 1: display

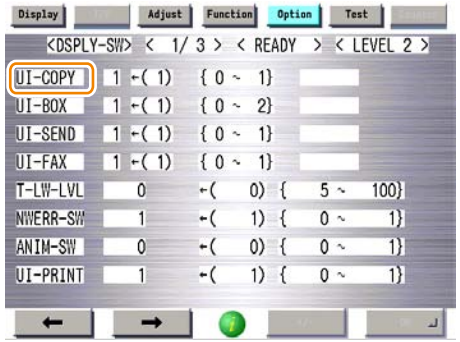
### Setting Procedure

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.




F-2-432

3) Press [UI-COPY] button.




F-2-433

4) Press either 0 (hide) or 1 (display) on control panel (the numerical value input in the field is displayed), and press [OK] button.

F-2-434

5) Check to see that it is reflected in setting field, and restart the device.

## Error at starting up the MEAP application/Setting to hide JAM screen (level 2)

In the case that operation is restricted by MEAP application, hide the warning screen of error/JAM (such as JAM screen, door opening, no-toner). In the case that these errors occur, there will be a display indicating 'call the service personnel' etc.

> Note:
> Part of the warning screens is displayed if shifting to the device screen.
> - As for the screens for jam and no-toner, the warning screen (animation) can be displayed by pressing the followings: [Device Screen] > [Recovery Procedure]
> - As for the screen for door opening, the warning screen cannot be displayed because there is no display for [[Device Screen] > [Recovery Procedure]

Default value

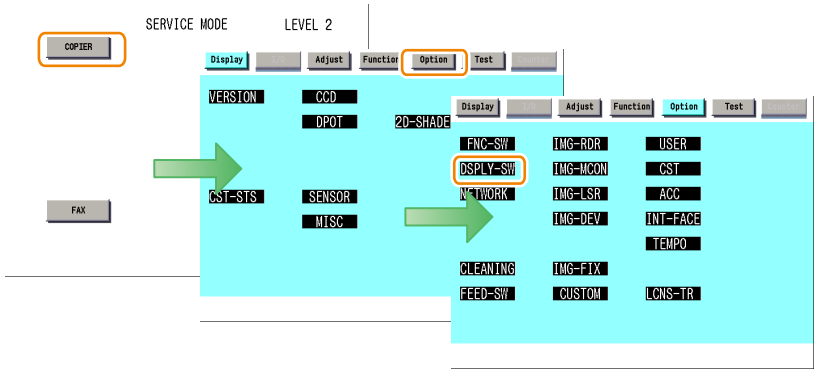
1: No activation of warning display

Setting range, item

0: display warning screen 1: hide warning screen

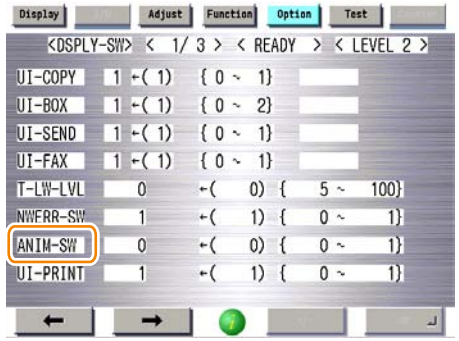
### Setting Procedure

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.




F-2-435

3) Press [ANIM-SW] button.




F-2-436

4) Press either 0 (display warning screen) or 1 (hide warning screen) on control panel (the numerical value input in the field is displayed), and press [OK] button.

F-2-437

5) Check to see that it is reflected in setting field, and restart the device.

# Embedded RDS

## Product Overview

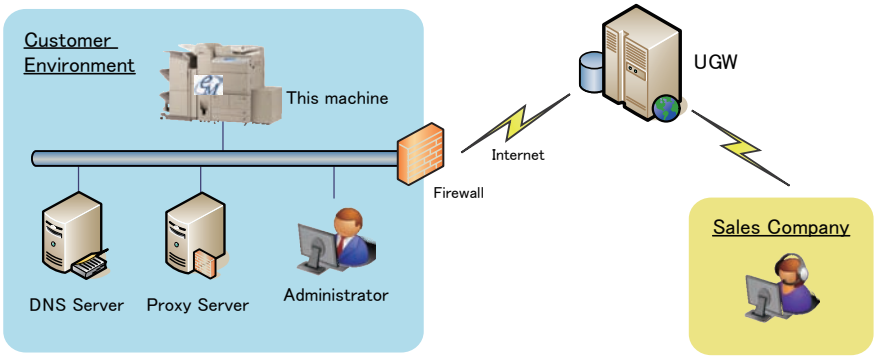
### Overview

Embedded RDS (hereinafter referred to as E-RDS) is a monitoring program that runs on the host machine. When the monitoring option is enabled by making the setting on this machine, information such as the status change of the machine, counter information, and failure information are collected. The collected device information is sent to a remote maintenance server called UGW (Universal Gateway Server) via Internet, thus allowing for e-Maintenance/ imageWARE Remote (Remote Diagnosis System).

The following device information/ status can be monitored.

- Billing counts
- Parts counter
- Firmware info
- Service call error log
- Jam log
- Alarm log
- Status changes (Toner low/ out, etc.)

Since high confidentiality is required for the information shown above, it performs communication between this machine and the UGW using HTTPS/ SOAP protocol.




The e-Maintenance/ imageWARE Remote system configuration

F-2-438

### Features and benefits

E-RDS embedded with a network module in advance can realize a front-end processing of e-Maintenance/ imageWARE Remote system without attaching any extra hardware equipment.

### Major Functions

#### Service Call Button

If a user touches service call button on the touch panel display when corrupt image, paper jams, or/ and other problem has occurred, E-RDS generates an alarm and notifies it to UGW. Moreover, E-RDS also notifies cancellation and the completion of the request

#### Service Browser

Service browser is a web browsing functionality only for service technicians in charge, and is used for referring to the FAQ contents which is connected to UGW.
In order to grasp on which devices the service browser is enabled, when the status of the service browser is changed from disabled (0: OFF) to enabled, E-RDS sends the browser information to the UGW.

#### Service mode menu Transmission

E-RDS sends the target service mode menu data to UGW in the following cases:

- When a specific alarm and service call error are detected
- When the setting is changed in service mode

The following shows the transmission timing and the target data for transmission in service mode menu:

| Transmission timing | Transmitting data | | | Error retry |
|---|---|---|---|---|
| When the following alarm is detected.<br><br>Alarm codes for transmission:<br>0x060002, // Fixing<br>0x060004 - 0x069999, // Fixing<br>0x090005 - 0x099999, // Dram<br>0x100006 - 0016, 0x100022 - 0099,<br>0x100101 - 9900, // Development<br>0x300001 - 0x309999 // High voltage | COPIER | Display | ANALOG | No |
| | | | HV-STS | |
| | | | CCD | |
| | | | DPOT | |
| | | | DENS | |
| | | | FIXING | |
| | | | SENSOR | |
| | | | MISC | |
| | | | HT-C | |
| | | | HV-TR | |
| | | | P-PASCAL | |

| Transmission timing | Transmitting data | | | Error retry |
|---|---|---|---|---|
| When the following service call error is detected.<br><br>Error codes for transmission:<br>E000 - E00F, // Fixing<br>E020, // Development ATR<br>E060 - E06F // High voltage | COPIER | Display | ANALOG | No |
| | | | HV-STS | |
| | | | CCD | |
| | | | DPOT | |
| | | | DENS | |
| | | | FIXING | |
| | | | SENSOR | |
| | | | MISC | |
| | | | HT-C | |
| | | | HV-TR | |
| | | | P-PASCAL | |
| When a value is set to [COPIER - Adjust] subordinate's Service mode menu.<br>(Transmission will be done at 60 min, later of setting) | COPIER | Adjust | | Yes |
| When the first communication test is done.<br>(For transmission process, 5 minutes after the execution) | COPIER | Display | ANALOG | Yes |
| | | | HV-STS | |
| | | | CCD | |
| | | | DPOT | |
| | | | DENS | |
| | | | FIXING | |
| | | | SENSOR | |
| | | | MISC | |
| | | | HT-C | |
| | | | HV-TR | |
| | | | P-PASCAL | |
| | | Adjust | | |

T-2-120

NOTE:
Target transmission data are only the items under LEVEL1 and 2 in the service mode.

# Limitations

## Service Mode Menu Transmission Function

1) In the following cases, service mode menu data is not transmitted.
   - When an unsent alarm log or service call log has been detected by E-RDS at power-on
   - When an alarm log or service call log to be resent due to a transmission failure is detected
   - When transmission of service mode menu executed at the time of detection of an alarm or a service call error ended in failure
   - If a new alarm or service call error occurs while service mode menu data is being obtained after detection of an alarm or a service call error, the data being obtained is not sent.

2) If alarms/service call errors successively occur, and if the time of the host machine is corrected or changed while the log is being sent, service mode menu data may not be properly sent. It is because a Link No.* may be applied to the old log although it should be applied to the new log.

   * Link No.:
   A common number for linking the service mode menu data with the alarm log/service call log data to be sent
   After completion of log transmission, the service mode menu data is obtained, and is sent with this number attached.

3) Transmission of the data of changes made in service mode menu settings is not performed instantly, but performed when a specified period of 60 minutes elapse after the change of service mode menu settings is detected or when a communication test is performed at the time of power-on. (There is a time lag.)

4) When service mode menu settings ([COPIER] > [Adjust]) are made, transmission is performed even when no change is made in the target data to be transmitted. Transmission of service mode data is also performed when changes are made in the service mode setting value not subject to transmission (items other than Level 1, 2) or when settlement of a value is performed without changing the setting value.

## Service cautions

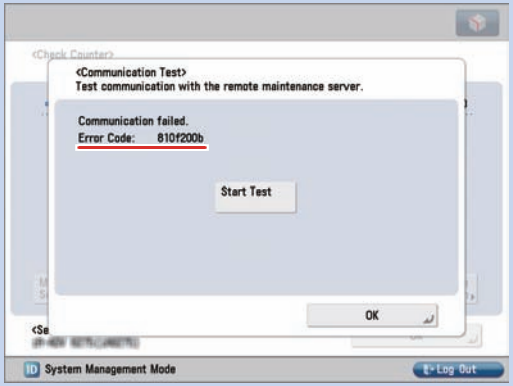
1) After clearing RAM of the Main Controller PCB SRAM Board, initialization of the E-RDS setting (ERDS-DAT) and a communication test (COM-TEST) need to be performed. Failure to do so will result that the counter transmitting value to the UGW may become unusual.
Also, after replacing the main controller board, all settings must be reprogrammed.

2) The following settings in service mode must not be change unless there are specific instructions to do so. Changing these values will cause error in communication with UGW.
   - Set port number of UGW
     [SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-PORT]
     Default : 443
   - URL setting of UGW
     [SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-ADR]
     Default : https://a01.ugwdevice.net/ugw/agentif010

3) If the e-Maintenance/imageWARE Remote contract of the device is invalid, be sure to turn OFF the E-RDS setting (E-RDS : 0).

4) Communication tests can be conducted in user mode.* When conducting a communication test in user mode, pay attention on the following points:
   - During a communication test in user mode, do not take any actions such as pressing a key. Actions are not accepted until the communication test is completed (actions are ignored).
   - When a communication test is being conducted from service mode or user mode, do not conduct a communication test from the other. These operations are not guaranteed.

NOTE:
*The user can conduct a communication test and seen the communication test result. If the communication results in failure, an error code (a hexadecimal number, 8 digits) appears on the touch panel display.



# E-RDS Setup

## Confirmation and preparation in advance

To monitor this machine with e-Maintenance/ imageWARE Remote, the following settings are required.

### (1) Advance confirmation

Confirm with the UGW administrator that the device to be monitored with e-Maintenance/ imageWARE Remote is registered in the UGW.

### (2) Advance preparations

The following network-related information needs to be obtained from the user's system administrator in advance.

#### Information item 1

IP address settings

- Automatic setting : DHCP, RARP, BOOTP
- Manual setting : IP address, subnet mask and gateway address to be set

#### Information item 2

Is there a DNS server in use?

If there is a DNS server in use, find out the following.

- Primary DNS server address
- Secondary DNS server address

#### Information item 3

Is there a proxy server?

If there is a proxy server in use, find out the following.

- Proxy server address
- Port No. for proxy server

#### Information item 4

Is proxy server authentication required?

If proxy server authentication is required, find out the following.

- User name and password required for proxy authentication

### (3) Network settings

Based on the results of the information obtained in (2) Advance preparations, make this machine network related settings.

See Users' Guide for detailed procedures.

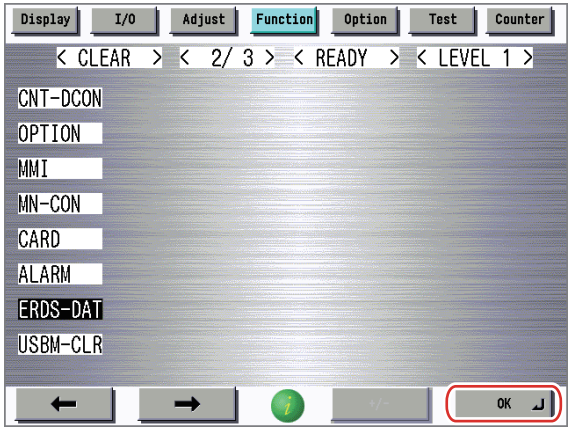
CAUTION:

When changes are made to the above-mentioned network settings, be sure to reboot this machine.

## Steps to E-RDS settings

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and touch the [OK] button.

NOTE:
This operation initializes the E-RDS settings to factory setting values.
For the setting values to be initialized, see the section of "Initializing E-RDS settings".



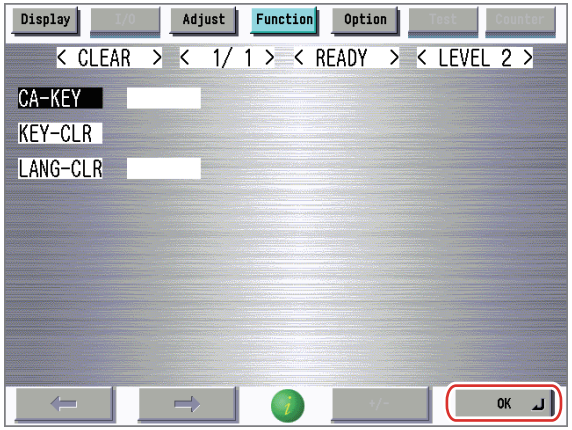

F-2-439

3. Perform installation or deletion of the CA certificate if necessary, and reboot this machine.
- Installation of the CA certificate: Perform installation from SST or Remote UI.
- Deletion of the CA certificate: When the following operation is performed, the CA certificate in the factory setting is automatically installed.

CAUTION:
After following procedure, the registered key and CA certificate are deleted, and only the CA certificate installed at the time of shipment is registered.
It is therefore necessary to check with the user in advance.

(1) Start [Service Mode] at Level 2.

(2) Select [COPIER] > [Function] > [CLEAR] > [CA-KEY] and touch the [OK] button.




F-2-440

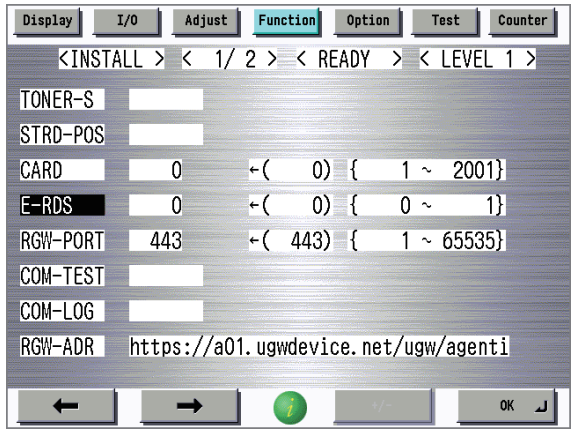
"OK!" is displayed if the CA certificate is initialized. When "NG!" is displayed, see the section of "Troubleshooting" to execute the remedy, and then perform initialization of the CA certificate again and check to see if the CA certificate is initialized.

F-2-441

(3) Reboot this machine.

CAUTION:
If a key and a CA certificate have been registered in order to use a function other than E-RDS, it is necessary to register again from SST or Remote UI.

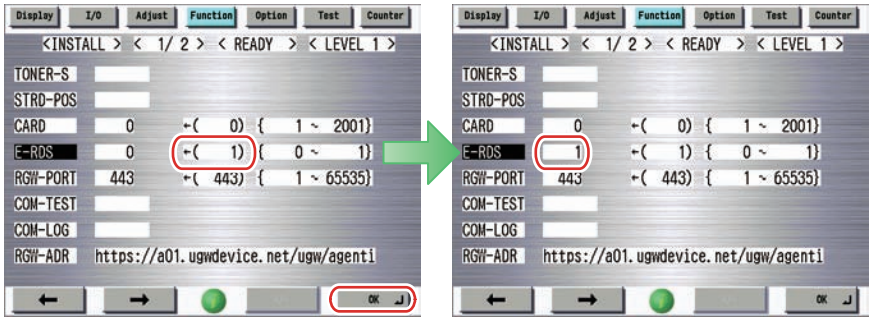
4. Start [Service Mode] at Level 1.
5. Select [COPIER] > [Function] > [INSTALL] > [E-RDS].




F-2-442

6. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:
This operation enables the communication function with UGW.




F-2-443

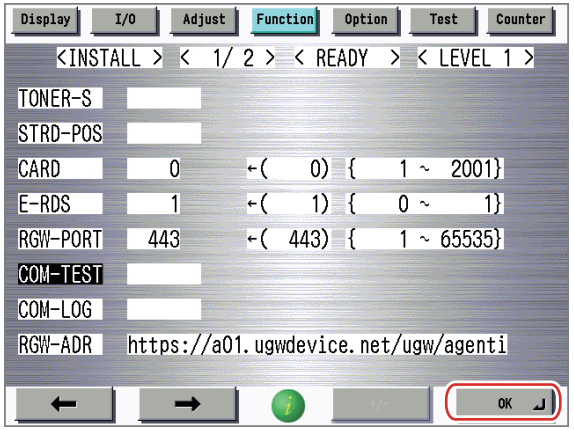
CAUTION:

The following settings i.e. RGW-PORT and RGW-ADR in Service mode must not be change unless there are specific instructions to do so.

Changing these values will cause error in communication with UGW.

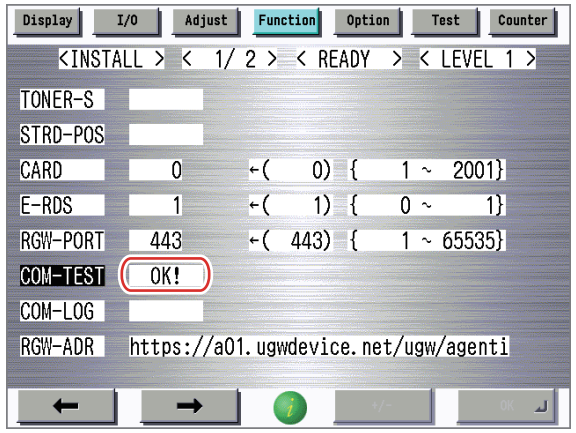
7. Select [COM-TEST] and then touch [OK].

NOTE:
This initiates the communication test between the device and the UGW.




F-2-444

If the communication is successful, "OK!" is displayed. If "NG!" (failed) appears, refer to the "Troubleshooting" and repeat until "OK!" is displayed.




F-2-445

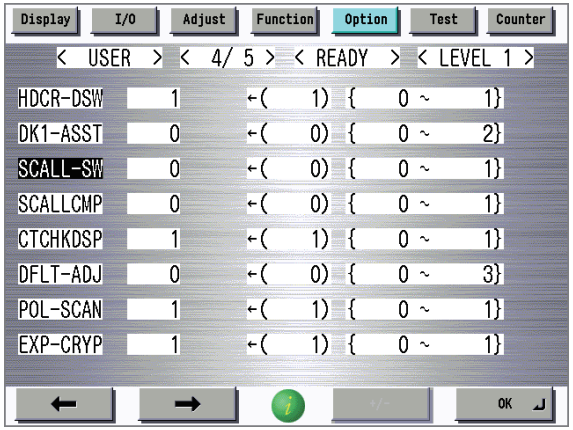
NOTE:
The communication results with UGW can be distinguished by referring to the COM-LOG. By performing the communication test with UGW, E-RDS acquires schedule information and starts monitoring and meter reads operation.

## Steps to Service Call button settings

### Steps for settings to display the service call button

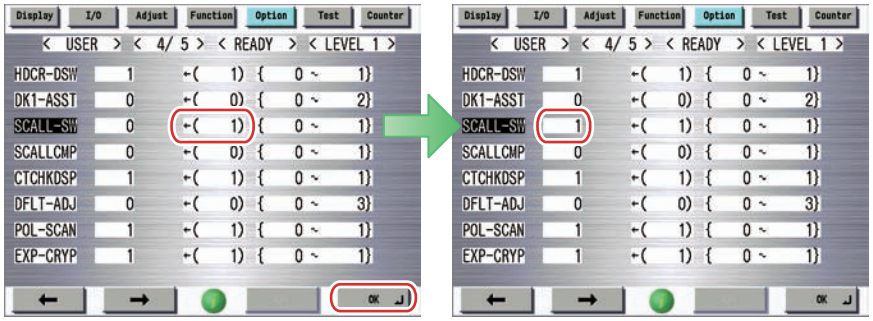
In order to use the "Service Call" button, follow the procedure shown below to display the "Service Call" button.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALL-SW].



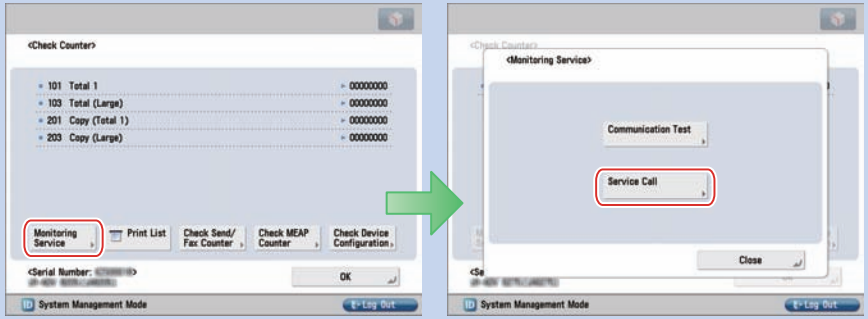

F-2-446

3. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)




F-2-447

NOTE:
When the function is enabled, the [Service Call] button is displayed on the Monitoring Service screen by touching the [Monitoring Service] button on the Check Counter screen.




## Steps for settings of service call completion

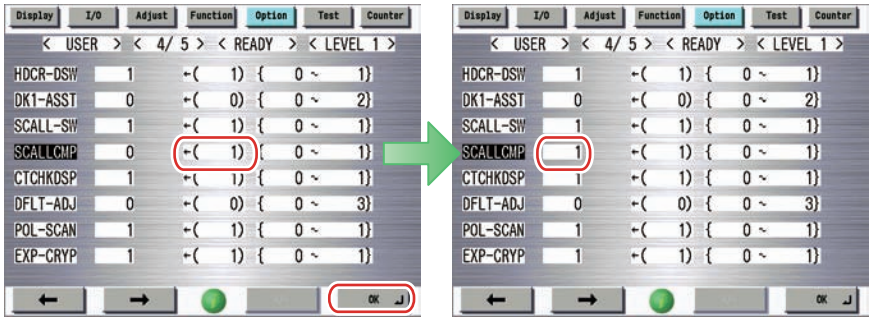
When the service technician completes the work for the service call, follow the instruction as described below to execute the service call completion work.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALLCMP].

F-2-448

3. Touch the numeric button [1] or [0] on the control panel (the setting value is changed to 1 or 0) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:
E-RDS generates an alarm of service call completion at this timing, and sends the alarm to UGW.



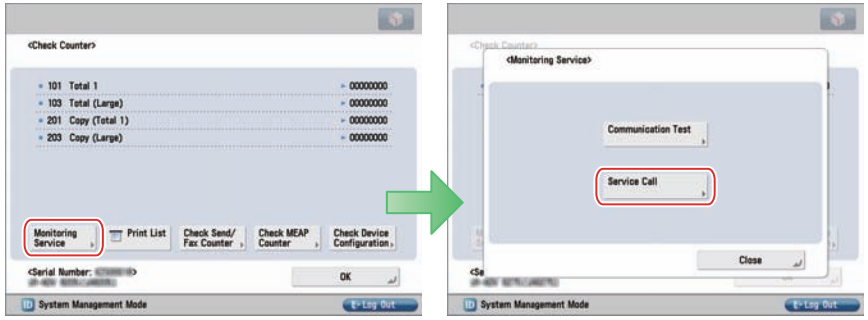

F-2-449

NOTE:
In the current condition, touching the [OK] button completes the service call regardless of whether 0 or 1 is set.

## Steps for service call request

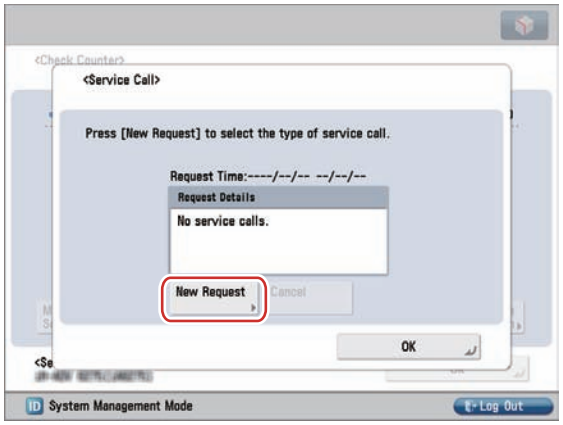
Users should follow the instructions as described below to request a service call.

1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.




F-2-450

3. Touch the [New Request] button on the Service Call screen.



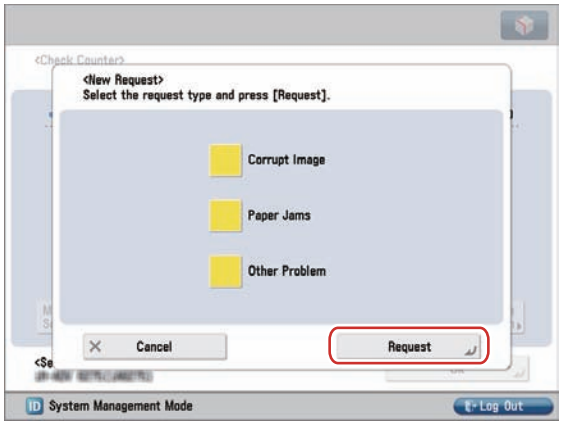

F-2-451

CAUTION:

When a service call has been already requested, another service call cannot be sent. The previous service call needs to be canceled, or a service technician needs to perform processing for service call completion.

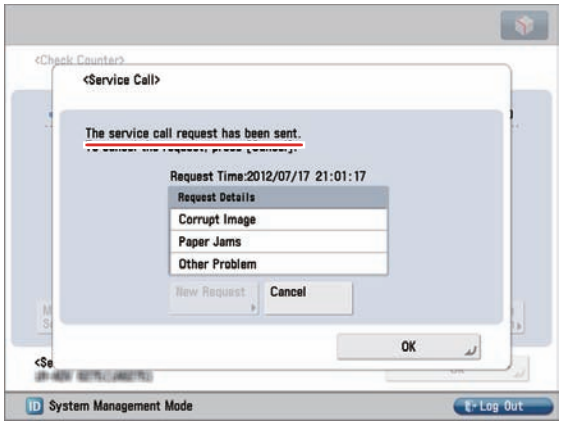
4. Select the request details and touch the [Request] button.

NOTE:
E-RDS generates an alarm of service call request at this timing, and sends the alarm to UGW.




F-2-452

5. If the service call request is successful, "The service call request has been sent." is displayed. If "Could not send the service call request." appears, refer to the "Troubleshooting" and repeat until "The service call request has been sent." is displayed.

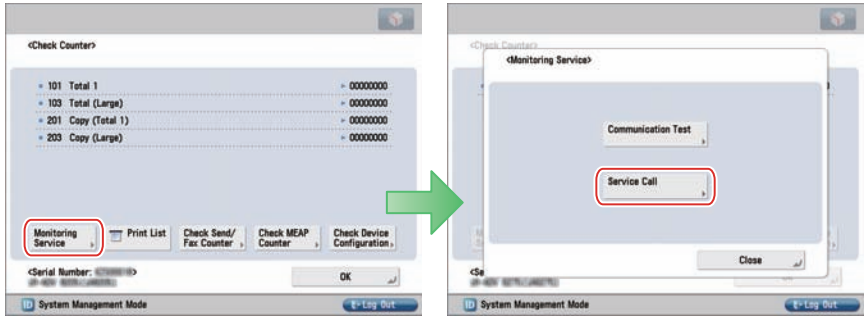



F-2-453

## Steps for service call cancellation

To cancel the service call, follow the instructions as described below.

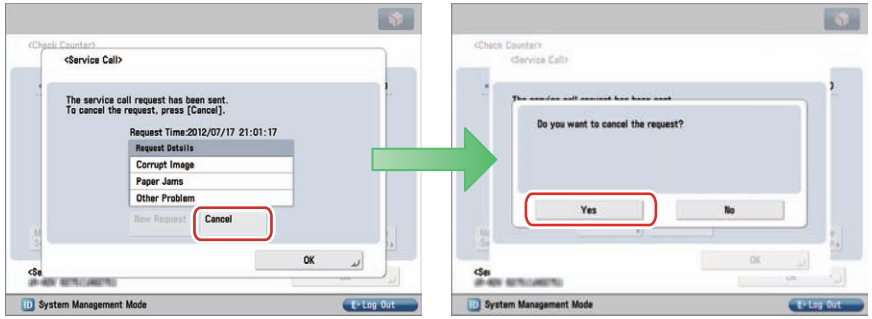
1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.




F-2-454

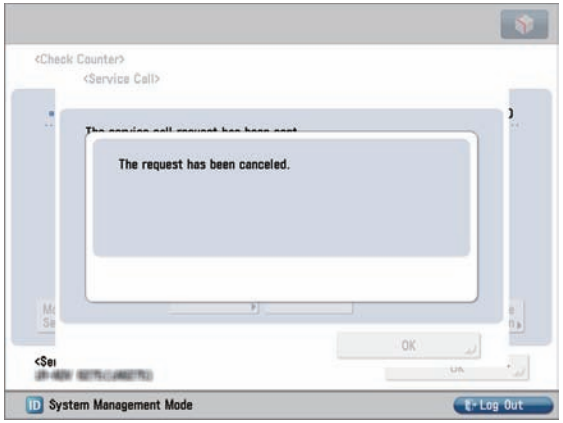
3. Touch the [Cancel] button, and touch the [Yes] button in the check screen.

NOTE:
E-RDS generates an alarm of service call cancellation at this timing, and sends the alarm to UGW.




F-2-455

4. "The request has been canceled." is displayed.

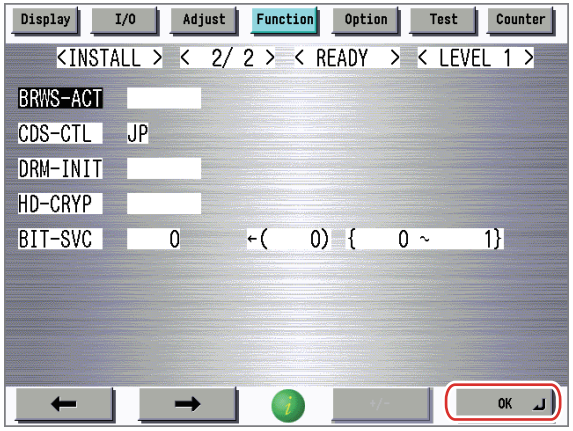



F-2-456

## Steps to Service Browser settings

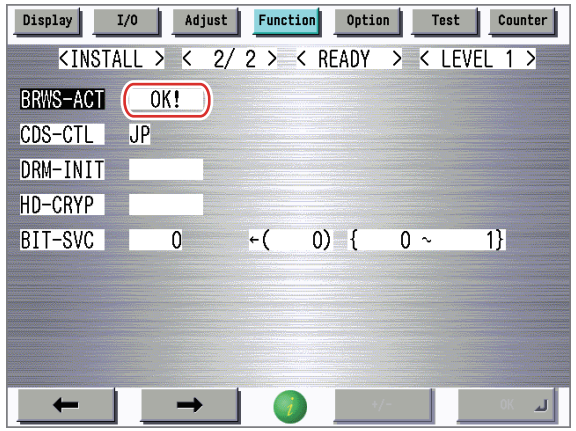
1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [INSTALL] > [BRWS-ACT] and then touch [OK].

NOTE:
When the status of the function is changed from disabled to enabled, E-RDS sends the browser information to the UGW.




F-2-457

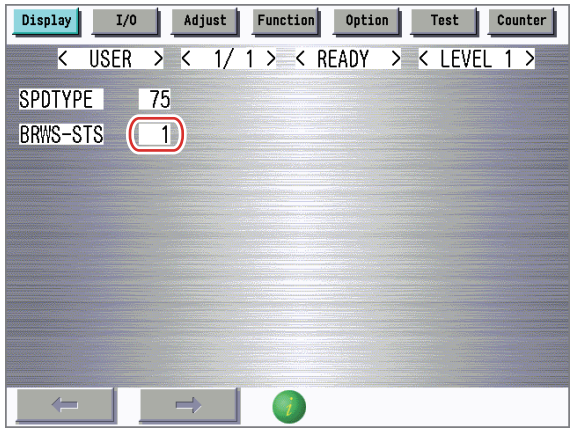
If the connection is established with UGW successfully, "OK!" is displayed. When "NG!" is displayed, perform the steps referring to "Troubleshooting" until connection is established with UGW.




F-2-458

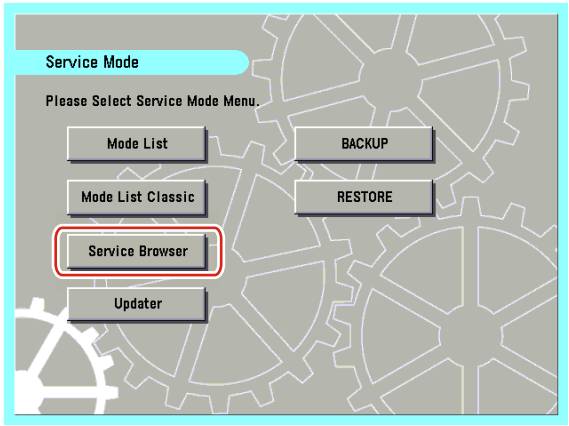
3. Reboot this machine.

4. Make sure that "1 (: ACTIVE)" is set under [COPIER] > [Display] > [USER] > [BRWS-STS].




F-2-459

5. When the above-shown setting values are enabled, [Service Browser] is displayed in the Service Mode screen.




F-2-460

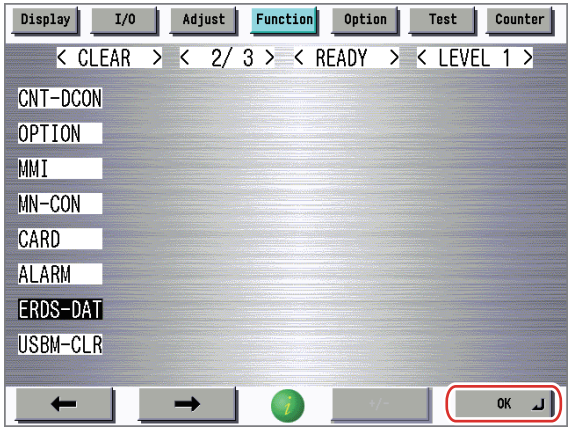
NOTE:
Generally, once service browsing is enabled (BRWS-STS : 1), it cannot be disabled (BRWS-STS : 0) again*. To disable service browsing, clear SRAM.
* The function is disabled (BRWS-STS: 2) by executing BRWS-ACT again.

## Initializing E-RDS settings

It is possible to clear the SRAM data of E-RDS and change the E-RDS setting back to the default value.

### Initialization procedure

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and then touch [OK].




F-2-461

### Setting values and data to be initialized

The following E-RDS settings, internal data, and Alarm filtering information are initialized.

- COPIER > Function > INSTALL > E-RDS
- COPIER > Function > INSTALL > RGW-ADR
- COPIER > Function > INSTALL > RGW-PORT
- COPIER > Function > INSTALL > COM-LOG

CAUTION:

In case of replacing the CA certificate file, even if initialization of E-RDS is executed, the status is not returned to the factory default.

When installing the certificate file other than the factory default CA certificate file, it is required to delete the certificate file after E-RDS initialization and install the factory default CA certificate file.

For detailed procedures, see "Steps to E-RDS settings - step 3.".

## FAQ

No.1

Q: In what case does a communication test with UGW fail?

A: The following cases can be considered in the becoming "NG!" case.

1. Name resolution was failed due to an incorrect host name or DNS server has been halted.
2. Network cable is blocked off.
3. Proxy server settings is not correct.

No.2

Q: When does E-RDS send counter information to UGW? How many data is sent?

A: The schedule of data transmitting, the start time are determined by settings in the UGW side. The send time cannot be specified on the E-RDS side. Data is sent once every 16 hours.
The data size of counter information is approx. 285 KB.

No.3

Q: Will data which failed to be sent due to an error in communication with UGW be resent?

A: Data shown below will be resent.

- Jam log
- Service call log
- Alarm log
- Service mode menu
  The newest data is resent only when the settings are changed in service mode.
- Browser information
  It is resent only when the web browser option is enabled.

Data is resent endlessly (after 5, 10, 15, 20, 25, and 30 minutes since the occurrence of communication error; once 30 minutes have passed, it is resent at 30-minute intervals) until it is sent successfully. Resend continues even if the power is turned OFF and then ON.

No.4

Q: What is the upper limit of the number of COM-LOGs? What is the upper limit of the number of characters of error information displayed in a COM-LOG?

A: Up to 30 log data can be saved. The data size of error information is maximum 128 characters.

No.5

Q: Although Microsoft ISA as a proxy server is introduced, the authentication check is failed. Can E-RDS adopt with Microsoft ISA?

A: E-RDS must comply with "Basic" while "Integrated" authentication is used for Microsoft ISA (as default); therefore, authentication with E-RDS is available if you change the setting to "Basic" authentication on the server.

No.6

Q: Can I turn this machine power off during the e-Maintenance/ imageWARE Remote system operation?

A: While operating the e-Maintenance/ imageWARE Remote system, the power of the device must be ON. If power OFF is needed, do not leave the device power OFF for long time.
It will become "Device is busy, try later" errors if the power supply of network equipment such as HUB is made prolonged OFF.

No.7

Q: Although a Service call error may not be notified to UGW, the reason is what?

A: If a service technician in charge turns off the power supply of this machine immediately after error occurred once, It may be unable to notify to UGW because data processing does not take a time from the controller of this machine to NIC though, the data will be saved on the RAM.
If the power supply is blocked off while starting up, the data will be inevitably deleted.

No.8

Q: How does E-RDS operate while this machine is placed in the sleep mode?

A: While being in Real Deep Sleep, and if data to be sent is in E-RDS, the system wakes up asleep, then starts to send the data to the UGW. The system also waits for completion of data transmission and let the device to shift to asleep status again.
However, transition time to the Real Deep Sleep depends on the device, and the transition to sleep won't be done if the next data transmission will be done within 10 minutes.

No.9

Q: Is E-RDS compatible with Department counter?

A: No, E-RDS does not support Department counter.

No.10

Q: Is there any setting to be made on the device side to enable the service mode menu transmission function? Moreover, what is Service mode menu set as the object of transmission?

A: No steps peculiar to Transmitting Service mode menu. As for the data that applies to transmission of the service mode, see the "Service mode menu Transmission".

No.11

Q: What service browser data is transmitted to UGW by E-RDS in what timing?

A: The service browser data to be transmitted and the transmission timing are shown below.

| Transmission timing | Detailed procedure | Transmission information | Error occurs |
|---|---|---|---|
| When the service browser is enabled from the disabled state [OFF] | 1) Specify the service browser setting in the service mode menu.<br>2) Send browser information to UGW.<br>3) Once obtaining OK response from UGW, enable the service browser mode [ACTIVE].<br>(To use the setting, it is necessary to reboot this machine) | Service browser mode: [Register]<br><br>WEB browser option: [ON] or [OFF] according to the license status | Retransmission is not performed.<br><br>("Disabling [OFF]" continues to be set.) |

T-2-121

No.12

Q: Can I make another service call request when I have already requested a service call?

A: No, you cannot make another service call request if you have already made a service call request.
Touch the [Cancel] button to cancel the service call which you'd made. Or the service technician performs a service call completion process.

No.13

Q: Is the "Requesting" status cancelled when this machine is rebooted?

A: The requesting status is not cancelled even if the device is rebooted. The information of the notified service call request (the time that the request was made, the service call request description) is also retained during the "Requesting" status.

No.14

Q: Counter information could not be sent at the scheduled send time due to the power of this machine being turned OFF. Will the counter information be sent later when the power of this machine is turned ON?

A: Yes. When a scheduled send such as that for counter could not be executed due to the power of this machine being turned OFF, etc., and the scheduled send time has already passed at power-on, the send is executed immediately.

The following shows data send according to the status of this machine.

| Send types | Status of this machine | | |
|---|---|---|---|
| | Power ON | Power OFF | Sleep |
| Scheduled send | Sent | Not sent*1 | Sent*2 |
| Immediate send (Service call log / Alarm log / Jam log) | Sent | - | Sent*2 |

T-2-122

*1: Immediately sent if the send time has already passed at power-on.

*2: Sent after recovery from sleep mode.

No.15

Q: Some part of information seems to be suppressed as screens passes: Settings/ Registration > Preferences > Network > TCP/ IP Settings, when the device is connected with a PS server unit. How the authentication information such as CA certificate is dealt?

A: The certificate-related items are displayed. Even when the device is connected with a PS Server Unit, E-RDS functions.

## Troubleshooting

No.1

Symptom: A communication test (COM-TEST) results NG!

Cause: Initial settings or network conditions is incomplete.

Remedy 1: Check and take actions mentioned below.

1) Check network connections

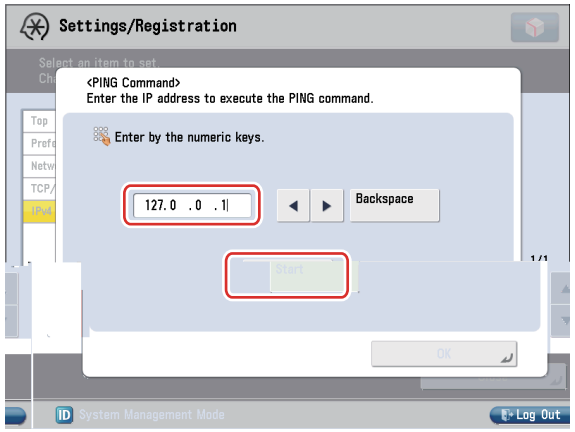
Is the status indicator LED for the HUB port to which this machine is connected ON?

YES: Proceed to Step 2).

NO: Check that the network cable is properly connected.

2) Confirm loop back address (* In case of IPv4 )

Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], enter "127.0.0.1", and touch the [Start] button.




F-2-462

Does the screen display "Response from the host."? (See the next figure.)

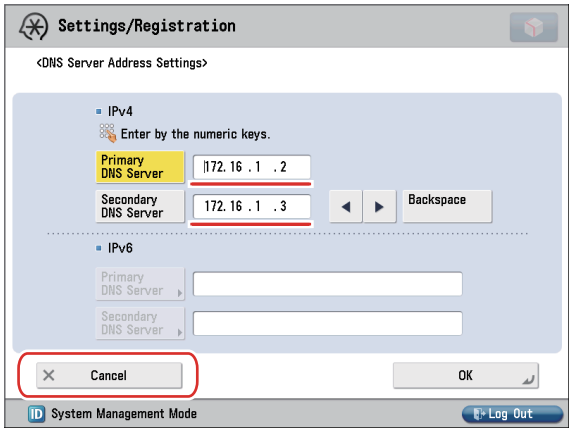
YES: Proceed to Step 3).

NO: There is a possibility that this machine's network settings are wrong. Check the details of the IPv4 settings once more.

F-2-463

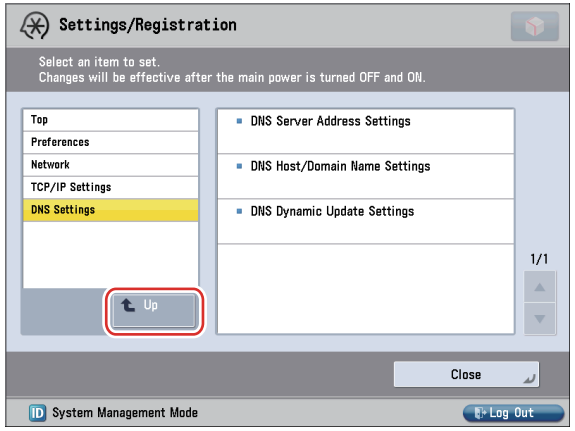
3) Confirmation from another PC connected to same network.
Request the user to ping this machine from a PC connected to same network.
Does this machine respond?
YES: Proceed to Step 4).
NO: Confirm the details of this machine's IP address and subnet mask settings.

4) Confirm DNS connection
(a) Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [DNS Settings] > [DNS Server Address Settings], write down the primary and secondary addresses of the DNS server, and touch the [Cancel] button.




F-2-464

(b) Touch the [Up] button.




F-2-465

(c) Select [IPv4 Settings] > [PING Command], enter the primary DNS server noted down in step a) as the IP address, and touch the [Start] button.

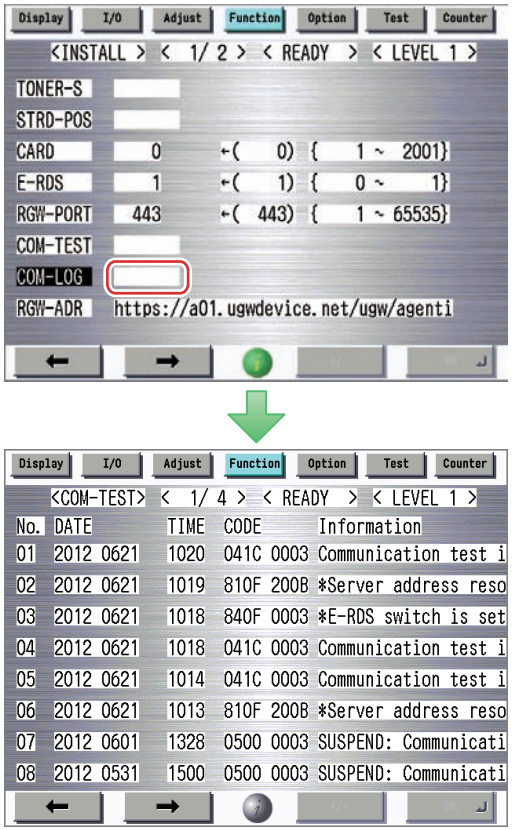
Does the screen display "Response from the host."?
YES: Proceed to Remedy 2.
NO: Enter the secondary DNS server noted down in step a) as the IP address, and then touch the [Start] button.

Does the screen display "Response from the host."?
YES: Proceed to Remedy 2.
NO: There is a possibility that the DNS server address is wrong. Reconfirm the address with the user's system administrator.

Remedy 2: Troubleshooting using communication error log (COM-LOG)

1) Start [Service Mode] at Level 1.

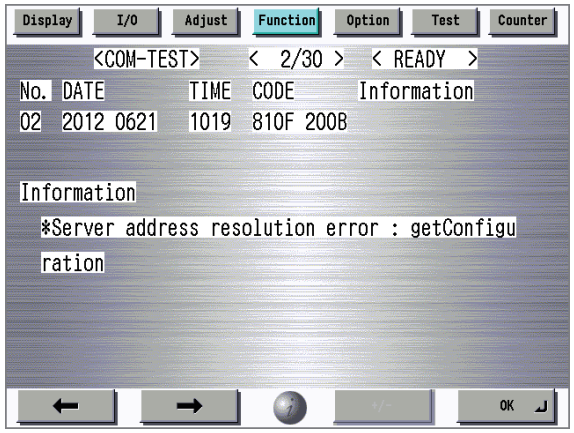
2) Select [COPIER] > [Function] > [INSTALL] > [COM-LOG] and touch the blank field on the right side. The communication error log list screen is displayed.




F-2-466

NOTE:
- Only the initial part of error information is displayed in the communication error log list screen.
- "*" is added to the top of the error text in the case of an error in communication test (method name: getConfiguration or communicationTest) only.

3) When each line is selected, the communication error log detailed screen is displayed as shown in the figure below. (Example: No. 02)




F-2-467

NOTE:
- A detailed description of the error appears below 'Information'. (Max 128 characters)
- Touch the [OK] button to return to the communication error log list screen.

4) When a message is displayed, take an appropriate action referring to "Error code and strings".

## No.2

### Symptom: A communication test results NG! even if network setting is set properly.

Cause: The network environment is inappropriate, or RGW-ADR or RGW-PORT settings for E-RDS have been changed.

Remedy: The following points should be checked.

1) Check network conditions such as proxy server settings and so on.

2) Check the E-RDS setting values.

- Check the communication error log from COM-LOG.
- Check whether RGW-ADR or RGW-PORT settings has changed. If RGW-ADR or RGW-PORT settings has changed, restore initial values. For initial values, see "Service cautions".

No.3

Symptom: There was a log, indicating "Device is not ready, try later" in error details of COM-LOG list.

Cause: A certain problem occurred in networking.

Remedy: Check and take actions mentioned below.

1) Check networking conditions and connections.

2) Turn on the power supply of this machine and perform a communication test about 60 seconds later.

No.4

Symptom: "Unknown error" is displayed though a communication test (COM-TEST) has done successfully.

Cause: It could be a problem at the UGW side or the network load is temporarily faulty.

Remedy: Try again after a period of time. If the same error persists, check the UGW status with a network and UGW administrator.

No.5

Symptom: Enabling Service Browser (BRWS-ACT) results NG!

Cause: A communication test with UGW has not been performed, or a communication test result is NG!

Remedy: Perform a communication test, and check that the test with UGW finishes successfully.

No.6

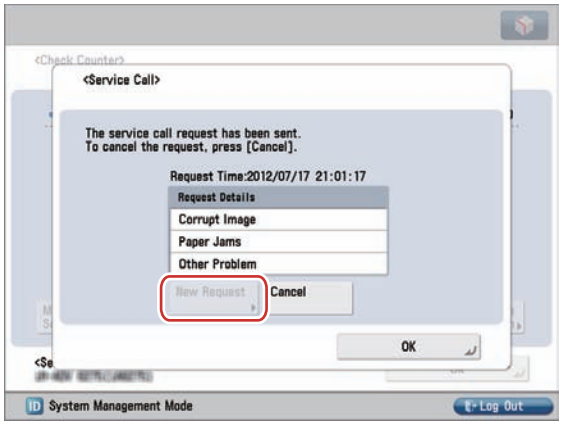
Symptom: The display indicates that the service browser is enabled (BRWS-STS: 1), but the service browser fails to be activated.

Cause: The main power switch of this machine has not been turned OFF and then ON. ON/OFF of the service browser is enabled after reboot.

Remedy: Turn OFF and then ON the main power of this machine.

No.7

Symptom: A service call request cannot be made because the [New Request] button is grayed out.




F-2-468

Cause: There has been already a service call request.

Remedy: Perform either of the following remedy works:

- Touch the [Cancel] button to cancel the service call request that has been made.
- A service technician performs a complete processing for the service call request that has been made.

No.8

Symptom: Initializing the CA certificate (CA-KEY) results in NG!

Cause: Initialization process of the CA certificate has completed abnormally.

Remedy: Initialize the HDD.

No.9

Symptom: A service call request is failed, and a message "Could not send the service call request" is displayed.

Cause: A communication test with UGW has not been performed, or a communication test result is NG!

Remedy: Perform a communication test, and check that the test with UGW finishes successfully.

No.10

Symptom: When a communication test (COM-TEST) is repeatedly executed, an error occurs.

Cause: During communication conducted after execution of a COM-TEST, another COM-TEST was executed again.

Remedy: When repeatedly executing COM-TEST, execute COM-TEST at intervals of 5 minutes or more.

## Error code and strings

The following error information is displayed on the communication error log details screen. (Here, "server" means UGW.)

- The error information are displayed in the following form.
  [*] [Error strings] [Method name] [Error details provided by UGW]

NOTE:
"*" is added to the top of the error text in the case of an error in communication test (method name: getConfiguration or communicationTest) only.

| No. | Code | Error strings | Cause | Remedy |
|---|---|---|---|---|
| 1 | 0000 0000 | SUSPEND: mode changed. | Unmatched Operation Mode | Initialize the E-RDS setting (ERDS-DAT). |
| 2 | 0500 0003 | SUSPEND: Communication test is not performed. | Rebooting the device while the communication test had not been performed although E-RDS is enabled. | Perform a communication test (COM-TEST). |
| 3 | 0xxx 0003 | Server schedule is not exist | Blank schedule data have been received from UGW. | Perform and complete a communication test (COM-TEST). |
| 4 | 0xxx 0003 | Communication test is not performed | Communication test has not completed. | Perform and complete a communication test (COM-TEST). |
| 5 | 84xx 0003 | E-RDS switch is setted OFF | A communication test has been attempted with the E-RDS switch being OFF. | Set E-RDS switch (E-RDS) to 1, and then perform a communication test (COM-TEST). |
| 6 | 8600 0002<br>8600 0003<br>8600 0101<br>8600 0201<br>8600 0305<br>8600 0306<br>8600 0401<br>8600 0403<br>8600 0414<br>8600 0415 | Event Registration is Failed | Processing (event processing) within the device has failed. | Turn the device OFF/ ON.<br>If the error persists, replace the device system software. (Upgrade) |
| 7 | 8700 0306 | SRAM version unmatch! | Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of E-RDS. | Turn the device OFF/ ON. |
| 8 | 8700 0306 | SRAM AeRDS version unmatch! | Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of Ae-RDS. | Turn the device OFF/ ON. |

| No. | Code | Error strings | Cause | Remedy |
|---|---|---|---|---|
| 9 | 8xxx 0004 | Operation is not supported | Method which E-RDS is not supporting attempted. | Contact help desk |
| 10 | 8xxx 0101 | Server response error (NULL) | Communication with UGW has been successful, but an error of some sort has prevented UGW from responding.<br>When (Null) is displayed at the end of the message, this indicates that there has been an error in the HTTPS communication method. | Perform and complete a communication test (COM-TEST). |
| 11 | 8xxx 0201<br>8xxx 0202<br>8xxx 0203<br>8xxx 0204<br>8xxx 0206 | Server schedule is invalid | During the communication test, there has been some kind of error in the schedule values passed from UGW. | When the error occurs, report the details to the support section.<br>After the UGW side has responded, try the communication test again. |
| 12 | 8xxx 0207<br>8xxx 0208 | Internal Schedule is broken | The schedule data in the inside of E-RDS is not right. | Perform a communication test (COM-TEST). |
| 13 | 8xxx 0221 | Server specified list is too big | Alarm/Alert filtering error: The number of elements of the list specified by the server is over restriction value. | Alert filtering is not supported by UGW. |
| 14 | 8xxx 0222 | Server specified list is wrong | Alarm filtering error: Unjust value is included in the element of the list specified by the server. | Alert filtering is not supported by UGW. |
| 15 | 8xxx 0304 | Device is busy, try later | The semaphore consumption error at the time of a communication test. | Try again a communication test after a period of time. |
| 16 | 8xxx 0709 | Tracking ID is not match | When upgrading firmware, the TrackingID notified by Updater differs from the thing of UGW designates. | Obtain the sublog, and contact the support department of the sales company. |
| 17 | 8xxx 2000 | Unknown error | Some other kind of communication error has occurred. | Perform and complete a communication test (COM-TEST). |
| 18 | 8xxx 2001 | URL Scheme error(not https) | The header of the URL of the registered UGW is not in https format. | Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. |
| 19 | 8xxx 2002 | URL server specified is illegal | A URL different to that specified by the UGW has been set. | Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. |

| No. | Code | Error strings | Cause | Remedy |
|---|---|---|---|---|
| 20 | 8xxx 2003 | Network is not ready, try later | Communication attempted without confirming network connection, just after booting up a device in which the network preparations are not ready. | Check the network connection, as per the initial procedures described in the troubleshooting.<br>Perform a communication test (COM-TEST) about 60 seconds later, after turn on the device. |
| 21 | 8xxx 2004 | Server response error ([Hexadecimal]) [Error detailed in UGW][*1] | Communication with UGW has been successful, but an error of some sort has prevented UGW from responding. | Try again after a period of time.<br>Check detailed error code (Hexadecimal) and [Error details in UGW] from UGW displayed after the message. |
| 22 | 8xxx 200A | Server connection error | • TCP/IP communication fault<br>• The IP address of device is not set. | • Check the network connection, as per the initial procedures described in the troubleshooting.<br>• When proxy is used, make the settings for proxy, and check the status of the proxy server. |
| 23 | 8xxx 200B | Server address resolution error | Server address name resolution has failed. | • Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.<br>• Check that Internet connection is available in the environment. |
| 24 | 8xxx 2014 | Proxy connection error | Could not connect to proxy server due to improper address. | Check proxy server address / port and re-enter as needed. |
| 25 | 8xxx 2015 | Proxy address resolution error | Could not connect to proxy server due to name resolution error of proxy address. | • Check that the proxy server name is correct. If the proxy server name is correct, check the DNS connection, as per the initial procedures described in the troubleshooting.<br>• Specify the IP address as the proxy server name. |
| 26 | 8xxx 201E | Proxy authentication error | Proxy authentication is failed. | Check the user name and password required in order to login to the proxy, and re-enter as needed. |

| No. | Code | Error strings | Cause | Remedy |
|---|---|---|---|---|
| 27 | 8xxx 2028 | Server certificate error | • No route certificate installed in device.<br>• Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device.<br>• The date and time of the device is not correct. | • Install the latest device system software. (Upgrade)<br>• Correctly set the date and time of the device.<br>• Execute CLEAR > CA-KEY, and turn OFF and then ON the device. (The CA certificate at the time of shipment is automatically installed.) |
| 28 | 8xxx 2029 | Server certificate verify error | The server certificate verification error occurred. | Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. |
| 29 | 8xxx 2046 | Server certificate expired | • The route certificate registered with the device has expired.<br>• Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device.<br>• The device time and date is outside of the certificated period. | Check that the device time and date are correctly set.<br>If the device time and date are correct, upgrade to the latest system software. |
| 30 | 8xxx 2047 | Server response time out | Due to network congestion, etc., the response from UGW does not come within the specified time. (HTTPS level time out) | If this error occurs when the communication test is being run or Service Browser is being set, try again after a period of time. |
| 31 | 8xxx 2048 | Service not found | There is a mistake in the UGW URL, and UGW cannot be accessed. (Path is wrong) | Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. |
| 32 | 8xxx 2052 | URL error | The data which is not URL is inputted into URL field. | Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. |
| 33 | 8xxx 2058 | Unknown error | SOAP Client fails to obtain SOAP Response.<br>Possibility of a problem in UGW or of a temporary problem in the network load. | Perform and complete a communication test (COM-TEST). |
| 34 | 8xxx 2063 | SOAP Fault | SOAP communication error has occurred. | Check that the value of port number of UGW (RGW-PORT) is 443. |
| 35 | xxxx xxxx | Device internal error | An internal error, such as memory unavailable, etc., has occurred during a device internal error phase. | Turn the device OFF/ ON.<br>Or replace the device system software. (Upgrade) |
| 36 | xxxx xxxx | SUSPEND: Initialize Failure! | Internal error occurred at the initiating E-RDS. | Turn the device OFF/ ON. |

T-2-123

*1: [Hexadecimal]: indicates an error code returned from UGW.
[Error details in UGW]: indicates error details returned from UGW.

# Updater

## Overview

Updater provides functions that enable network communication with Content Delivery System (hereinafter CDS) to install firmware, MEAP applications and system options.

- Firmware Installation
  Updater function enables users to distribute firmware through CDS via Internet. Particularly on e-Maintenance/UGW (called NETEYE in Japan)-enabled devices, firmware can be updated remotely, which effectively slashes costs incurred in field services.

- MEAP Application/System Option Installation
  By linking devices to CDS and License Management System (providing the function to manage licenses; hereinafter LMS), applications can be installed in devices via Updater, regardless of those not embedded (MEAP application) or embedded (system options) in devices.

## Installing Firmware

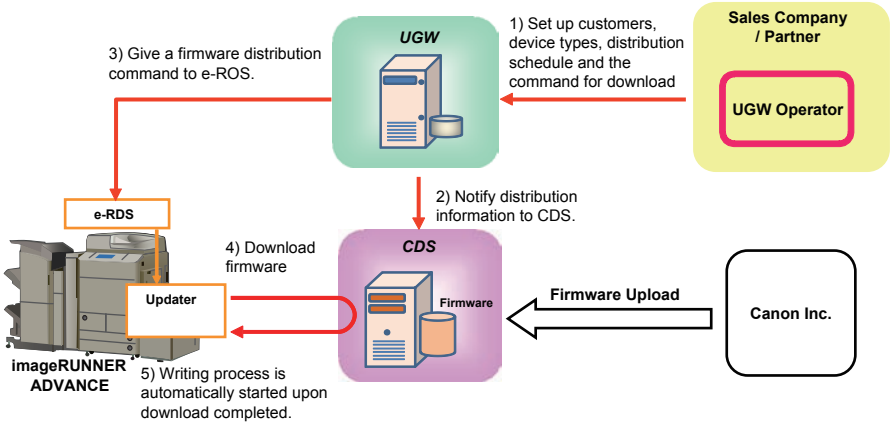
With link to Updater, service technicians provide firmware install services in the following 3 methods.

| Distribution Method | Download Commanded by: | Update Timing | Downloadable Firmware Versions | | |
|---|---|---|---|---|---|
| | | | Previous Ver | Current Ver | Newer Ver |
| a. UGW-linked Download / Update (Full-remote update) | UGW | Auto | No | Yes | Yes*1 |
| b. UGW-linked Download (Remote Distribution / Update) | UGW | Manual | Yes | Yes | Yes |
| c. Manual Download / Update (On-site Update via Service mode) | Local UI | Auto | No | Yes | Yes*1 |
| | | Manual | Yes | Yes | Yes |

*1:You can select the version allowed Remote Update.

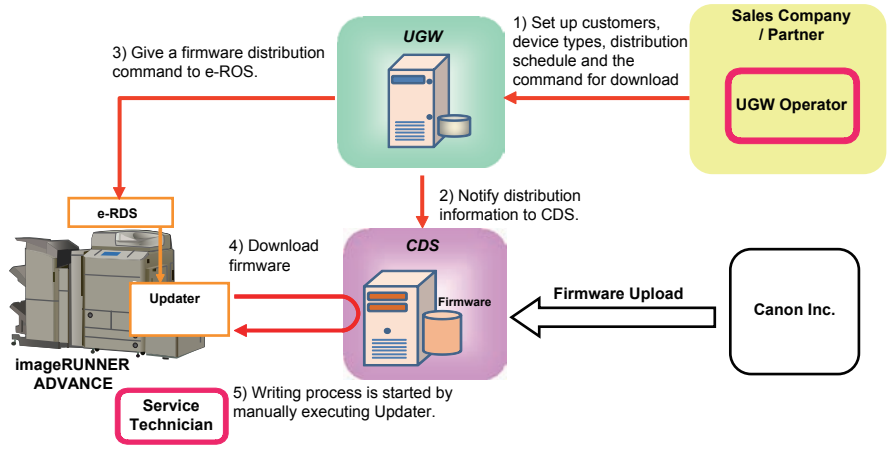
T-2-128

a. UGW-linked Download and Update (Full-Remote Update)
If the device is linked to UGW and the distribution schedule and update setting are registered on UGW in advance, full remote firmware update is available on an imageRUNNER ADVANCE-series device. Upon downloaded from CDS, the firmware is updated on the device.




F-2-488

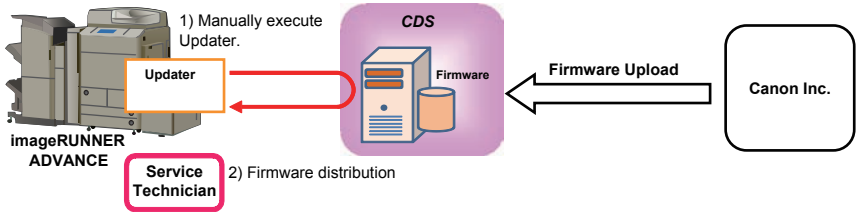
b. UGW-linked Download (Remote Distribution / Update)
If the device is linked to UGW and the distribution schedule is registered on UGW in advance, firmware can be distributed to an imageRUNNER ADVANCE-series device before a service technician actually visits the customer site. This allows the service technician to update the firmware manually immediately after completing device inspection.




F-2-489

c. Manual Download and Update (On-site Update via Service Mode)

If an imageRUNNER ADVANCE-series device has connection with the external network, a service technician can gain access to CDS via Service mode to download and update firmware. This allows service technicians to update the firmware as needed on the customer site even without PCs.




F-2-490

NOTE:
"External network" here means the network connecting the device to CDS via Internet.

NOTE:
Users are able to gain firmware distribution in the following 4 methods by introducing CDS. See User Manual for detailed information.

| Distribution Method | Download Commanded by | Update Timing | Downloadable Firmware Versions | | |
|---|---|---|---|---|---|
| | | | Previous Ver | Current Ver | Newer Ver |
| Manual download/ update via Local UI | Local UI | Auto | No | No | Yes *1 |
| | | Manual | No | No | Yes *1 |
| Manual download/ upload via Remote UI | Remote UI | Auto | No | No | Yes *1 |
| | | Manual | No | No | Yes *1 |
| Special download/ upload via Remote UI | Remote UI | - | Specific version only (Obtain it separately) | | |
| Periodical update via Local UI | Local UI | Auto | No | No | Yes *1 |

T-2-129

*1: Only the latest version of Remote update-enabled version is downloadable.

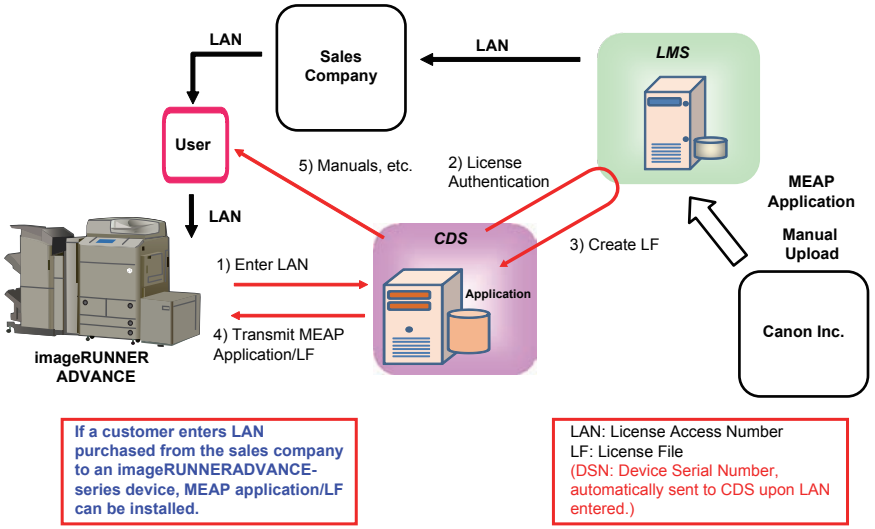
## Installing MEAP Application/System Option

The following is the installation method of MEAP application/system option which is enabled by applying CDS.

a. LMS-linked MEAP Application/System Option Installation

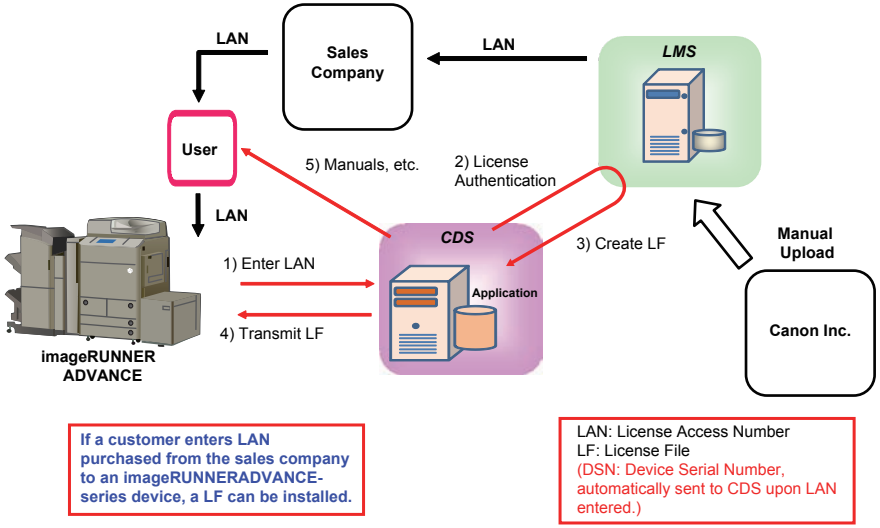
If an imageRUNNER ADVANCE-series device is connected to the external network, user or service technician can gain access to CDS from User mode to install a MEAP application or a system option.

Installing MEAP Application




F-2-491

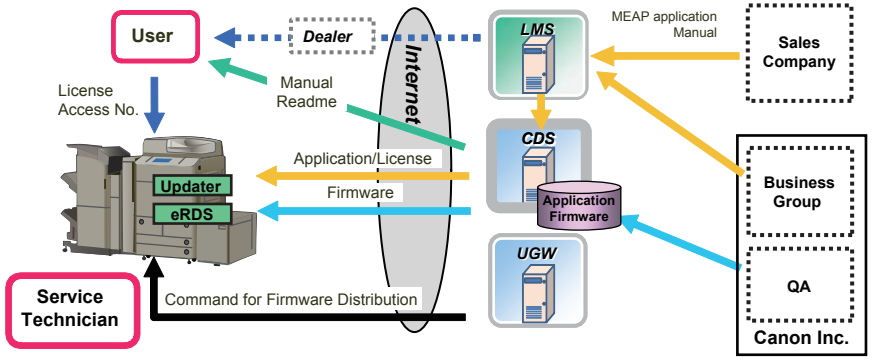
Installing System Option




F-2-492

## System Configuration

The figure below schematically shows the system configuration.




F-2-493

## List of Functions

The matrix below shows the list of functions provided by Updater.

| Category | Function | Service Mode | User Mode | Remote UI | UGW-linked |
|---|---|---|---|---|---|
| Firmware | Checking firmware compatibility | Yes | - | - | - |
| | Checking special firmware | Yes | - | - | - |
| | Checking latest firmware version | - | Yes | Yes | - |
| | Registering/deleting firmware distribution schedule | Yes | Yes | Yes | - |
| | Confirming and downloading firmware | Yes | Yes | Yes | Yes |
| | Updating downloaded firmware | Yes | Yes | Yes | - |
| | Cancelling downloaded firmware | Yes | Yes | Yes | - |
| | Acquiring firmware distribution information registered from UGW | - | - | - | Yes |
| | Notifying firmware version information | - | - | - | Yes |
| | Periodical update* | - | Yes | - | - |
| MEAP application/ system option | Inquiring license for MEAP application/system option | - | Yes | Yes | - |
| | Installing MEAP application / system option | - | Yes | Yes | - |
| System Management | Settings | Yes | - | - | - |
| | Testing communications | Yes | Yes | Yes | - |
| | Displaying update logs | Yes | Yes | Yes | - |
| | Displaying system logs | Yes | Yes | Yes | - |
| Internal system error notification | Notifying internal system error occurrence to distribution server | Yes | Yes | Yes | Yes |

T-2-130

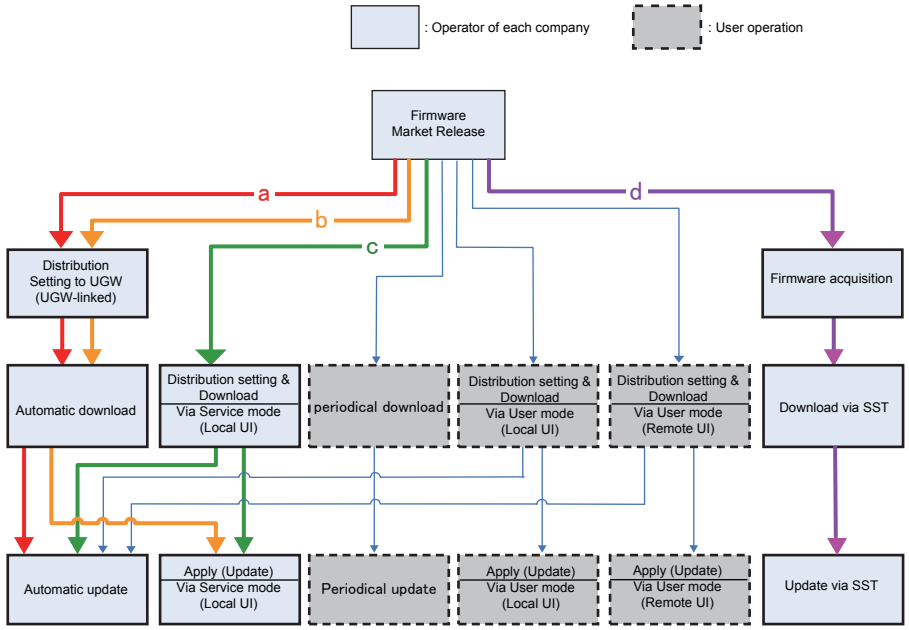
*Functioning supports periodical update with a device after firmware version V50.00.

## Distribution Flow

### Firmware Installation Flow

Service technicians provide firmware install services in the following 4 methods.

a: UGW-linked download and update
b: UGW-linked download
c: Manual download and update
d: Update via SST



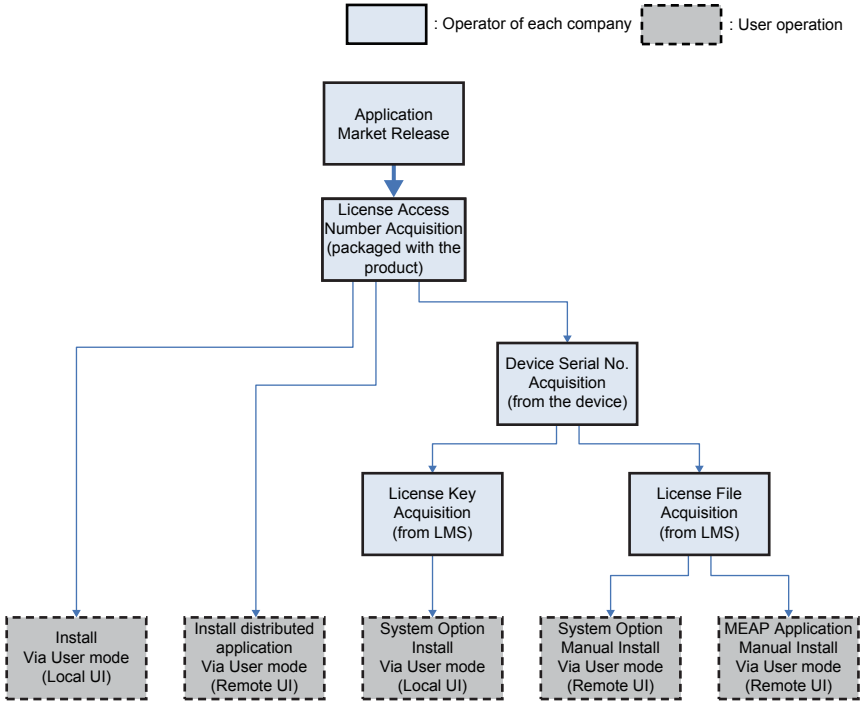

F-2-494

*1: Schedules for UGW-linked distribution are maintained on CDS.

*Functioning supports periodical update with a device after firmware version V50.00.

## MEAP Application/System Option Installation Flow

MEAP application/system option installation method using service mode is not provided.
Be sure to use the user mode to install.




F-2-495

# Limitations and Cautions

## Limitations

### Changing Date/Time on Device

When a user changes the date/time setting on the device (including change of the setting according to daylight saving time), the firmware distribution may not be performed as scheduled.
But there is not the problem if it is time adjustment of several minutes with NTP servers.

### Change of Setting from Service mode

Any settings from Service mode will be enabled after restarting the device.

## Cautions

### Concurrent use of Updater functions

Multiple users cannot use Updater functions on a device concurrently by using it together with Remote UI.

### Coexistence of Remote UI and other tools

Users logged in SMS (Service Management Service) are unable to use Update functions from Remote UI.

### Using Updater function from Remote UI

Upon the following operations done, Updater functions are suspended from Remote UI for certain duration.

- When a user exits Web browser without clicking [Portal] or [Log Out] button in the setting of Remote Login Service via SMS
- When a user exits Web browser without clicking [Portal] button in the setting of not to use Remote Login Service via SMS.
- When a user exits Web browser without clicking [Log out from SMS] or [To Remote UI] button.

### Wait for EOJ (end of job) Function

Firmware update will be triggered only after the following jobs are completed.
This is the Updater-specific specification.

| Job/Function type | Receiving | Printing | Queued print jobs | Sending | Queued send jobs |
|---|---|---|---|---|---|
| COPY | - | Wait for EOJ | Wait for EOJ | - | - |
| PRINT | Wait for EOJ (end of job) | Wait for EOJ | Wait for EOJ | - | - |
| FAX | Wait for EOJ | Wait for EOJ | Wait for EOJ | Wait for EOJ | Wait for EOJ |
| I-FAX Receipt | Cancel processing to trigger update * | Wait for EOJ | Wait for EOJ | Wait for EOJ | Wait for EOJ |
| Report Print | - | Wait for EOJ | Wait for EOJ | - | - |
| SEND | - | - | - | Cancel processing to trigger update * | Cancel processing to trigger update * |

T-2-131

*The data are guaranteed even if cut off in the middle of a job.It becomes the recovery object after the device reboot and carry out send / reception again.

Even during transfer, Pull SCAN job processing is cancelled soon after scanning is completed.
Firmware update is cancelled if the jobs are not completed within 10 minutes. If this occurs, the error code, 8x001106, will be returned (different numbers will be shown for x depending on the execution modes).
Firmware update is executed if the jobs stated above are not in the queue.
Follow the shutdown sequence to reboot the device after the firmware is updated.

Caution:
The following firmware versions do not support Wait for EOJ Function.

- iR-ADV V5000 series: V40.17 or earlier
- iR-ADV V7000/9000 series: V40.18 or earlier

For the versions above, triggering firmware update will cancel all COPY/PDL jobs submitted and/or queued. Only jobs with power-off safeguard (Fax/ I-Fax/ Auto-Report Print) are recovered after reboot.

## Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

| Installation Method | Setting Sales Company's HQ | Network Settings | Enabling UGW Link | Enabling [Update Firmware] Button of User Mode | Enabling [Manual Update] Button of User Mode (Remote UI) | Periodical update validation |
|---|---|---|---|---|---|---|
| UGW-linked Download and Update | Yes | Yes | Yes | - | - | - |
| UGW-linked Download | Yes | Yes | Yes | - | - | - |
| Manual Download and Update | Yes | Yes | - | - | - | - |
| Manual Download and Update via Local UI | Yes | Yes | - | Yes | - | - |
| Manual Download and Update via Remote UI | Yes | Yes | - | Yes | - | - |
| Special Download and Update via Remote UI | Yes | - | - | - | Yes | - |
| Periodical update | Yes | Yes | - | - | - | Yes |

T-2-132

- For Install of Application

| Installation Method | Network Settings | Enabling [Install Application/ Options] Button of User Mode |
|---|---|---|
| LMS-linked Installation | Yes | - |
| LMA-linked installation via Local UI | Yes | Yes |
| LMS-linked installation via Remote UI | Yes | Yes |

T-2-133

## Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

| Market | Default Setting of Sales Company's HQ | Setting of Sales Company's HQ after Change |
|---|---|---|
| Canada | US | CA |
| Latin America | US/SG | LA |
| Hong Kong | SG | HK |

T-2-134

Go to the following screen to change the setting of Sales Company's HQ.

| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER > FUNCTION > INSTALL > CDS-CTL |

NOTE:
The list below shows the setting of Sales Company's HQ for CDS-CTS by market.
Check and adhere to the appropriate setting for your market.
<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP
USA = US
Singapore = SG
Europe = NL
Korea = KR
China = CN
Hong Kong = HK
Australia = AU
Canada = CA
Latin America= LA

# Network Settings

## Connecting to External Network

The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

NOTE:
- See User Manual for how to connect the device to the external network.
- Before using UGW link or User mode, see the sections below to prepare as required.
  "Enabling UGW Link"
  "Enabling [Update Firmware] Button of User Mode"
  "Enabling [Install Application/Options] Button of User Mode"

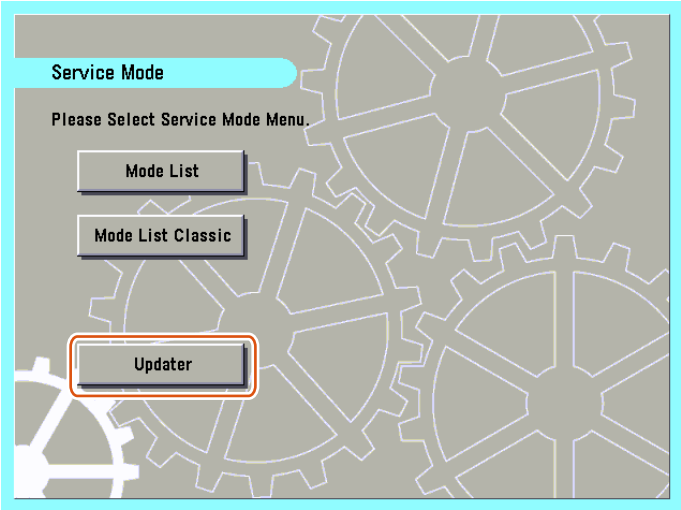
NOTE:
“External Network” here means the network connecting the device to CDS via Internet.

## Confirming URL Setting of Distribution Server

This section describes how to confirm the URL setting of the distribution server.

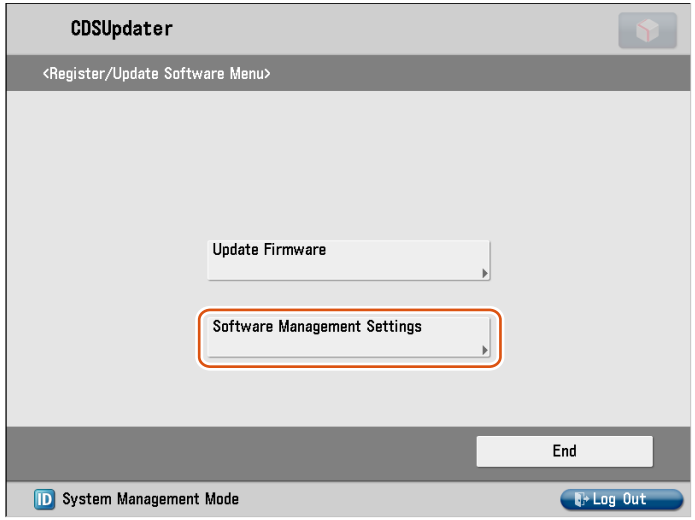
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



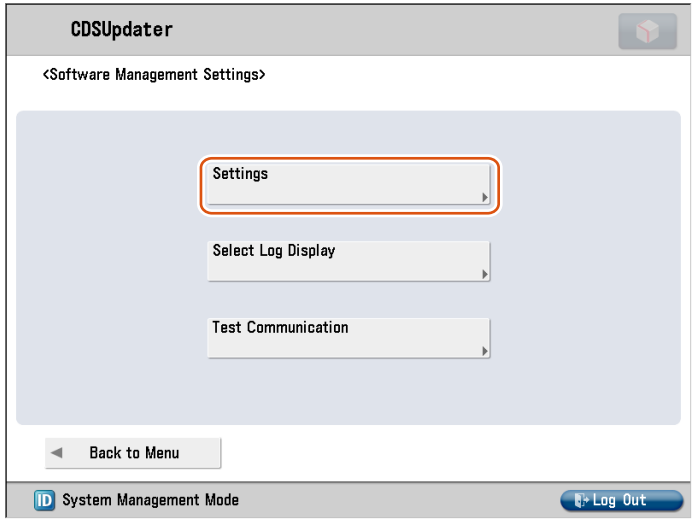

F-2-496

3. Press [Software Management Settings] button.



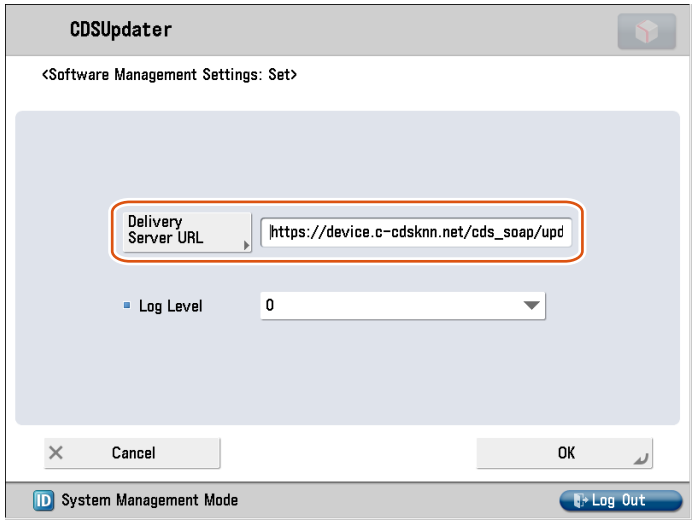

F-2-497

4. Press [Settings] button.




F-2-498

5. Ensure to enter “https://device.c-cdsknn.net/cds_soap/updaterif” in the field beside the [Delivery Server URL] button.
If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.




F-2-499

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

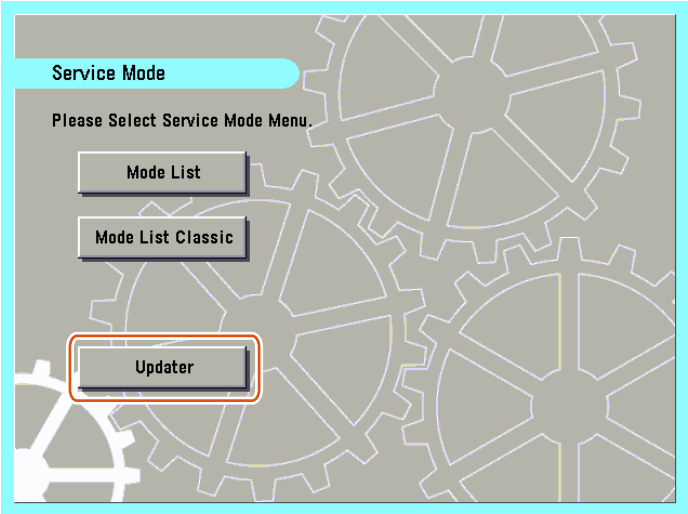
## Communication Test

This section describes how to check if the communication is normally done to the distribution server and/or the file server.

NOTE:
CDS and RDS are another servers.You need the communication test of CDS by all means even if You succeed in a communication test of the Embedded RDS.

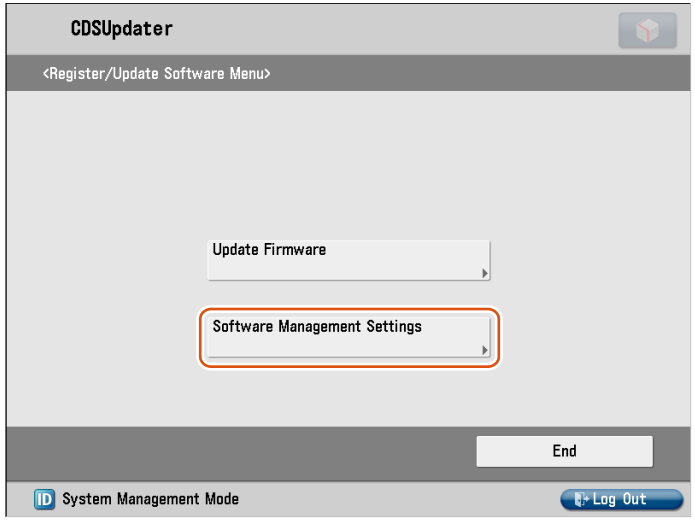
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



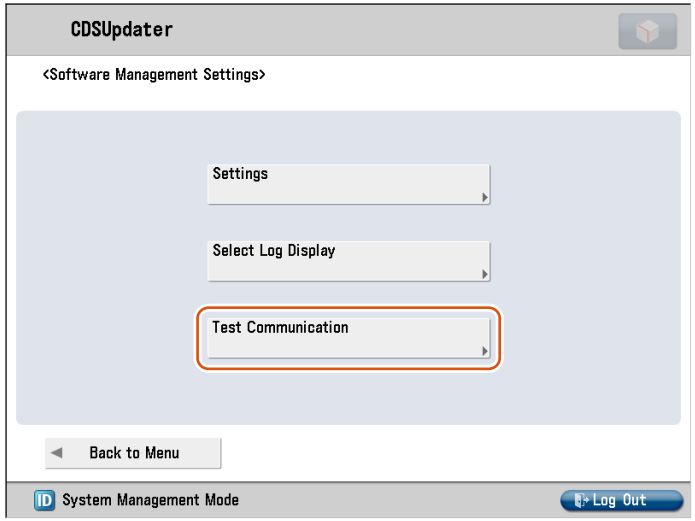

F-2-500

3. Press [Software Management Settings] button.



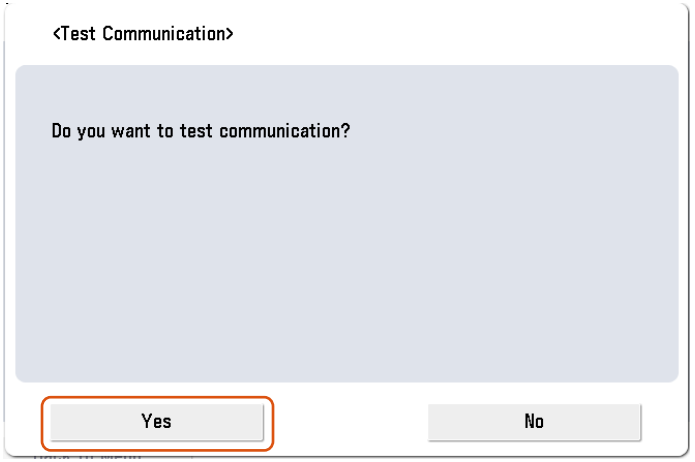

F-2-501

4. Press [Test Communication] button.




F-2-502

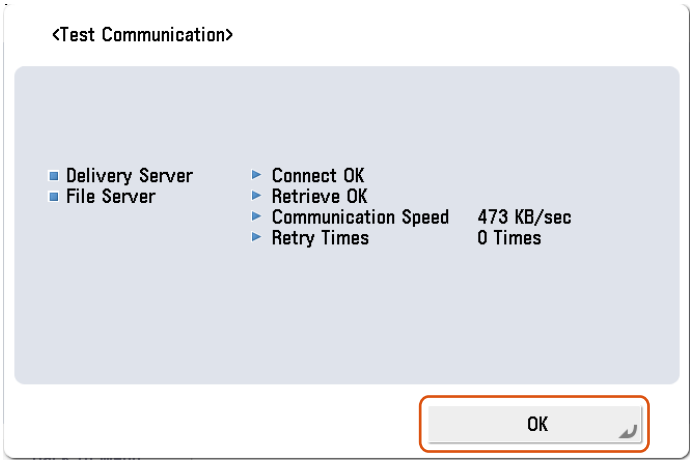
5. Press [Yes] button.




F-2-503

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.




F-2-504

## Enabling UGW Link

When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-UGW (0 -> 1) |
| | Setting of UGW WebPortal | In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware]. |
| Sales Company's HQ | Setting of Authorities on UGW WebPortal | See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account. |

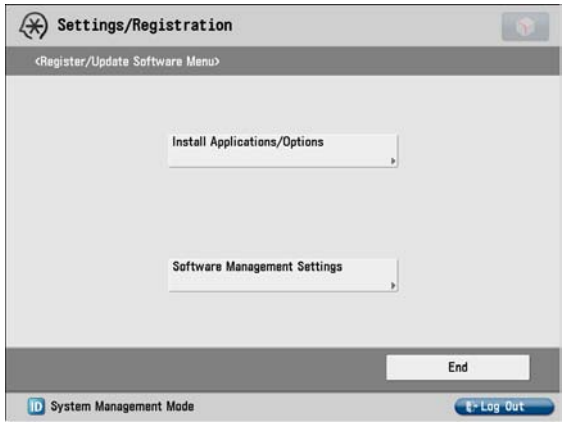
NOTE:
- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual“ for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.
- If [Distribute Firmware] is not shown on [Customer Management] screen of UGW WebPortal, appropriate authorities may not be set to each account in Firmware Distribution Information. Contact the Sales Company HQ concerned for confirmation.

## Enabling [Update Firmware] Button of User Mode

To allow users to install firmware using Updater, the setting of firmware installation should be set to ON for users in advance.

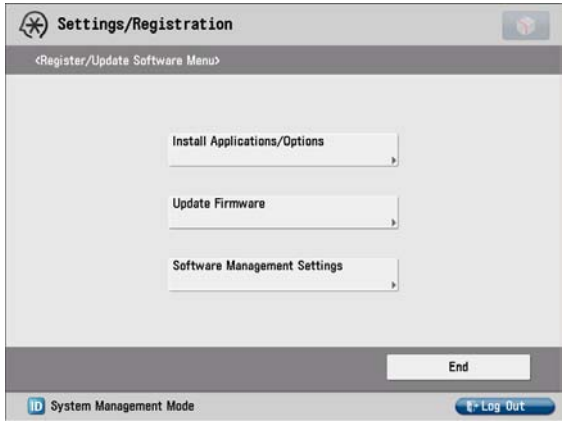
| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-FIRM (0 -> 1) |

- User Mode screen for Updater when the setting is not enabled (CDS-FIRM(0)):




F-2-505

- User Mode screen for Updater when the setting is enabled (CDS-FIRM(1)):



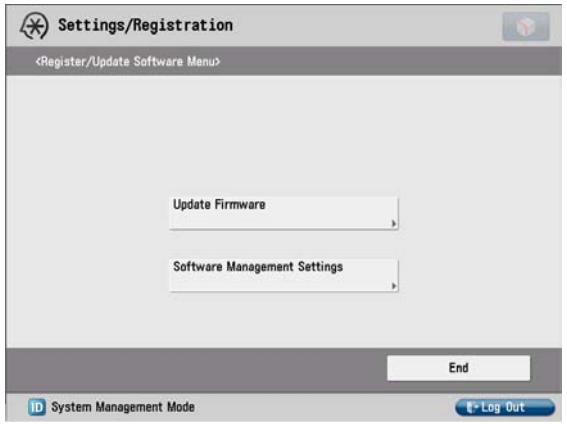

F-2-506

## Enabling [Install Application/Options] Button of User Mode

To allow users to install applications using Updater, the setting of application installation should be set to ON for users in advance.

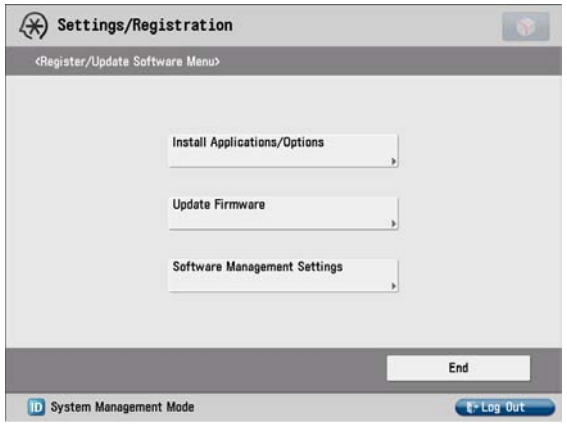
| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-MEAP (0 -> 1) |

- User Mode screen of Updater when the setting is not enabled (CDS-MEAP(0)):




F-2-507

- User Mode screen of Updater when the setting is enabled (CDS-MEAP(1)):



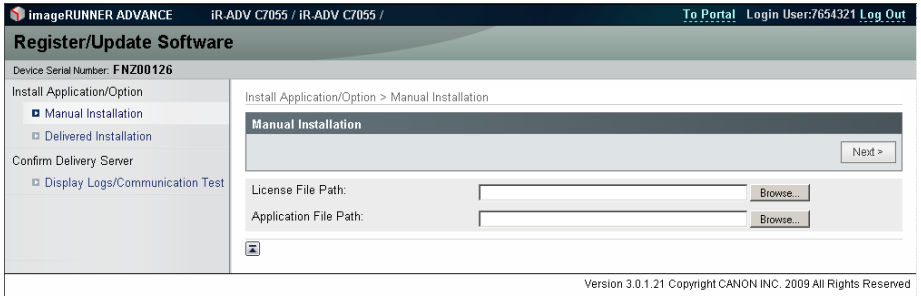

F-2-508

# Enabling [Manual Update] Button of User Mode (Remote UI)

To allow users to install firmware from Updater using the file on Local PCs, the setting of firmware installation should be set to ON for users in advance.

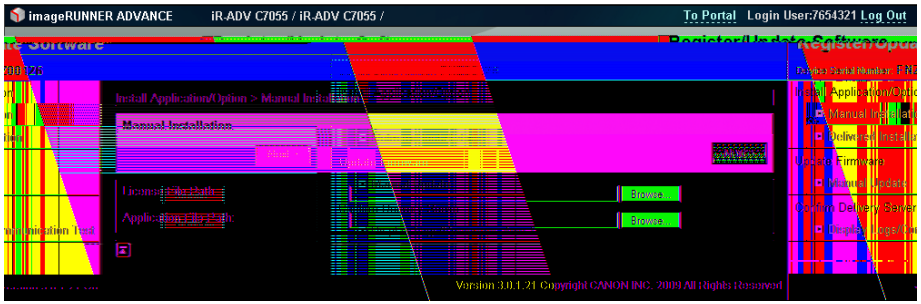
| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >LOCLFIRM (0 -> 1) |

- Remote UI screen of Updater when the setting is not enabled (LOCLFIRM (0)):




F-2-509

- Remote UI screen of Updater when the setting is enabled (LOCLFIRM (1)):




F-2-510

- Periodical validation

| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-LVUP (0 -> 1) |

# System Management Operations

## Various Setting

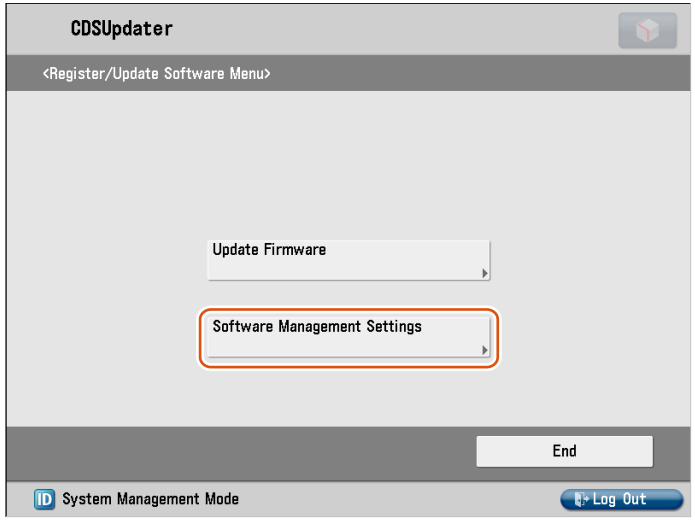
### Setting URL of Distribution Server

This section describes how to set URL of the distribution server.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

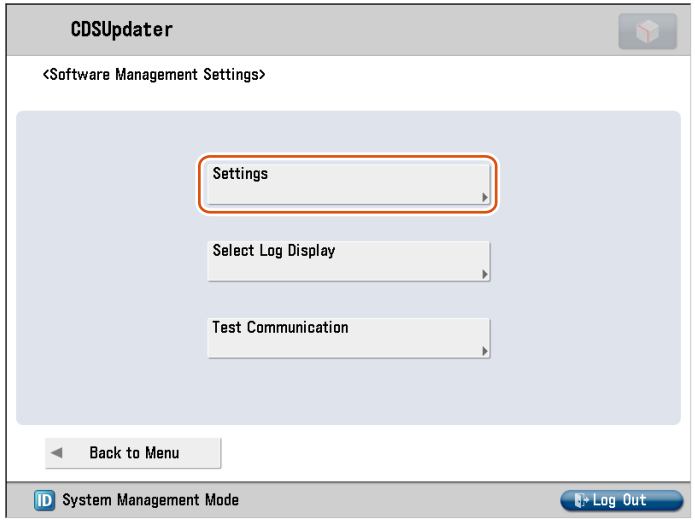
2. Press [Updater] button.

3. Press [Software Management Settings] button.




F-2-511

4. Press [Settings] button.




F-2-512

5. Press [Delivery Server URL] to show the virtual keypad. Enter the URL.

F-2-513

- [Delivery Server URL]:
  Enter the "https://device.c-cdsknn.net/cds_soap/updaterif"

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

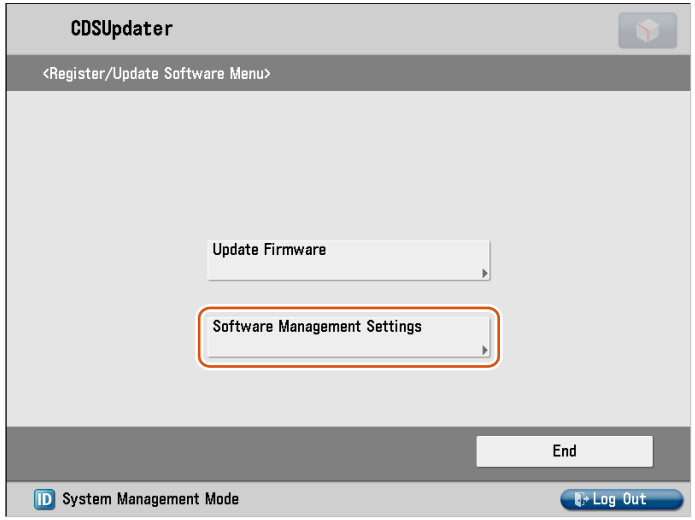
## Setting Log Level

This section describes how to set system log levels.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

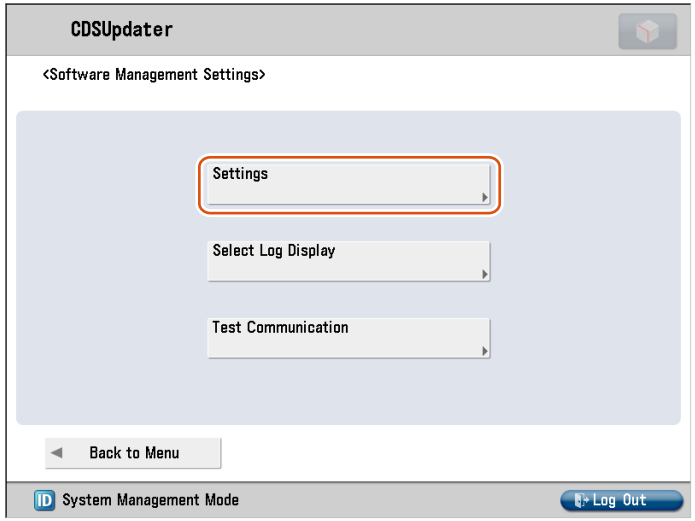
2. Press [Updater] button.

3. Press [Software Management Settings] button.



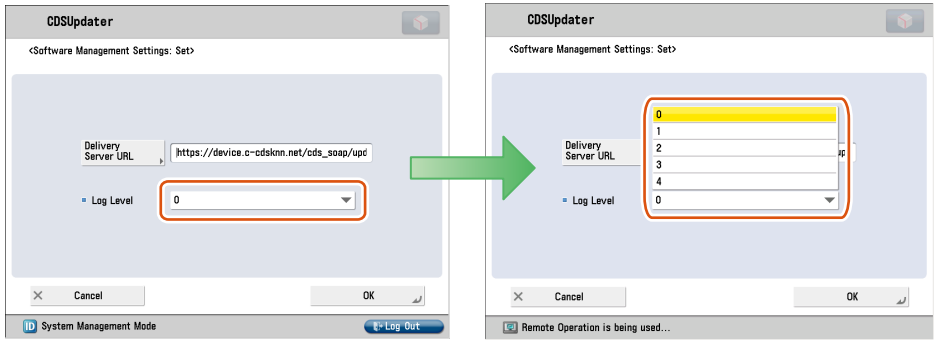

F-2-514

4. Press [Settings] button.




F-2-515

5. Select a log level from [Log Level] dropdown list.




F-2-516

- [Log Level]:
  Select one of 5 levels ranging from [0] to [4].
  See the table below for logs output in each level.

| Log Level | Log Output | | | | |
|---|---|---|---|---|---|
| | Trace | Information | Important Message | Ordinary Error | System Error |
| 0 | - | - | - | - | Yes |
| 1 | - | - | - | Yes | Yes |
| 2 | - | - | Yes | Yes | Yes |
| 3 | - | Yes | Yes | Yes | Yes |
| 4 | Yes | Yes | Yes | Yes | Yes |

T-2-135

NOTE:
This list shows the contents of the Log Output.

| Log Output | Description |
|---|---|
| Trace | Detailed logs for debug |
| Information | Logs related to operations done on the system |
| Important Message | Update logs output by firmware type<br>Installation logs by MEAP application<br>Logs related to enabled functions by system option |
| Ordinary Error | Logs for ordinary errors |
| System Error | Logs for internal system errors |

T-2-136

6. Press [OK] button to set the selected log level. Now the log level is successfully set.

# Displaying Logs

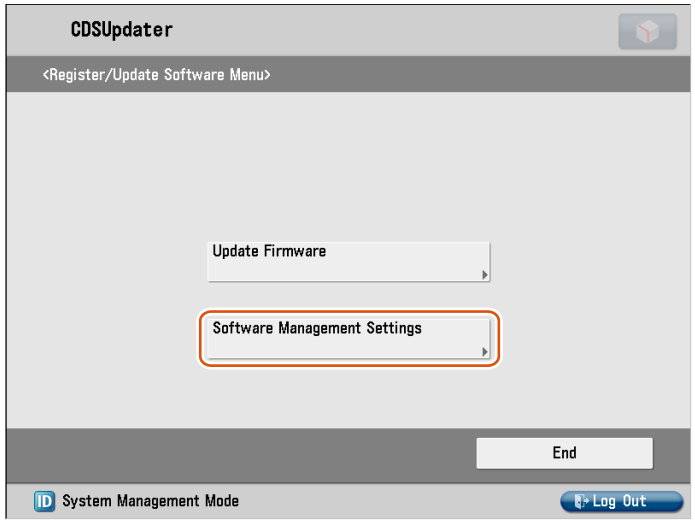
## Update Logs

This section describes how to confirm System Option/MEAP Application Installation Logs and Firmware Update Logs.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

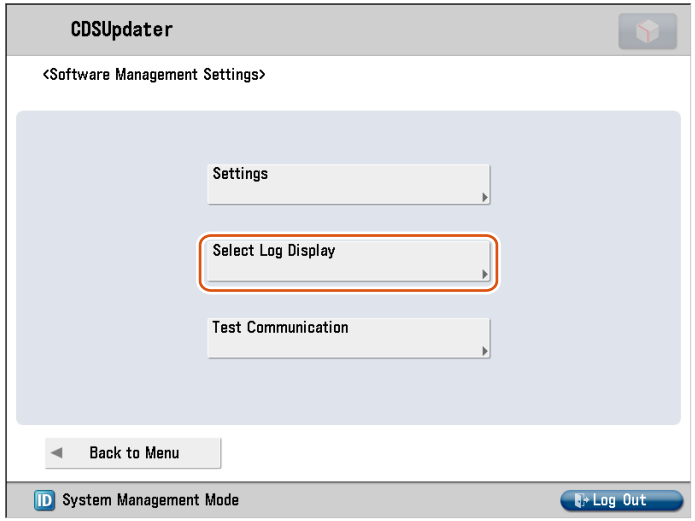
2. Press [Updater] button.

3. Press [Software Management Settings] button.



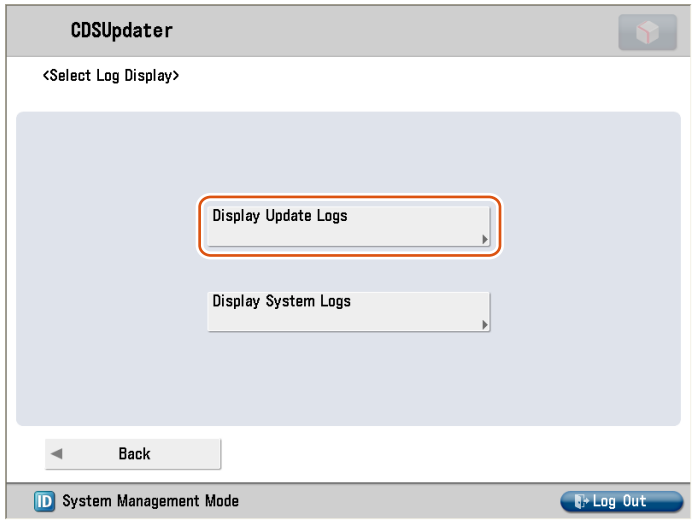

F-2-517

4. Press [Select Log Display] button.



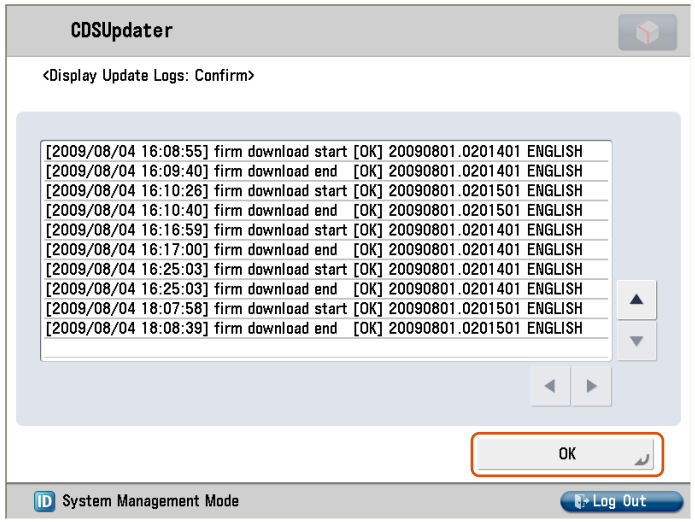

F-2-518

5. Press [Display Update Logs] button.




F-2-519

6. System Option/MEAP Application Installation Logs and Firmware Update Logs are shown. Press [OK] button to exit this operation.




F-2-520

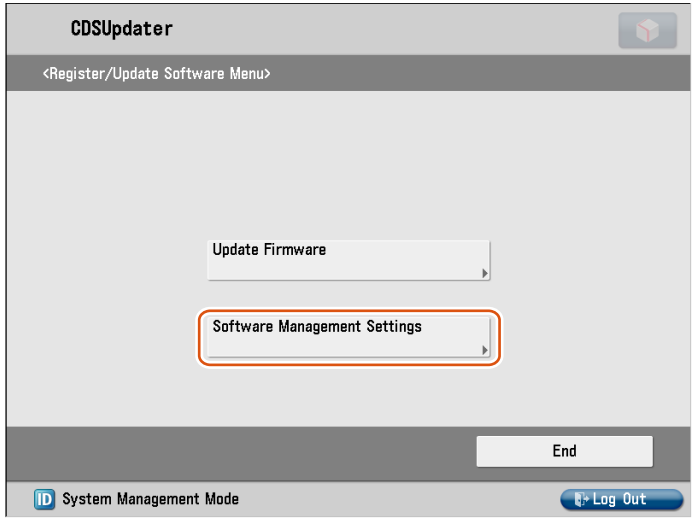
## System Logs

This section describes how to confirm System Logs.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

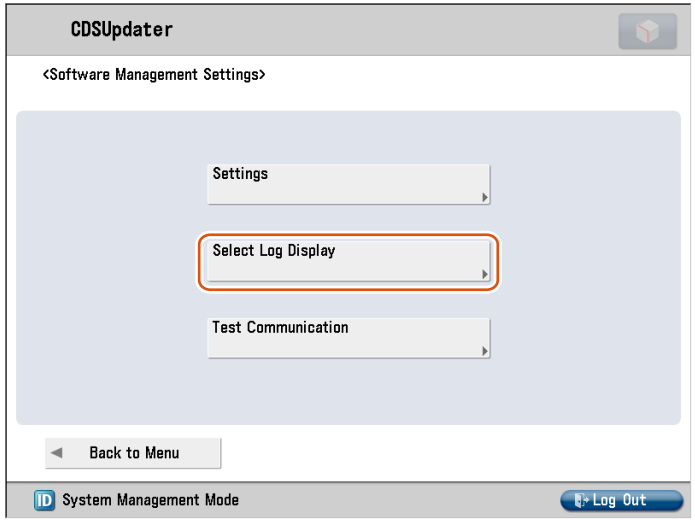
2. Press [Updater] button.

3. Press [Software Management Settings] button.



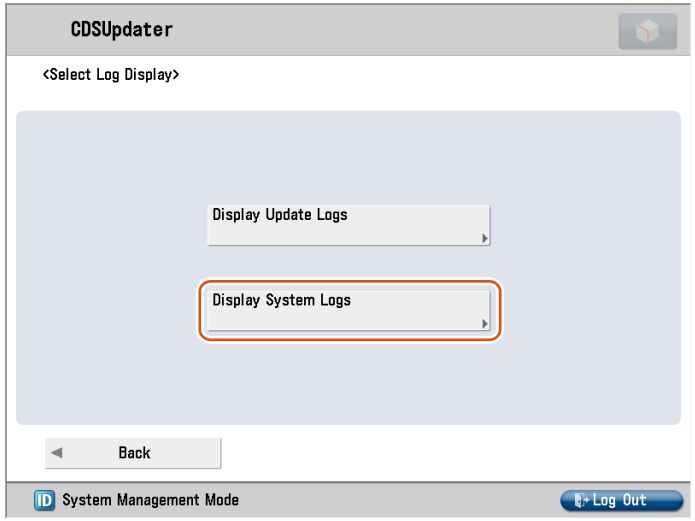

F-2-521

4. Press [Select Log Display] button.



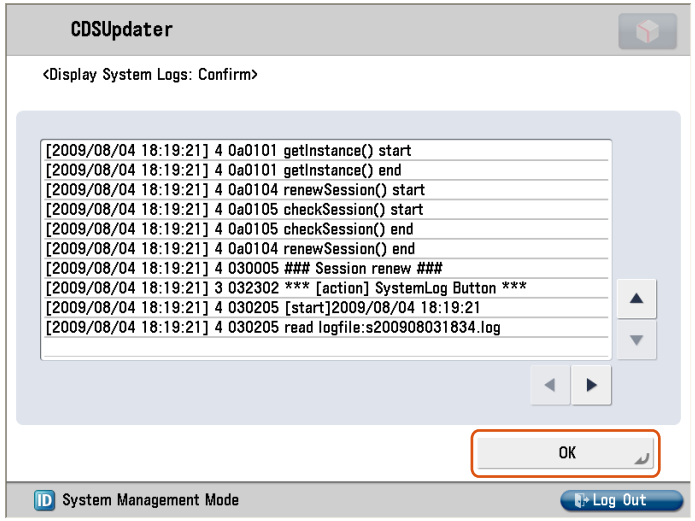

F-2-522

5. Press [Display System Logs] button.




F-2-523

6. Updater internal logs are displayed.
Press [OK] button to exit this operation.




F-2-524

NOTE:
See Chapter6 "Debug Logs" for how to obtain System Log.

# Communication Test

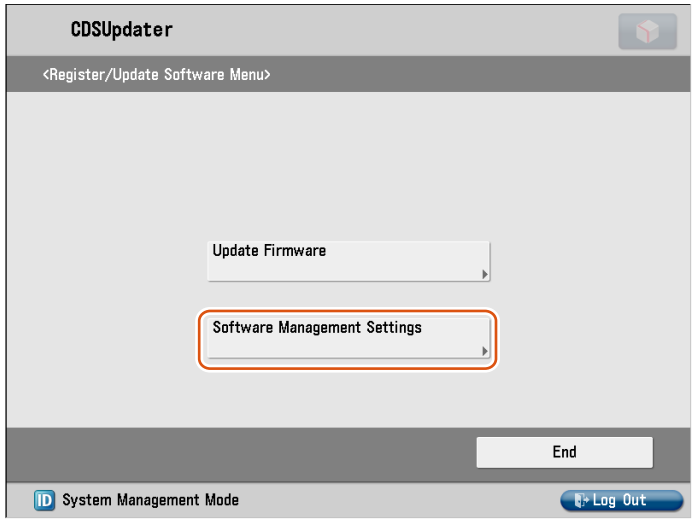
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

NOTE:
CDS and RDS are another servers.
You need the communication test of CDS by all means even if You succeed in a communication test of the RDS.

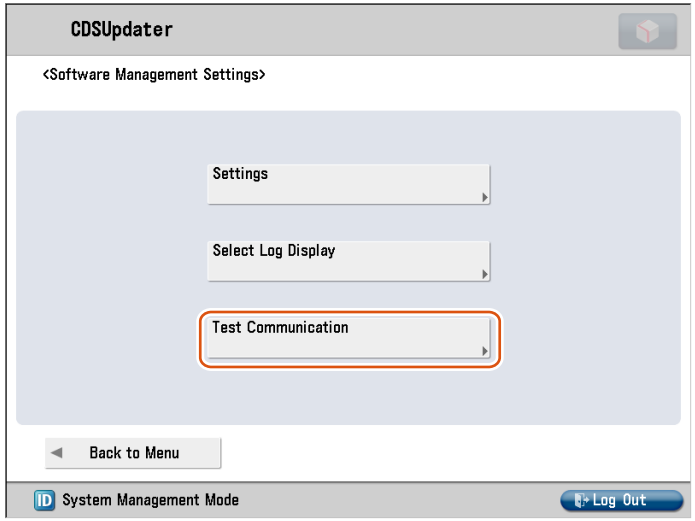
2. Press [Updater] button.

3. Press [Software Management Settings] button.



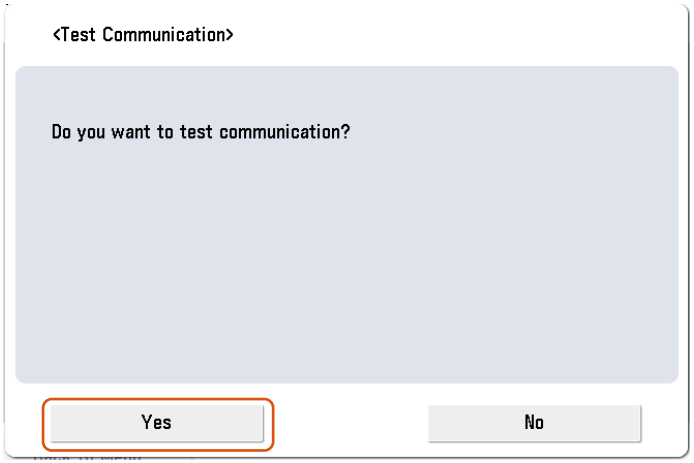

F-2-525

4. Press [Test Communication] button.




F-2-526

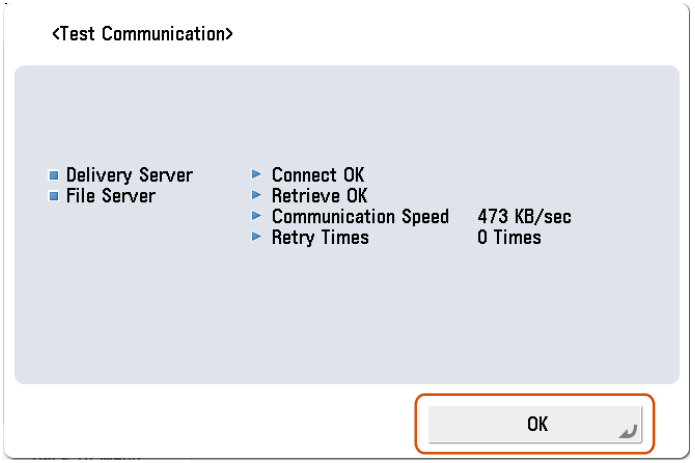
5. Press [Yes] button.




F-2-527

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown.
   Press [OK] button to exit this operation.




F-2-528

## Upgrading Updater

The firmware installed in the device should be also upgraded when upgrading Updater. See "Overview" in chapter 3 of this manual for how to update firmware.
The setting information and logs (update logs/system logs) are inherited in the upgraded version.

## Formatting Hard Disk

Since Updater is a MEAP application, its contents can be temporarily saved in the MEAP application storage area on PC via SST during formatting or replacing HDD. See MEAP Service Manual for further information.
The settings initialized in format or replacement should be restored. See "Overview of Preparation" in chapter 2 of this manual for details.

NOTE:
When formatting or replacing HDD, distribution schedule, downloaded firmware (not updated yet) and logs (update/system logs) will be deleted.

## How to Replace Controller Boards

The steps are different depending on which of 2 controller boards are to be replaced.

- Main Controller Board PCB 1
  No steps follow.

- Main Controller Board PCB 2 (including SRAM)
  The network and service mode setting should be set again after initialization. See "Overview of Preparation" in chapter 2 of this manual for details.

## How to Replace Devices

All settings should be set again because no data are inherited. See "Overview of Preparation" in chapter 2 of this manual for details.

# FAQ on Installing Firmware

No.1

Q: Is it also possible to downgrade firmware with using CDS?

A: Firmware can be downgraded in some methods shown in the table below.
If download and update are performed consecutively, firmware can't be downgraded.

| Distribution Method | Downgrade Possibility |
|---|---|
| UGW-linked Download and Update | No |
| UGW-linked Download | Yes |
| Manual Download and Update(Timing to Apply : Manual) | Yes |
| Manual Download and Update(Timing to Apply : Automatic) | No |

T-2-137

No.2

Q: When installing firmware, does it take less time in "manual download and update" compared to "update via SST"?

A: It depends on the number of devices to update firmware.
When updating the firmware on a device, it takes more time in "manual download and update" compared to "update via SST" (It depend on network environment.).
As for the time to update firmware to multiple devices, "manual download and update" takes less time compared to "update via SST" because updating the firmware to multiple devices can be executed simultaneously.

When the network line of the user is slow, update via CDS becomes slow in comparison with the SST. Because speed is displayed by a communication test, You refer to it.
As for the aim of the downloading time, transmission rate is 6 or 7 minutes in the case of 1000KB/sec. (There is a difference in a device and a version of Firmware, accessories and the quantity of the language files).

No.3

Q: How can we confirm that the firmware is properly updated after "UGW-linked download and update" done?

A: You can confirm this in E-mail or the Device List on UGW-linked screen.
E-mail to notify firmware update will be sent from CDS server to the addresses set as destinations at the time of distribution setting to notify update completion.
On UGW-linked screen, search the device of your interest on [Select Device] screen to find the distribution status per device as shown in the search result.

No.4

Q: In the course of "UGW-linked download", what will happen if the user downloads the firmware before the service technician update the firmware downloaded with "UGW-linked download" before?

A: The previously downloaded firmware in the method of "UGW-linked download" will be overridden by the subsequently downloaded one.
This is because only one downloaded firmware can be held on the device.
The firmware downloaded in the method of "Service mode-linked download" and "UGW-linked download" can be checked/deleted from User mode, but cannot be updated, so it cannot be updated by the user unnoticed by the service technician.

No.5

Q: What happens if the user registers another distribution schedule when the distribution schedule has been set in "manual download and update"?

A: The distribution schedule subsequently registered by the user will override the existing schedule. This is because only one distribution schedule can be held. Any existing distribution schedule is deleted and the newly registered distribution schedule is made valid.

No.6

Q: How is an individual response edition of firmware distributed?

A: Any individual response edition of firmware can be installed in all the methods provided by service technicians. Before installing the individual response edition, ensure to obtain the ID and password separately.

No.7

Q: If the device is down during firmware update, can the device be started using the older firmware version?

A: No, it is impossible to start the device using older versions. If this occurs, the service technician in charge should reinstall the firmware via SST. See "Troubleshooting on Firmware Installation" in chapter 6 of this manual for details.

No.8

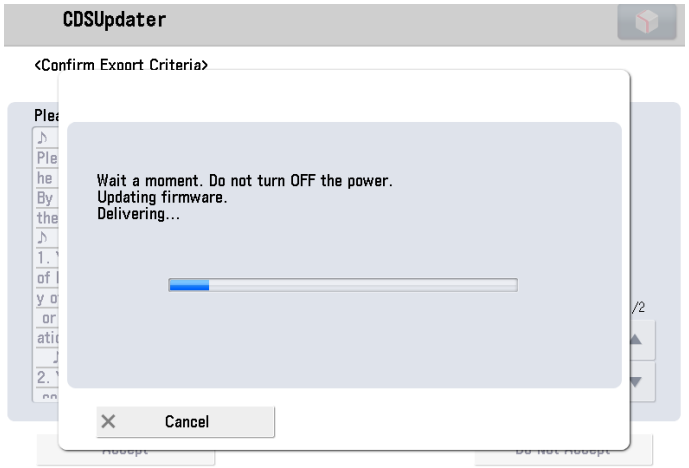
Q: If the device is down during firmware download, is it possible to download the firmware again?

A: Firmware cannot be downloaded again automatically. Instead, the error is notified in E-mail.
The user should register the firmware distribution schedule again accordingly.

No.9

Q: Can we cancel the operation during firmware download?

A: Yes. [Cancel] button is shown.




F-2-529

No.10

Q: E-mail is sent to users to notify update completion. Can service technicians also receive such a notification?

A: Yes. The notification E-mail is also set for the service technician in charge if the user enters his/her E-mail address at the time of firmware distribution setting.
Multiple E-mail addresses can be entered in the field.Delimit each E-mail address with “,” (comma) or “;” (semicolon) when you enter multiple E-mail addresses in the field.

No.11

Q: How long does the firmware update take?

A: Approx. 30 min. However, this does not include the download time. Download time relies on the network environment.

# FAQ on Installing MEAP Application/System Option

No.1

Q: What happens if a MEAP application is installed in the system with insufficient HDD free space?

A: An error message is shown. Upon starting installation, the MEAP application checks the required space against free space to judge installation availability.

No.2

Q: Can we cancel the operation during installation of MEAP application?

A: Yes: [Cancel] button is shown.

No.3

Q: Is the device automatically restarted after the system option is enabled?

A: The device is not automatically restarted. Users should restart the device manually.

# FAQ on General Matters of Updater

No.1

Q: What preparation is needed in each installation method?

A: See the table below for preparation required in each installation method.

- For updating firmware

| Installation Method | Setting Sales Company's HQ | Network Settings | Enabling UGW Link | Enabling [Update Firmware] Button of User Mode | Enabling [Manual Update] Button of User Mode (Remote UI) | Periodical update validation |
|---|---|---|---|---|---|---|
| UGW-linked Download and Update | Yes | Yes | Yes | - | - | - |
| UGW-linked Download | Yes | Yes | Yes | - | - | - |
| Manual Download and Update | Yes | Yes | - | - | - | - |
| Manual Download and Update via Local UI | Yes | Yes | - | Yes | - | - |
| Manual Download and Update via Remote UI | Yes | Yes | - | Yes | - | - |
| Special Download and Update via Remote UI | Yes | - | - | - | Yes | - |
| Periodical update | Yes | Yes | - | - | - | Yes |

T-2-138

- For install Application

| Installation Method | Network Settings | Enabling [Install Application/ Options] Button of User Mode |
|---|---|---|
| LMS-linked Installation | Yes | - |
| LMA-linked installation via Local UI | Yes | Yes |
| LMS-linked installation via Remote UI | Yes | Yes |

T-2-139

No.2

Q: How can operations using Updater be masked on the users' side?

A: Be sure to perform the following from the service mode.

- Masking Firmware Installation

| | |
|---|---|
| Setting Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-FIRM (1 -> 0) |
| Setting Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >LOCLFIRM (1 -> 0) |

- Masking Application Installation

| | |
|---|---|
| Setting Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-MEAP (1 -> 0) |

No.3

Q: Can the communication be cancelled during the communication test?

A: Yes. During the communication test, “Cancel” button is displayed.

# DCM

## DCM

### Overview

DCM (Device Configuration Management) is a function to migrate the setting values (of user mode and service mode). In terms of the description in the User's Guide, it is synonymous with "Import/Export All". Service mode setting values can be backed up/restored from the top screen of service mode.
By the conventional method for backing up SRAM of the Main Controller 2, data could be backed up/restored only for the same machine. DCM supports the following 3 patterns.

- The same machine (backup for the purpose of providing against emergency)
- A different machine of the same model (setting values are migrated collectively to multiple machines when replacing a host machine)
- A different model (e.g.: the setting values are copied from an old model to a new model)

### Where data is stored

Store the backup data in the following location.

- User > PC (RUI)
- Service > USB memory device/HDD of the machine (top screen of service mode)

### Setting values that can be backed up

The values changed by the user under [Settings/Registration] and those specified in service mode can be backed up.
Only setting values are backed up. Image data such as scanned image cannot be backed up.

- [Settings/Registration] value that a user set.
- Service mode setting values

### General limitations on DCM

- With DCM, stored data, MEAP application, and system option license cannot be migrated.
- A .dcm file exported to the internal HDD is not deleted even when the machine is restarted. Only 2 files at a maximum are stored in HDD. When there are more than 2 files, the old .dcm files are deleted from the oldest.
- Continuous import is not guaranteed. After importing a file, the machine must be restarted. If executing import without restart, NG is displayed and a file is not imported.
- When importing DCM file in service mode and user mode separately, perform it in the following procedures.
  1) Perform the import of the DCM data of the service mode earlier.
  2) Reboot the Host machine.
  3) Import the DCM data of the user mode.
- As for service mode, if the process is not completed within 5 minutes in the case of export and 15 minutes in the case of import, the item performed at that time is continued until it ends, but the final result becomes ERROR.
- Data to which no password is set when exporting service mode cannot be loaded from collective import from RUI. When assuming to perform collective import from RUI, password must be set to data to be exported.
- Following limitations are applied to password for DCM data:
  - Character string of software keyboard: 0 to 32 characters
  - No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
  - No space is allowed in the middle of a password.
  - Password is case sensitive.
- At the time of following setting, Host matchine does not recognize USB memory.The DCM function is not usable, too.
  - Settings/Registration > Preferences > External Interface > USB Settings > Use MEAP Driver for External USB Device = On

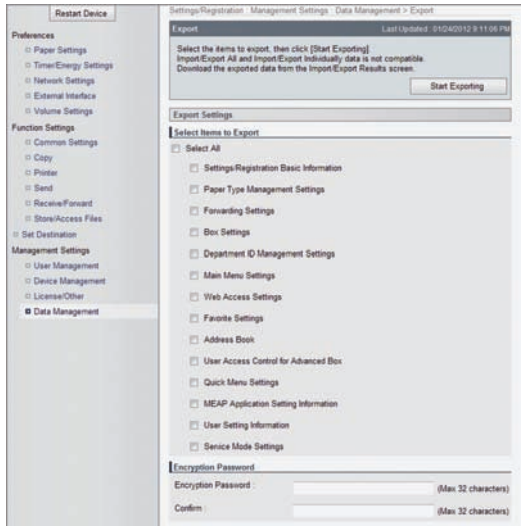
### Restrictions about import/export

- An import/export process ends with error while the following specific job is executed;
  - Send job,
  - Forwarding job,
  - FAX reception job,
  - IFAX reception job
- If this function is executed with a print job simultaneously, it affects the operation such as; UI is locked, or a print job is cleared by reboot after import. So it requires careful operation.
- A device rejects an import/ export request during shut-down.
- If this function is executed with device information distribution or RUI import/ export (conventional function) simultaneously, the first coming job takes priority and they are controlled exclusively.
- If this function is executed with a firmware update by a CDS Updater simultaneously, a firmware update process takes priority, and this function is stopped temporarily by reboot.
- When error code is issued, this function ends with error.
- If the display language differs between export and import, a setting value of a text corrupts in some cases. The character corruption can be solved by changing the display language to the appropriate one.

## Import/Export All from Remote UI

The following settings information is available with the Import function in each case

- Settings/Registration Basic Information
- Box Settings
- Department ID Management Settings
- Main Menu Settings
- Favorite Settings
- Address Book
- Forwarding Settings
- Quick Menu Settings
- MEAP Application Setting Information
- Paper Type Management Settings
- User Access Control for Advanced Space
- Web Access Settings
- Service Mode Settings(Display/hide of the service mode settings on the export screen)




F-2-530

Note:
Display/hide of the service mode settings on RUI can be switched by changing the setting in the following service mode.
Service mode L1 > Copier > Option > USER > SMD-EXPT
[0]: Hide the service mode settings. (Def.)
[1]: Display the service mode settings.

### Collective Import Using Data Collectively Exported from RUI

For the reason of security, it is not appropriate that the user mode can be exported from service mode without user's permission. Because of that, it cannot be exported due to the specification However, it is possible to import the setting values of user mode exported from RUI.

### Preparation

PC and web browser

USB memory device to store the data of reference machine

### Overall flow

1. Complete the device setting as a reference machine.
2. Export the data of reference machine including service mode from RUI.
3. Copy the data to the root of the USB memory device using a PC.
4. Connect the USB memory device to the copy destination machine.
5. Execute import by specifying the target files from RESTORE in service mode.

The following cases may be possible for the Import All function.
Case A:Importing all to your machine (Restoring the settings information to your machine for backups)
Case B:Importing all to the same model machine.
Case C:Importing all to the different model machine that supports the Import All function

| Setting Information | | | Case A | Case B | Case C |
|---|---|---|---|---|---|
| Preferences | Paper Settings | Paper Settings | Yes | Yes | No |
| | | A5R/STMTR Paper Selection | Yes | Yes | No |
| | | B5/EXEC Paper Selection | Yes | Yes | Yes |
| | | Paper Type Management Settings | Yes | Yes | No |
| | | Register Custom Size | Yes | Yes | Yes |
| | Display Settings | Default Screen after Startup/Restoration | Yes | Yes | Yes |
| | | Default Screen (Status Monitor/Cancel) | Yes | Yes | Yes |
| | | Copy Screen Display Settings | Yes | Yes | Yes |
| | | Display Fax Function | Yes | Yes | Yes |
| | | Store Location Display Settings | Yes | Yes | Yes |
| | | Language/Keyboard Switch On/Off | Yes | Yes | Yes |
| | | Language/Keyboard Switch | Yes | Yes | Yes |
| | | Use Keyboard Shift Lock Feature | Yes | Yes | Yes |
| | | Display Remaining Paper Message | Yes | Yes | Yes |
| | | No. of Copies/Job Duration Status | Yes | Yes | Yes |
| | | Display Original Scanning Cleaning Area | Yes | Yes | Yes |
| | | Paper Type Selection Screen Priority | Yes | Yes | Yes |
| | | mm/Inch Entry Switch | Yes | Yes | Yes |
| | | ID/User Name Display On/Off | Yes | Yes | Yes |
| | Timer/Energy Settings | Date/Time Settings | Yes | Yes | Yes |
| | | Time Format | Yes | Yes | Yes |
| | | Quick Startup Settings for Main Power | Yes | Yes | Yes |
| | | Auto Reset Time | Yes | Yes | Yes |
| | | Restrict Auto Reset Time | Yes | Yes | Yes |
| | | Function After Auto Reset | Yes | Yes | Yes |
| | | Auto Sleep Time | Yes | Yes | Yes |
| | | Sleep Mode Energy Use | Yes | Yes | Yes |
| | | Auto Sleep Weekly Timer | Yes | Yes | Yes |
| | | Energy Saver/Sleep Mode Exit Time Settings | Yes | Yes | Yes |
| | | Mode After Energy Saver Key Pressed | Yes | Yes | Yes |

| Setting Information | | | | Case A | Case B | Case C |
|---|---|---|---|---|---|---|
| | | Change Energy Saver Mode | | Yes | Yes | Yes |
| | | Silent Mode Time | | Yes | Yes | Yes |
| | Network | Confirm Network Connection Set. Changes | | Yes | Yes | Yes |
| | | TCP/IP Settings | | | | |
| | | IPv4 Settings | Use IPv4 | Yes | Yes | Yes |
| | | | IP Address Settings | | | |
| | | | IP Address | Yes | No | No |
| | | | Subnet Mask | Yes | Yes | Yes |
| | | | Gateway Address | Yes | Yes | Yes |
| | | | DHCP | Yes | Yes | Yes |
| | | | RARP | Yes | Yes | Yes |
| | | | BOOTP | Yes | Yes | Yes |
| | | | DHCP Option Settings | Yes | Yes | Yes |
| | | IPv6 Settings | Use IPv6 | Yes | Yes | Yes |
| | | | Stateless Address Settings | Yes | Yes | Yes |
| | | | Manual Address Settings | Yes | No | No |
| | | | Use DHCPv6 | Yes | Yes | Yes |
| | | DNS Settings | DNS Server Address Settings | Yes | Yes | Yes |
| | | | DNS Host/Domain Name Settings | Yes | No | No |
| | | | DNS Dynamic Update Settings | Yes | Yes | Yes |
| | | WINS Settings | | Yes | Yes | Yes |
| | | LPD Print Settings | | Yes | Yes | Yes |
| | | RAW Print Settings | | Yes | Yes | Yes |
| | | SNTP Settings | | Yes | Yes | Yes |
| | | FTP Print Settings | | Yes | Yes | Yes |
| | | WSD Settings | | Yes | Yes | Yes |
| | | Use FTP PASV Mode | | Yes | Yes | Yes |
| | | Multicast Discovery Settings | | Yes | Yes | Yes |
| | | Use HTTP | | Yes | Yes | Yes |
| | | Use WebDAV Server | | Yes | Yes | Yes |
| | | Proxy Settings | | Yes | Yes | Yes |
| | | NetWare Settings | | Yes | Yes | Yes |
| | | AppleTalk Settings | | Yes | No | No |
| | | SMB Server Settings | | Yes | No | No |

| Setting Information | | | Case A | Case B | Case C |
|---|---|---|---|---|---|
| | | SNMP Settings | Yes | Yes | Yes |
| | | Dedicated Port Settings | Yes | Yes | Yes |
| | | Use Spool Function | Yes | Yes | Yes |
| | | Startup Settings | Yes | Yes | Yes |
| | | Ethernet Driver Settings | Yes | Yes | Yes |
| | | Firewall Settings | Yes | Yes | Yes |
| | External Interface | USB Settings | Yes | Yes | Yes |
| | Accessibility | Key Repetition Settings | Yes | Yes | Yes |
| | | Reversed Display (Color) | Yes | Yes | Yes |
| | Adjustment/Maintenance | | | | |
| | Adjust Image Quality | Correct Density | Yes | Yes | Yes |
| | | Fine Adjust Zoom | Yes | No | No |
| | Adjust Action | Speed/Precision Priority for Double Staple | Yes | Yes | No |
| | | Alignment Adjustment When Stapling | Yes | No | No |
| | | Finisher Tray A Alignment Adjustment | Yes | No | No |
| | | Finisher Tray B Alignment Adjustment | Yes | No | No |
| Function Settings | Common | Paper Feed Settings | | | |
| | | Suspended Job Timeout | Yes | Yes | Yes |
| | | Paper Output Settings | | | |
| | | Output Tray Settings | Yes | No | No |
| | | High Volume Stack Mode | Yes | Yes | |
| | | Offset Jobs | Yes | Yes | No |
| | | Job Separator Between Jobs | Yes | Yes | No |
| | | Job Separator Between Copies | Yes | Yes | No |
| | | Different Paper Sizes for Output Tray | Yes | No | No |
| | | Align Output Paper of Diff. Sizes (Diff. Width) | Yes | Yes | No |
| | | Unfinished Tab Paper Forced Output | Yes | Yes | Yes |
| | | Print Settings | | | |
| | | Print Priority | Yes | Yes | Yes |
| | | Thin/Plain Paper Printing Priority Settings | Yes | Yes | No |
| | | Output Report Default Settings | Yes | Yes | Yes |
| | | Register Characters for Page No./Watermark | Yes | Yes | Yes |
| | | Copy Set Numbering Option Settings | Yes | Yes | No |
| | | Secure Watermark/Document Scan Lock | Yes | Yes | Yes |
| | | Scan Settings | | | |
| | | Timing to Raise Feeder Tray | Yes | Yes | No |
| | | Feeder Jam Recovery Method | Yes | Yes | No |

| Setting Information | | | | Case A | Case B | Case C |
|---|---|---|---|---|---|---|
| | | Scanner Noise Settings | | Yes | Yes | No |
| | | Streak Prevention | | Yes | Yes | No |
| | | LTRR/STMT Original Selection | | Yes | Yes | No |
| | | Remote Scan Gamma Value | | Yes | Yes | No |
| | | Auto Online | | Yes | Yes | Yes |
| | | Auto Offline | | Yes | Yes | Yes |
| | | Generate File | | | | |
| | | High Compression Image Quality Level | | Yes | Yes | Yes |
| | | OCR (Text Searchable) Settings | | Yes | Yes | Yes |
| | | Trace & Smooth Settings | | Yes | Yes | Yes |
| | | OOXML Settings | | Yes | Yes | Yes |
| | | Specify Minimum PDF Version | | Yes | Yes | Yes |
| | | Format PDF to PDF/A | | Yes | Yes | Yes |
| | | Optimize PDF for Web | | Yes | Yes | Yes |
| | | 256-bit AES Settings for Encrypted PDF | | Yes | Yes | Yes |
| | | Document Scan Lock Operational Settings | | Yes | Yes | Yes |
| | | Set Authentication Method | | Yes | Yes | Yes |
| | Copy | Auto Collate | | Yes | Yes | No |
| | | Image Orientation Priority | | Yes | Yes | No |
| | | Auto Orientation | | Yes | Yes | Yes |
| | | Photo Printout Mode | | Yes | Yes | No |
| | | Cascade Copy Communication Timeout | | Yes | Yes | Yes |
| | Send | Common Settings | | Yes | Yes | Yes |
| | | E-Mail/I-Fax Settings | | | | |
| | | Register Unit Name | | Yes | Yes | Yes |
| | | Communication Settings | SMTP RX | Yes | Yes | Yes |
| | | | POP | Yes | Yes | Yes |
| | | | SMTP Server | Yes | Yes | Yes |
| | | | E-Mail Address | Yes | No | No |
| | | | POP Server | Yes | Yes | Yes |
| | | | POP Login Name | Yes | No | No |
| | | | POP Password | Yes | No | No |
| | | | POP Interval | Yes | Yes | Yes |
| | | Authent./Encryption | | Yes | Yes | Yes |
| | | Confirm SSL Certificate for SMTP TX | | Yes | Yes | Yes |
| | | Confirm SSL Certificate for POP RX | | Yes | Yes | Yes |
| | | Maximum Data Size for Sending | | Yes | Yes | Yes |

| Setting Information | | | | Case A | Case B | Case C |
|---|---|---|---|---|---|---|
| | | Default Subject | | Yes | Yes | Yes |
| | | Specify Authentication User Dest. to Reply | | Yes | Yes | Yes |
| | | Set Authentication User Dest. to Sender | | Yes | Yes | Yes |
| | | Allow Unregistered Users to Send E-Mail | | Yes | Yes | Yes |
| | | Full Mode TX Timeout | | Yes | Yes | Yes |
| | | Print MDN/DSN upon Receipt | | Yes | Yes | Yes |
| | | Use Send via Server | | Yes | Yes | Yes |
| | | Allow MDN Not via Server | | Yes | Yes | Yes |
| | | Restrict TX Destination Domain | | Yes | Yes | Yes |
| | | Autocomplete for Entering E-Mail Addresses | | Yes | Yes | Yes |
| | | Fax Settings | | | | |
| | | Default Screen | | Yes | Yes | Yes |
| | | Change Default Settings | | Yes | Yes | Yes |
| | | Register Options Shortcuts | | Yes | Yes | Yes |
| | | Register Sender Name (TTI) | | Yes | Yes | Yes |
| | | Use Auth. User Name as Sender Name | | Yes | Yes | Yes |
| | | ECM TX | | Yes | Yes | Yes |
| | | Set Pause Time | | Yes | Yes | Yes |
| | | Auto Redial | | Yes | Yes | Yes |
| | | Check Dial Tone Before Sending | | Yes | Yes | Yes |
| | | Fax TX Report | | Yes | Yes | Yes |
| | | Fax Activity Report | | Yes | Yes | Yes |
| | | Set Line | Line 1 to Line 4 | Yes | Yes | Yes |
| | | | Register Unit Telephone Number | Yes | No | No |
| | | | Register Unit Name | Yes | No | No |
| | | | Select Line Type | Yes | Yes | Yes |
| | | | Select TX Line | Yes | Yes | Yes |
| | | TX Start Speed | | Yes | Yes | Yes |
| | | PIN Code Access | | Yes | Yes | Yes |
| | | Confirm Entered Fax Number | | Yes | Yes | Yes |
| | | Allow Fax Driver TX | | Yes | Yes | Yes |
| | | Remote Fax TX Settings | | Yes | Yes | Yes |
| | | Remote Fax Settings | | Yes | Yes | Yes |
| | Receive/Forward | Common Settings | | Yes | Yes | Yes |
| | | Fax Settings | | Yes | Yes | Yes |

| Setting Information | | | Case A | Case B | Case C |
|---|---|---|---|---|---|
| | Store/Access Files | Common Settings | | | |
| | | Scan and Store Settings | Yes | Yes | Yes |
| | | Access Stored Files Settings | Yes | Yes | No |
| | | Limit Box PIN to 7 Digits/Restrict Access | Yes | Yes | Yes |
| | | Mail Box Settings | Yes | Yes | Yes |
| | | Advanced Space Settings | Yes | Yes | Yes |
| | | Network Settings | Yes | Yes | Yes |
| | | Memory Media Settings | Yes | Yes | Yes |
| | Secure Print | Simple Authentication Settings | Yes | Yes | Yes |
| | | Only Allow Encrypted Print Jobs | Yes | Yes | Yes |
| | Hold | Use Hold Function | Yes | Yes | Yes |
| | | Store PS/PDF Data to Hold | Yes | Yes | Yes |
| Set Destination | Change Default Display of Address Book | | Yes | Yes | Yes |
| | Address Book PIN | | Yes | Yes | Yes |
| | Manage Address Book Access Numbers | | Yes | Yes | Yes |
| | Include Pswd. When Exporting Address Book | | Yes | Yes | Yes |
| | Register LDAP Server | | Yes | Yes | No |
| | Auto Search When Using LDAP Server | | Yes | Yes | Yes |
| | Change Default LDAP Search Conditions | | Yes | Yes | Yes |
| | Register/Edit LDAP Search Conditions | | Yes | Yes | No |
| | Acquire Remote Address Book | Acquire Address Book | Yes | Yes | Yes |
| | | Remote Address Book Server Address | Yes | Yes | Yes |
| | | Communication Timeout | Yes | Yes | Yes |
| | | Fax TX Line Auto Select Adjustment | Yes | Yes | Yes |
| | Make Remote Add. Book Open | Make Address Book Open | Yes | Yes | Yes |
| Management Settings | Device Management | Device Information Settings | Yes | No | No |
| | | Device Information Delivery Settings | | | |
| | | Register Destinations | Yes | Yes | No |
| | | Set MEAP Authentication | Yes | Yes | Yes |
| | | Set Auto Delivery | Yes | Yes | No |
| | | Restrict Receiving Device Information | Yes | Yes | Yes |
| | | Restrict Receiving for Each Function | Yes | Yes | Yes |
| | | Set Paper Information | Yes | Yes | Yes |
| | | Use MEAP Auth. When Receive | Yes | Yes | Yes |
| | | Report Settings | Yes | Yes | Yes |
| | | Display Job Status Before Authentication | Yes | Yes | Yes |

| Setting Information | | | | Case A | Case B | Case C |
|---|---|---|---|---|---|---|
| | | Display Log | | Yes | Yes | Yes |
| | | Audit Log Retrieval | | Yes | Yes | Yes |
| | | Store Key Operation Log | | Yes | Yes | Yes |
| | | Format Encryption Method to FIPS 140-2 | | Yes | Yes | Yes |
| | License/Other | Message Board/Support Link | | Yes | Yes | Yes |
| | | Remote Operation Settings | | Yes | Yes | Yes |
| | Data Management | Back Up/Restore Settings | | Yes | Yes | Yes |
| | | HDD Data Complete Deletion | | Yes | Yes | Yes |
| Box Settings | Function Settings | Receive/Forward | Common Settings | Yes | Yes | Yes |
| | | Store/Access Files | Mail Box Settings | Yes | Yes | Yes |
| | Access Stored Files | Mail Box (Print) | Color Balance (Options) | Yes | Yes | No |
| | Scan and Store | Advanced Space (Scan) | Custom (Scan Size) | Yes | Yes | No |
| Department ID Management Settings | Management Settings | User Management | System Manager Information Settings | Yes | Yes | Yes |
| | | | Department ID Management | | | |
| | | | Register PIN | Yes | Yes | Yes |
| Main Menu Settings | Main Menu Settings | Setting File | | Yes | Yes | Yes |
| | | Wallpaper Image File | | Yes | Yes | Yes |
| Favorite Settings | Copy | Register/Edit Favorite Settings | | Yes | Yes | No |
| | | Change Default Settings | | Yes | Yes | No |
| | | Register Options Shortcuts (Regular Copy) | | Yes | Yes | No |
| | | Register Options Shortcuts (Express Copy) | | Yes | Yes | No |
| | Send | Common Settings | | Yes | Yes | Yes |
| | | Fax Settings | | Yes | Yes | Yes |
| | Store/Access Files | Common Settings | | Yes | Yes | No |
| | Scan and Store | | | | | |
| | Advanced Box (Scan) | Custom (Scan Size) | | Yes | Yes | No |
| Address Book | Set Destination | Register Destinations | | Yes | Yes | Yes |
| | | Rename Address List | | Yes | Yes | Yes |
| | | Register One-Touch | | Yes | Yes | Yes |
| Forwarding Settings | Function Settings | Receive/Forward | Common Settings | Yes | Yes | Yes |

| Setting Information | | | | Case A | Case B | Case C |
|---|---|---|---|---|---|---|
| Quick Menu Settings | Quick Menu Settings | Button File | | Yes | Yes | No |
| MEAP Application Setting Information | Workflow Composer | Flow Data File | | Yes | Yes | Yes |
| | | Operation Setting File | | Yes | Yes | Yes |
| | MEAP User Setting Information | Data | | Yes | Yes | Yes |
| | MEAP Application Setting Information | Data | | Yes | Yes | Yes |
| Paper Type Management Settings | Preferences | Paper Settings | Paper Type Management Settings | Yes | Yes | Yes |
| User Access Control for Advanced Space | User Access Control for Advanced Box | User List | | Yes | Yes | Yes |
| | | Integrated Authentication Settings | | Yes | Yes | Yes |
| | | Authentication/Operation Log Management | | Yes | Yes | Yes |
| Web Access Settings | Web Access Settings | Favorites | | Yes | Yes | Yes |
| | | Settings | | Yes | Yes | Yes |

T-2-140

## Service mode setting values that can be backed up by DCM

The numbers shown in the Compatibility level are explained in the table below.

| Compatibility level (Lv) | Description |
|---|---|
| 0 | Not supported. |
| 1 | Can import to a device of the same model and same SN only. |
| | Usable for the purpose of backup/restore. |
| 2 | Can import to a device of a same model. |
| 3 | Can import to a device of a different model also. |

T-2-141

### DCM list for Service Mode

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| BOARD | OPTION | | FONTDL | Yes | Yes | Yes |
| COPIER | ADJUST | ADJ-XY | ADJ-X | Yes | | |
| COPIER | ADJUST | ADJ-XY | ADJ-Y | Yes | | |
| COPIER | ADJUST | ADJ-XY | ADJ-Y-DF | Yes | | |
| COPIER | ADJUST | ADJ-XY | STRD-POS | Yes | | |
| COPIER | ADJUST | ADJ-XY | ADJ-X-MG | Yes | | |
| COPIER | ADJUST | ADJ-XY | ADJY-DF2 | Yes | | |
| COPIER | ADJUST | ADJ-XY | ADJ-Y-MG | Yes | | |
| COPIER | ADJUST | AE | AE-TBL | Yes | Yes | |
| COPIER | ADJUST | BLANK | BLANK-T | Yes | | |
| COPIER | ADJUST | BLANK | BLANK-L | Yes | | |
| COPIER | ADJUST | BLANK | BLANK-R | Yes | | |
| COPIER | ADJUST | BLANK | BLANK-B | Yes | | |
| COPIER | ADJUST | CCD | W-PLT-X | Yes | | |
| COPIER | ADJUST | CCD | W-PLT-Y | Yes | | |
| COPIER | ADJUST | CCD | W-PLT-Z | Yes | | |
| COPIER | ADJUST | CCD | SH-TRGT | Yes | | |
| COPIER | ADJUST | CCD | 100-RG | Yes | | |
| COPIER | ADJUST | CCD | 100-GB | Yes | | |
| COPIER | ADJUST | CCD | DFTAR-R | Yes | | |
| COPIER | ADJUST | CCD | DFTAR-G | Yes | | |
| COPIER | ADJUST | CCD | DFTAR-B | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M1 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M2 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M3 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M4 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M5 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M6 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M7 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M8 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M9 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S1 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S2 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S3 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S4 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S5 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S6 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S7 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S8 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S9 | Yes | | |
| COPIER | ADJUST | CCD | 100DF2GB | Yes | | |
| COPIER | ADJUST | CCD | 100DF2RG | Yes | | |
| COPIER | ADJUST | CCD | DFCH2R2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2R10 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2B2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2B10 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2G2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2G10 | Yes | | |
| COPIER | ADJUST | CCD | CCD-CHNG | Yes | | |
| COPIER | ADJUST | CCD | MTF-M1 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M2 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M3 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M4 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M5 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M6 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M7 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M8 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M9 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S1 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S2 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S3 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S4 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S5 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S6 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S7 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S8 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S9 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-R2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-R10 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-B2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-B10 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-G2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-G10 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M10 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M11 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-M12 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S10 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S11 | Yes | | |
| COPIER | ADJUST | CCD | MTF2-S12 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M10 | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | ADJUST | CCD | MTF-M11 | Yes | | |
| COPIER | ADJUST | CCD | MTF-M12 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S10 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S11 | Yes | | |
| COPIER | ADJUST | CCD | MTF-S12 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2K2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH2K10 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-K2 | Yes | | |
| COPIER | ADJUST | CCD | DFCH-K10 | Yes | | |
| COPIER | ADJUST | CCD | DFTAR-BW | Yes | | |
| COPIER | ADJUST | CCD | DFTBK-G | Yes | | |
| COPIER | ADJUST | CCD | DFTBK-B | Yes | | |
| COPIER | ADJUST | CCD | DFTBK-R | Yes | | |
| COPIER | ADJUST | CCD | CCD-CHG2 | Yes | | |
| COPIER | ADJUST | CCD | DFTBK-BW | Yes | | |
| COPIER | ADJUST | CST-ADJ | MF-A4R | Yes | | |
| COPIER | ADJUST | CST-ADJ | MF-A6R | Yes | | |
| COPIER | ADJUST | CST-ADJ | MF-A4 | Yes | | |
| COPIER | ADJUST | DENS | DENS-ADJ | Yes | | |
| COPIER | ADJUST | DENS | P-OFFSET | Yes | | |
| COPIER | ADJUST | DENS | P-DHALF | Yes | | |
| COPIER | ADJUST | DENS | P-B-TGT | Yes | | |
| COPIER | ADJUST | DENS | DMAX-N-T | Yes | | |
| COPIER | ADJUST | DEVELOP | BIAS | Yes | | |
| COPIER | ADJUST | EXP-LED | PR-EXP | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REGIST | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-C1 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-C2 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-C3 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-C4 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-MF | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-DK | Yes | | |
| COPIER | ADJUST | FEED-ADJ | ADJ-REFE | Yes | | |
| COPIER | ADJUST | FEED-ADJ | RG-MF | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REG-THCK | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REG-OHT | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REG-DUP1 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REG-DUP2 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | LP-FEED1 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | LP-MULT1 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | LP-DUP1 | Yes | | |
| COPIER | ADJUST | FEED-ADJ | REG-SPD | Yes | | |
| COPIER | ADJUST | HV-PRI | PRI-GRID | Yes | | |
| COPIER | ADJUST | HV-TR | TR-OFS1 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-OFS2 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-OFS3 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-OFS4 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-OFS5 | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | ADJUST | HV-TR | TR-OFS6 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF1 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF2 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF3 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF4 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF5 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-OF6 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF1 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF2 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF3 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF4 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF5 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-OF6 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-SP1 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-SP2 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-SP1 | Yes | | |
| COPIER | ADJUST | HV-TR | TR-L-SP2 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-SP1 | Yes | | |
| COPIER | ADJUST | HV-TR | P-TR-SP2 | Yes | | |
| COPIER | ADJUST | IMG-REG | MAG-V | Yes | | |
| COPIER | ADJUST | LASER | PVE-OFST | Yes | | |
| COPIER | ADJUST | LASER | POWER | Yes | | |
| COPIER | ADJUST | MISC | SEG-ADJ | Yes | | |
| COPIER | ADJUST | MISC | K-ADJ | Yes | | |
| COPIER | ADJUST | MISC | ACS-ADJ | Yes | | |
| COPIER | ADJUST | MISC | ACS-EN | Yes | | |
| COPIER | ADJUST | MISC | ACS-CNT | Yes | | |
| COPIER | ADJUST | MISC | ACS-EN2 | Yes | | |
| COPIER | ADJUST | MISC | ACS-CNT2 | Yes | | |
| COPIER | ADJUST | MISC | WT-FL-LM | Yes | Yes | |
| COPIER | ADJUST | MISC | SEG-ADJ3 | Yes | | |
| COPIER | ADJUST | MISC | K-ADJ3 | Yes | | |
| COPIER | ADJUST | MISC | ACS-ADJ3 | Yes | | |
| COPIER | ADJUST | MISC | ACS-EN3 | Yes | | |
| COPIER | ADJUST | MISC | ACS-CNT3 | Yes | | |
| COPIER | ADJUST | MISC | TBSIS-WB | Yes | | |
| COPIER | ADJUST | MISC | DCON-V | Yes | | |
| COPIER | ADJUST | MISC | HP-OFST | Yes | | |
| COPIER | ADJUST | PASCAL | OFST-P-K | Yes | | |
| COPIER | ADJUST | V-CONT | VL-OFST | Yes | | |
| COPIER | ADJUST | V-CONT | VD-OFST | Yes | | |
| COPIER | ADJUST | V-CONT | DE-OFST | Yes | | |
| COPIER | ADJUST | V-CONT | VCONT-1 | Yes | | |
| COPIER | ADJUST | V-CONT | VL-OF-L | Yes | | |
| COPIER | ADJUST | V-CONT | VL-OF-H1 | Yes | | |
| COPIER | ADJUST | V-CONT | VL-OF-H2 | Yes | | |
| COPIER | FUNCTION | 2D-SHADE | M-LINE1 | Yes | | |
| COPIER | FUNCTION | 2D-SHADE | M-LINE2 | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | FUNCTION | 2D-SHADE | S-LINE1 | Yes | | |
| COPIER | FUNCTION | 2D-SHADE | S-LINE2 | Yes | | |
| COPIER | FUNCTION | 2D-SHADE | S-LINE3 | Yes | | |
| COPIER | FUNCTION | 2D-SHADE | S-LINE4 | Yes | | |
| COPIER | FUNCTION | DENS | AGG-SW | Yes | | |
| COPIER | FUNCTION | INSTALL | E-RDS | Yes | Yes | Yes |
| COPIER | FUNCTION | INSTALL | RGW-PORT | Yes | Yes | Yes |
| COPIER | FUNCTION | INSTALL | RGW-ADR | Yes | Yes | Yes |
| COPIER | FUNCTION | INSTALL | CDS-CTL | Yes | Yes | Yes |
| COPIER | FUNCTION | INSTALL | BIT-SVC | Yes | Yes | Yes |
| COPIER | FUNCTION | SYSTEM | DEBUG-1 | Yes | Yes | Yes |
| COPIER | OPTION | ACC | COIN | Yes | | |
| COPIER | OPTION | ACC | DK-P | Yes | | |
| COPIER | OPTION | ACC | CARD-SW | Yes | | |
| COPIER | OPTION | ACC | PD-SIZE | Yes | | |
| COPIER | OPTION | ACC | CC-SPSW | Yes | | |
| COPIER | OPTION | ACC | UNIT-PRC | Yes | | |
| COPIER | OPTION | ACC | MIN-PRC | Yes | | |
| COPIER | OPTION | ACC | MAX-PRC | Yes | | |
| COPIER | OPTION | ACC | MIC-TUN | Yes | | |
| COPIER | OPTION | ACC | SRL-SPSW | Yes | | |
| COPIER | OPTION | ACC | PDL-THR | Yes | | |
| COPIER | OPTION | ACC | CR-TYPE | Yes | Yes | |
| COPIER | OPTION | ACCPST-D | ACC1 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC2 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC3 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC4 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC5 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC6 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC7 | Yes | | |
| COPIER | OPTION | ACCPST-D | ACC8 | Yes | | |
| COPIER | OPTION | BODY | PO-CNTMD | Yes | Yes | |
| COPIER | OPTION | BODY | MODEL-SZ | Yes | | |
| COPIER | OPTION | BODY | FIX-CLN | Yes | | |
| COPIER | OPTION | BODY | FIX-TEMP | Yes | Yes | |
| COPIER | OPTION | BODY | FSPD-S1 | Yes | Yes | |
| COPIER | OPTION | BODY | SCANSLCT | Yes | | |
| COPIER | OPTION | BODY | PASCAL | Yes | | |
| COPIER | OPTION | BODY | DH-SW | Yes | | |
| COPIER | OPTION | BODY | DRM-IDL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SENS-CNF | Yes | | |
| COPIER | OPTION | BODY | CONFIG | Yes | | |
| COPIER | OPTION | BODY | RAW-DATA | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SHARP | Yes | Yes | |
| COPIER | OPTION | BODY | LAPC-SW | Yes | Yes | |
| COPIER | OPTION | BODY | RMT-LANG | Yes | | |
| COPIER | OPTION | BODY | IFAX-LIM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DF-BLINE | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | BODY | TEMP-TBL | Yes | | |
| COPIER | OPTION | BODY | W/SCNR | Yes | | |
| COPIER | OPTION | BODY | DRM-H-SW | Yes | Yes | |
| COPIER | OPTION | BODY | SMTPTXPN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SMTPRXPN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | POP3PN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ORG-LGL | Yes | Yes | |
| COPIER | OPTION | BODY | ORG-LTR | Yes | Yes | |
| COPIER | OPTION | BODY | ORG-B5 | Yes | Yes | |
| COPIER | OPTION | BODY | UI-COPY | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-BOX | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-SEND | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-FAX | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SCR-SLCT | Yes | Yes | |
| COPIER | OPTION | BODY | TMC-SLCT | Yes | | |
| COPIER | OPTION | BODY | CAL-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | FTPTXPN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NW-SPEED | Yes | | |
| COPIER | OPTION | BODY | T-LW-LVL | Yes | | |
| COPIER | OPTION | BODY | INTROT-1 | Yes | | |
| COPIER | OPTION | BODY | DMAX-SW | Yes | | |
| COPIER | OPTION | BODY | TRY-CHG | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NWERR-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | STS-PORT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | CMD-PORT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MODELSZ2 | Yes | | |
| COPIER | OPTION | BODY | DFDST-L1 | Yes | | |
| COPIER | OPTION | BODY | DFDST-L2 | Yes | | |
| COPIER | OPTION | BODY | NS-CMD5 | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NS-GSAPI | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NS-NTLM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NS-PLNWS | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NS-PLN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NS-LGN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MEAP-PN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SVMD-ENT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DH-MODE | Yes | | |
| COPIER | OPTION | BODY | ENVP-INT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DRM-CNTR | Yes | | |
| COPIER | OPTION | BODY | CHNG-STS | Yes | Yes | Yes |
| COPIER | OPTION | BODY | CHNG-CMD | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ANIM-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | BASE-SW | Yes | Yes | |
| COPIER | OPTION | BODY | DV-RT-LG | Yes | | |
| COPIER | OPTION | BODY | MEAP-SSL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SC-L-CNT | Yes | Yes | |
| COPIER | OPTION | BODY | CBLTINVL | Yes | | |
| COPIER | OPTION | BODY | KSIZE-SW | Yes | Yes | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | BODY | LPD-PORT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | PDF-RDCT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ABC-MODE | Yes | | |
| COPIER | OPTION | BODY | REBOOTSW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | VP-ART | Yes | | |
| COPIER | OPTION | BODY | VP-TXT | Yes | | |
| COPIER | OPTION | BODY | UI-PRINT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WUEV-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WUEV-INT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WUEV-POT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WUEV-RTR | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SJB-UNW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IMGC-ADJ | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-RSCAN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-EPRNT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-WEB | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-HOLD | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WEBV-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | OPEMANT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | CARD-RNG | Yes | Yes | |
| COPIER | OPTION | BODY | WUEN-LIV | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MAILYEAR | Yes | Yes | Yes |
| COPIER | OPTION | BODY | OPLOG-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | OP-ALMT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | TMP-TBL2 | Yes | | |
| COPIER | OPTION | BODY | TMP-TBL3 | Yes | | |
| COPIER | OPTION | BODY | TMP-TBL4 | Yes | | |
| COPIER | OPTION | BODY | SJOB-CL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DHCP-12 | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DHCP-81 | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IFX-CHIG | Yes | Yes | Yes |
| COPIER | OPTION | BODY | USB-RCNT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UNLMTBND | Yes | | |
| COPIER | OPTION | BODY | SCANTYPE | Yes | Yes | |
| COPIER | OPTION | BODY | RAG-CONT | Yes | | |
| COPIER | OPTION | BODY | DNSTRANS | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ABC-MD2 | Yes | | |
| COPIER | OPTION | BODY | MIBCOUNT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DRY-CISU | Yes | | |
| COPIER | OPTION | BODY | RMT-CNSL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MEAP-PRI | Yes | Yes | Yes |
| COPIER | OPTION | BODY | PDLEVCT1 | Yes | Yes | Yes |
| COPIER | OPTION | BODY | PROXYRES | Yes | Yes | Yes |
| COPIER | OPTION | BODY | WOLTRANS | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DF2DSTL1 | Yes | | |
| COPIER | OPTION | BODY | DF2DSTL2 | Yes | | |
| COPIER | OPTION | BODY | 802XTOUT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IKERETRY | Yes | Yes | Yes |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | BODY | SPDALDEL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NCONF-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ABK-TOOL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IKEINTVL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | REG-SPD | Yes | | |
| COPIER | OPTION | BODY | INSRT-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ILSZ-JAM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IPSDEBLV | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SP-LINK | Yes | Yes | Yes |
| COPIER | OPTION | BODY | W/RAID | Yes | Yes | |
| COPIER | OPTION | BODY | PSWD-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SM-PSWD | Yes | Yes | Yes |
| COPIER | OPTION | BODY | C-PDL-T | Yes | Yes | |
| COPIER | OPTION | BODY | C-S-P-D | Yes | Yes | |
| COPIER | OPTION | BODY | C-S-C-D | Yes | Yes | |
| COPIER | OPTION | BODY | DH-TGT | Yes | | |
| COPIER | OPTION | BODY | ADJ-VPPN | Yes | | |
| COPIER | OPTION | BODY | RAG-SW | Yes | | |
| COPIER | OPTION | BODY | DEV-SP1 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP2 | Yes | | |
| COPIER | OPTION | BODY | LM-LEVEL | Yes | Yes | Yes |
| COPIER | OPTION | BODY | RPT2SIDE | Yes | Yes | Yes |
| COPIER | OPTION | BODY | AFS-JOB | Yes | Yes | Yes |
| COPIER | OPTION | BODY | AFC-EVNT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-SBOX | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-MEM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ILOGMODE | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ILOGKEEP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-NAVI | Yes | Yes | Yes |
| COPIER | OPTION | BODY | UI-MOBP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ERS-SEL | Yes | | |
| COPIER | OPTION | BODY | IR-FILTR | Yes | | |
| COPIER | OPTION | BODY | STND-PNL | Yes | Yes | |
| COPIER | OPTION | BODY | INVALPDL | Yes | Yes | |
| COPIER | OPTION | BODY | CDS-FIRM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | CDS-MEAP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | CDS-UGW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | LOCLFIRM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | RSHDW-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DEV-SP3 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP4 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP5 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP6 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP7 | Yes | | |
| COPIER | OPTION | BODY | DEV-SP8 | Yes | | |
| COPIER | OPTION | BODY | IPTBROAD | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DK2-TURN | Yes | | |
| COPIER | OPTION | BODY | DK3-TURN | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | BODY | DK4-TURN | Yes | | |
| COPIER | OPTION | BODY | DK1-TURN | Yes | | |
| COPIER | OPTION | BODY | DK5-TURN | Yes | | |
| COPIER | OPTION | BODY | PFWFTPRT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | YP-ROT | Yes | Yes | |
| COPIER | OPTION | BODY | PG-DMAX | Yes | | |
| COPIER | OPTION | BODY | CLN-SW | Yes | | |
| COPIER | OPTION | BODY | CLN-ADJ | Yes | | |
| COPIER | OPTION | BODY | FIX-DWN | Yes | | |
| COPIER | OPTION | BODY | FIX-RT | Yes | | |
| COPIER | OPTION | BODY | DRM-IDL2 | Yes | | |
| COPIER | OPTION | BODY | AC-FREQ | Yes | Yes | Yes |
| COPIER | OPTION | BODY | 2D-SHADE | Yes | | |
| COPIER | OPTION | BODY | T-RUN-LV | Yes | Yes | |
| COPIER | OPTION | BODY | WDREDUCT | Yes | | |
| COPIER | OPTION | BODY | VDADDCNT | Yes | | |
| COPIER | OPTION | BODY | HDADDCNT | Yes | | |
| COPIER | OPTION | BODY | DK1-AIR | Yes | | |
| COPIER | OPTION | BODY | BXNUPLOG | Yes | Yes | Yes |
| COPIER | OPTION | BODY | LIN-OFST | Yes | Yes | |
| COPIER | OPTION | BODY | TFL-RTC | Yes | Yes | |
| COPIER | OPTION | BODY | D-MXDSZ | Yes | Yes | |
| COPIER | OPTION | BODY | UI-CUSTM | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MIX-WAIT | Yes | Yes | |
| COPIER | OPTION | BODY | P-BETWN | Yes | | |
| COPIER | OPTION | BODY | FIX-TMP2 | Yes | Yes | |
| COPIER | OPTION | BODY | FIX-TMP3 | Yes | Yes | |
| COPIER | OPTION | BODY | SDLMTWRN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | JLK-PWSC | Yes | Yes | Yes |
| COPIER | OPTION | BODY | IPMTU | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DDNSINTV | Yes | Yes | Yes |
| COPIER | OPTION | BODY | FX-IMGLV | Yes | Yes | |
| COPIER | OPTION | BODY | FX-WNKL | Yes | Yes | |
| COPIER | OPTION | BODY | FAX-INT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | ATM | Yes | Yes | |
| COPIER | OPTION | BODY | CDS-LVUP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | EP-CONT | Yes | | |
| COPIER | OPTION | BODY | LWDTY-SW | Yes | Yes | |
| COPIER | OPTION | BODY | LWDTYADJ | Yes | | |
| COPIER | OPTION | BODY | BB-CNT | Yes | | |
| COPIER | OPTION | BODY | PRI-SHUT | Yes | | |
| COPIER | OPTION | BODY | TBLTCLSW | Yes | | |
| COPIER | OPTION | BODY | TBLTBIS+ | Yes | | |
| COPIER | OPTION | BODY | TBLTBIS- | Yes | | |
| COPIER | OPTION | BODY | TBLTTMS | Yes | | |
| COPIER | OPTION | BODY | FIX-TMP4 | Yes | Yes | |
| COPIER | OPTION | BODY | DRM-IDL3 | Yes | | |
| COPIER | OPTION | BODY | AMSOFFSW | Yes | Yes | Yes |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | BODY | EXT-TBOX | Yes | | |
| COPIER | OPTION | BODY | UA-OFFSW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | MIB-NVTA | Yes | Yes | |
| COPIER | OPTION | BODY | MIB-EXT | Yes | Yes | |
| COPIER | OPTION | BODY | SCT-BTN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | DFEJCLED | Yes | | |
| COPIER | OPTION | BODY | SVC-RUI | Yes | Yes | |
| COPIER | OPTION | BODY | PSCL-TBL | Yes | | |
| COPIER | OPTION | BODY | USER-DSP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | LCDSFLG | Yes | Yes | Yes |
| COPIER | OPTION | BODY | STNDBY-A | Yes | Yes | Yes |
| COPIER | OPTION | BODY | SDTM-DSP | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NWLOGINT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | BXSHIFT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | HOME-SW | Yes | Yes | Yes |
| COPIER | OPTION | BODY | NO-LGOUT | Yes | Yes | Yes |
| COPIER | OPTION | BODY | T-DLV-BK | Yes | | |
| COPIER | OPTION | BODY | WT-WARN | Yes | Yes | Yes |
| COPIER | OPTION | BODY | JM-ERR-D | Yes | | |
| COPIER | OPTION | BODY | JM-ERR-R | Yes | | |
| COPIER | OPTION | BODY | WEB-LIFE | Yes | Yes | |
| COPIER | OPTION | BODY | LCRY-DSP | Yes | Yes | Yes |
| COPIER | OPTION | CST | U1-NAME | Yes | Yes | Yes |
| COPIER | OPTION | CST | U2-NAME | Yes | Yes | Yes |
| COPIER | OPTION | CST | U3-NAME | Yes | Yes | Yes |
| COPIER | OPTION | CST | U4-NAME | Yes | Yes | Yes |
| COPIER | OPTION | CST | P-SZ-C1 | Yes | Yes | Yes |
| COPIER | OPTION | CST | P-SZ-C2 | Yes | Yes | Yes |
| COPIER | OPTION | CST | CST3-P1 | Yes | | |
| COPIER | OPTION | CST | CST3-P2 | Yes | | |
| COPIER | OPTION | CST | CST4-P1 | Yes | | |
| COPIER | OPTION | CST | CST4-P2 | Yes | | |
| COPIER | OPTION | CST | CST3-U1 | Yes | | |
| COPIER | OPTION | CST | CST3-U3 | Yes | | |
| COPIER | OPTION | CST | CST4-U1 | Yes | | |
| COPIER | OPTION | CST | CST4-U3 | Yes | | |
| COPIER | OPTION | INT-FACE | IMG-CONT | Yes | | |
| COPIER | OPTION | INT-FACE | AP-OPT | Yes | | |
| COPIER | OPTION | INT-FACE | AP-ACCNT | Yes | | |
| COPIER | OPTION | INT-FACE | AP-CODE | Yes | | |
| COPIER | OPTION | INT-FACE | NWCT-TM | Yes | | |
| COPIER | OPTION | LCNS-TR | OF-POPDF | Yes | Yes | Yes |
| COPIER | OPTION | USER | COPY-LIM | Yes | Yes | |
| COPIER | OPTION | USER | SLEEP | Yes | Yes | Yes |
| COPIER | OPTION | USER | SIZE-DET | Yes | | |
| COPIER | OPTION | USER | COUNTER1 | Yes | Yes | Yes |
| COPIER | OPTION | USER | COUNTER2 | Yes | Yes | Yes |
| COPIER | OPTION | USER | COUNTER3 | Yes | Yes | Yes |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | USER | COUNTER4 | Yes | Yes | Yes |
| COPIER | OPTION | USER | COUNTER5 | Yes | Yes | Yes |
| COPIER | OPTION | USER | COUNTER6 | Yes | Yes | Yes |
| COPIER | OPTION | USER | DATE-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | MB-CCV | Yes | | |
| COPIER | OPTION | USER | CONTROL | Yes | | |
| COPIER | OPTION | USER | B4-L-CNT | Yes | Yes | |
| COPIER | OPTION | USER | TRY-STP | Yes | | |
| COPIER | OPTION | USER | MF-LG-ST | Yes | Yes | Yes |
| COPIER | OPTION | USER | CNT-DISP | Yes | Yes | Yes |
| COPIER | OPTION | USER | PH-D-SEL | Yes | | |
| COPIER | OPTION | USER | COPY-JOB | Yes | Yes | |
| COPIER | OPTION | USER | OP-SZ-DT | Yes | Yes | |
| COPIER | OPTION | USER | NW-SCAN | Yes | Yes | Yes |
| COPIER | OPTION | USER | INS-C-S | Yes | | |
| COPIER | OPTION | USER | HDCR-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | JOB-INVL | Yes | Yes | Yes |
| COPIER | OPTION | USER | TAB-ROT | Yes | Yes | |
| COPIER | OPTION | USER | PR-PSESW | Yes | Yes | Yes |
| COPIER | OPTION | USER | IDPRN-SW | Yes | Yes | |
| COPIER | OPTION | USER | PCL-COPY | Yes | Yes | Yes |
| COPIER | OPTION | USER | CNT-SW | Yes | Yes | Yes |
| COPIER | OPTION | USER | TAB-ACC | Yes | Yes | Yes |
| COPIER | OPTION | USER | BCNT-AST | Yes | Yes | Yes |
| COPIER | OPTION | USER | PRJOB-CP | Yes | Yes | Yes |
| COPIER | OPTION | USER | DOC-REM | Yes | Yes | Yes |
| COPIER | OPTION | USER | DPT-ID-7 | Yes | Yes | Yes |
| COPIER | OPTION | USER | RUI-RJT | Yes | Yes | Yes |
| COPIER | OPTION | USER | CTM-S06 | Yes | Yes | Yes |
| COPIER | OPTION | USER | FREG-SW | Yes | Yes | Yes |
| COPIER | OPTION | USER | IFAX-SZL | Yes | Yes | Yes |
| COPIER | OPTION | USER | IFAX-PGD | Yes | Yes | Yes |
| COPIER | OPTION | USER | MEAPSAFE | Yes | Yes | |
| COPIER | OPTION | USER | AFN-PSWD | Yes | Yes | Yes |
| COPIER | OPTION | USER | PTJAM-RC | Yes | Yes | Yes |
| COPIER | OPTION | USER | PDL-NCSW | Yes | Yes | |
| COPIER | OPTION | USER | SLP-SLCT | Yes | Yes | |
| COPIER | OPTION | USER | PS-MODE | Yes | Yes | Yes |
| COPIER | OPTION | USER | CNCT-RLZ | Yes | Yes | Yes |
| COPIER | OPTION | USER | LDAP-SW | Yes | Yes | Yes |
| COPIER | OPTION | USER | FROM-OF | Yes | Yes | Yes |
| COPIER | OPTION | USER | DOM-ADD | Yes | Yes | Yes |
| COPIER | OPTION | USER | FILE-OF | Yes | Yes | Yes |
| COPIER | OPTION | USER | MAIL-OF | Yes | Yes | Yes |
| COPIER | OPTION | USER | IFAX-OF | Yes | Yes | Yes |
| COPIER | OPTION | USER | LDAP-DEF | Yes | Yes | Yes |
| COPIER | OPTION | USER | FREE-DSP | Yes | | |
| COPIER | OPTION | USER | CLR-TIM | Yes | Yes | Yes |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| COPIER | OPTION | USER | HDCR-DSW | Yes | Yes | Yes |
| COPIER | OPTION | USER | DK1-ASST | Yes | | |
| COPIER | OPTION | USER | SNMP-COA | Yes | Yes | |
| COPIER | OPTION | USER | SCALL-SW | Yes | Yes | Yes |
| COPIER | OPTION | USER | SCALLCMP | Yes | Yes | Yes |
| COPIER | OPTION | USER | USBH-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | USBM-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | USBI-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | CTCHKDSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | DFLT-ADJ | Yes | Yes | Yes |
| COPIER | OPTION | USER | USBR-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | POL-SCAN | Yes | Yes | Yes |
| COPIER | OPTION | USER | PH-D-SL2 | Yes | Yes | |
| COPIER | OPTION | USER | SCAN-RSL | Yes | Yes | |
| COPIER | OPTION | USER | JA-SBOX | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-DFAX | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-REP | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-FREP | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-BOX | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-FORM | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-PREV | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-PULL | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-PDLB | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-JOBK | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-JDF | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-RUI | Yes | Yes | Yes |
| COPIER | OPTION | USER | JA-WEB | Yes | Yes | Yes |
| COPIER | OPTION | USER | EXP-CRYP | Yes | Yes | Yes |
| COPIER | OPTION | USER | THK1-DSP | Yes | Yes | Yes |
| COPIER | OPTION | USER | SLEEP1SW | Yes | Yes | Yes |
| COPIER | OPTION | USER | AUT-SLCT | Yes | Yes | Yes |
| COPIER | OPTION | USER | CNCL-ATH | Yes | Yes | Yes |
| COPIER | OPTION | USER | EZY-SCRP | Yes | Yes | Yes |
| COPIER | OPTION | USER | DMN-MTCH | Yes | Yes | Yes |
| COPIER | OPTION | USER | SCN-RSLG | Yes | Yes | Yes |
| COPIER | OPTION | USER | SNDSTREN | Yes | Yes | Yes |
| COPIER | OPTION | USER | FAXSTREN | Yes | Yes | Yes |
| FEEDER | ADJUST | | DOCST | Yes | | |
| FEEDER | ADJUST | | LA-SPEED | Yes | | |
| FEEDER | ADJUST | | DOCST2 | Yes | | |
| FEEDER | ADJUST | | LA-SPD2 | Yes | | |
| FEEDER | ADJUST | | ADJMSCN1 | Yes | | |
| FEEDER | ADJUST | | ADJMSCN2 | Yes | | |
| FEEDER | ADJUST | | ADJSSCN1 | Yes | | |
| FEEDER | ADJUST | | ADJSSCN2 | Yes | | |
| FEEDER | OPTION | | SIZE-SW | Yes | Yes | Yes |
| SORTER | ADJUST | | PNCH-Y | Yes | | |
| SORTER | ADJUST | | PF-A3Z1 | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| SORTER | ADJUST | | PF-A3Z2 | Yes | | |
| SORTER | ADJUST | | PF-B4Z1 | Yes | | |
| SORTER | ADJUST | | PF-B4Z2 | Yes | | |
| SORTER | ADJUST | | PF-A4RZ1 | Yes | | |
| SORTER | ADJUST | | PF-A4RZ2 | Yes | | |
| SORTER | ADJUST | | PF-LDRZ1 | Yes | | |
| SORTER | ADJUST | | PF-LDRZ2 | Yes | | |
| SORTER | ADJUST | | PF-LGLZ1 | Yes | | |
| SORTER | ADJUST | | PF-LGLZ2 | Yes | | |
| SORTER | ADJUST | | PFLTRRZ1 | Yes | | |
| SORTER | ADJUST | | PFLTRRZ2 | Yes | | |
| SORTER | ADJUST | | PF-A4RC1 | Yes | | |
| SORTER | ADJUST | | PF-A4RC2 | Yes | | |
| SORTER | ADJUST | | PFLTRRC1 | Yes | | |
| SORTER | ADJUST | | PFLTRRC2 | Yes | | |
| SORTER | ADJUST | | PF-A4R31 | Yes | | |
| SORTER | ADJUST | | PF-A4R32 | Yes | | |
| SORTER | ADJUST | | PFLTRR31 | Yes | | |
| SORTER | ADJUST | | PFLTRR32 | Yes | | |
| SORTER | ADJUST | | PF-A4R41 | Yes | | |
| SORTER | ADJUST | | PF-A4R42 | Yes | | |
| SORTER | ADJUST | | PFLTRR41 | Yes | | |
| SORTER | ADJUST | | PFLTRR42 | Yes | | |
| SORTER | ADJUST | | PF-A4R21 | Yes | | |
| SORTER | ADJUST | | PFLTRR21 | Yes | | |
| SORTER | ADJUST | | PRCS-ALG | Yes | | |
| SORTER | ADJUST | | STP-F1 | Yes | | |
| SORTER | ADJUST | | STP-F2 | Yes | | |
| SORTER | ADJUST | | STP-R1 | Yes | | |
| SORTER | ADJUST | | STP-R2 | Yes | | |
| SORTER | ADJUST | | STP-2P | Yes | | |
| SORTER | ADJUST | | BFF-SFT | Yes | | |
| SORTER | ADJUST | | PNCH-X | Yes | | |
| SORTER | ADJUST | | TRM-RG1 | Yes | | |
| SORTER | ADJUST | | TRM-RG2 | Yes | | |
| SORTER | ADJUST | | TRM-CUT1 | Yes | | |
| SORTER | ADJUST | | TRM-CUT2 | Yes | | |
| SORTER | ADJUST | | BFF-SFT2 | Yes | | |
| SORTER | ADJUST | | SDL-STP | Yes | | |
| SORTER | ADJUST | | SDL-FLD | Yes | | |
| SORTER | ADJUST | | SDL-ALG | Yes | | |
| SORTER | ADJUST | | SDL-RLPT | Yes | | |
| SORTER | ADJUST | | SDL-RLFD | Yes | | |
| SORTER | ADJUST | | SDL-RLHD | Yes | | |
| SORTER | ADJUST | | BFR-UPA4 | Yes | | |
| SORTER | ADJUST | | BFR-UPB5 | Yes | | |
| SORTER | ADJUST | | BFR-UPLT | Yes | | |
| SORTER | ADJUST | | RTR-DWA4 | Yes | | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| SORTER | ADJUST | | RTR-DWB5 | Yes | | |
| SORTER | ADJUST | | RTR-DWLT | Yes | | |
| SORTER | ADJUST | | BF-SB-A4 | Yes | | |
| SORTER | ADJUST | | BF-SB-B5 | Yes | | |
| SORTER | ADJUST | | BF-SB-LT | Yes | | |
| SORTER | ADJUST | | RTR-UPA4 | Yes | | |
| SORTER | ADJUST | | RTR-UPB5 | Yes | | |
| SORTER | ADJUST | | RTR-UPLT | Yes | | |
| SORTER | ADJUST | | PUNCH-SB | Yes | | |
| SORTER | ADJUST | | ST-ALG1 | Yes | | |
| SORTER | ADJUST | | ST-ALG2 | Yes | | |
| SORTER | ADJUST | | DW-CL | Yes | | |
| SORTER | ADJUST | | PRT-DWN | Yes | | |
| SORTER | ADJUST | | PF-LGL41 | Yes | | |
| SORTER | ADJUST | | PF-LGL42 | Yes | | |
| SORTER | ADJUST | | PNC-SBTN | Yes | | |
| SORTER | ADJUST | | SBFD-SPL | Yes | | |
| SORTER | ADJUST | | SBFD-LPL | Yes | | |
| SORTER | ADJUST | | SBFD-SHV | Yes | | |
| SORTER | ADJUST | | SBFD-LHV | Yes | | |
| SORTER | ADJUST | | SBFD-STN | Yes | | |
| SORTER | ADJUST | | SBFD-LTN | Yes | | |
| SORTER | ADJUST | | SBFD-SCT | Yes | | |
| SORTER | ADJUST | | SBFD-LCT | Yes | | |
| SORTER | ADJUST | | NST-SPD | Yes | | |
| SORTER | ADJUST | | NST-SPTN | Yes | | |
| SORTER | ADJUST | | RTNRL-SP | Yes | | |
| SORTER | ADJUST | | SW-ADJ | Yes | | |
| SORTER | ADJUST | | GRP-ALG | Yes | | |
| SORTER | ADJUST | | PRTN-ALG | Yes | | |
| SORTER | ADJUST | | BFF-SFT3 | Yes | | |
| SORTER | ADJUST | | BFF-SFT4 | Yes | | |
| SORTER | OPTION | | BLNK-SW | Yes | | |
| SORTER | OPTION | | MD-SPRTN | Yes | | |
| SORTER | OPTION | | CNTR-OUT | Yes | Yes | Yes |
| SORTER | OPTION | | SDL-PRS | Yes | | |
| SORTER | OPTION | | BUFF-SW | Yes | | |
| SORTER | OPTION | | TRY-EJCT | Yes | | |
| SORTER | OPTION | | PN-SKEW | Yes | | |
| SORTER | OPTION | | CURL-SW | Yes | | |
| SORTER | OPTION | | TRY-OVER | Yes | Yes | |
| SORTER | OPTION | | TRM-LMT | Yes | | |
| SORTER | OPTION | | PUCH-SW | Yes | Yes | |
| SORTER | OPTION | | ALG-IMPR | Yes | Yes | |
| SORTER | OPTION | | BUFF-SW2 | Yes | Yes | |
| SORTER | OPTION | | 1SHT-SRT | Yes | Yes | |
| SORTER | OPTION | | SD-LMTLS | Yes | Yes | |
| SORTER | OPTION | | SD-STCNB | Yes | Yes | |

| Initial screen | Large | Middle | Small | Lev1 | Lev2 | Lev3 |
|---|---|---|---|---|---|---|
| SORTER | OPTION | | BUFF-THK | Yes | Yes | |
| SORTER | OPTION | | PRCS-SP1 | Yes | | |
| SORTER | OPTION | | PRCS-SP2 | Yes | Yes | |
| SORTER | OPTION | | BUFF-MX1 | Yes | Yes | |
| SORTER | OPTION | | BUFF-MX2 | Yes | Yes | |
| SORTER | OPTION | | PRCS-MX1 | Yes | Yes | |
| SORTER | OPTION | | PRCS-MX2 | Yes | Yes | |
| SORTER | OPTION | | BUF-THK1 | Yes | Yes | |
| SORTER | OPTION | | PRD-PRTY | Yes | Yes | |
| SORTER | OPTION | | SLD-BCK | Yes | | |
| SORTER | OPTION | | STP-MAX | Yes | Yes | Yes |
| SORTER | OPTION | | SDL-MAX | Yes | Yes | Yes |
| SORTER | OPTION | | VFLD-MAX | Yes | Yes | Yes |
| SORTER | OPTION | | NEAT-MIX | Yes | | |
| SORTER | OPTION | | NEAT-SW | Yes | Yes | Yes |
| SORTER | OPTION | | TRM-CNT | Yes | Yes | Yes |
| SORTER | OPTION | | THN-SW | Yes | | |
| SORTER | OPTION | | THN-STK | Yes | Yes | Yes |

T-2-142

## ■ Import/export by service mode (external)

The following shows the procedure for importing and exporting the service mode setting values in service mode. With export by which data is collected from the machine, service mode setting values can be backed up. With import, data backed up from service mode and that backed up from remote UI can be restored.
The save destination of backup data can be selected from either a USB memory device or HDD of the machine.

### ● Export

#### Preparation

- USB memory device
  * Required when exporting to an external USB memory device.
  It needs to have been formatted to be recognized by the device. No firmware registration is necessary.

#### Overall flow

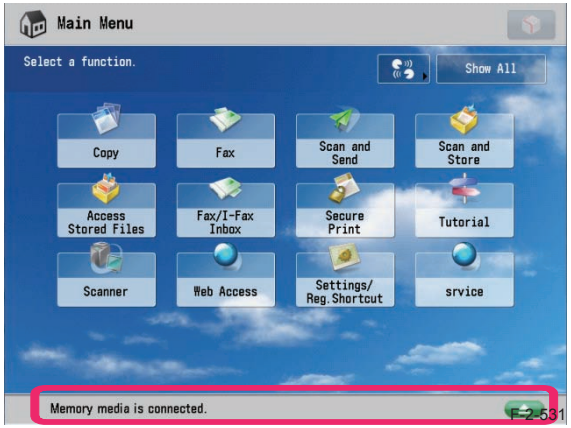
Select the save destination between the internal HDD or external USB memory device depending on the use case.

#### Procedure

1. Select external USB memory device as save destination (LIST=1)
2. Register password
3. Export to external USB memory device
4. Remove USB memory device

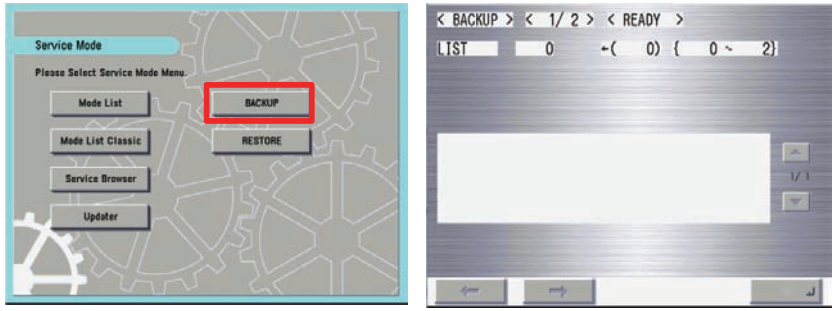
#### Exporting data to an external USB memory device

1. Connect the USB memory device and check that it has been mounted. (When using the external USB memory device)



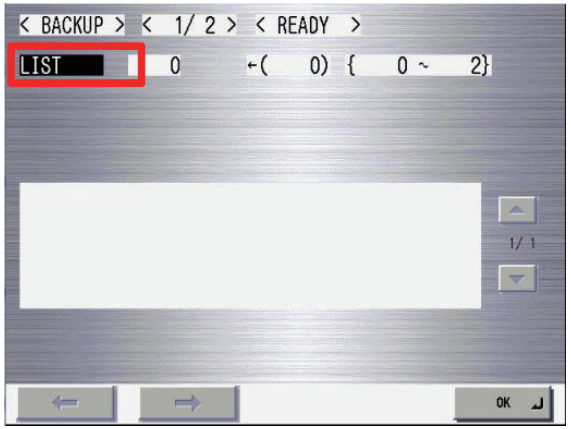

F-2-531

2. Log in to service mode and press BACKUP.



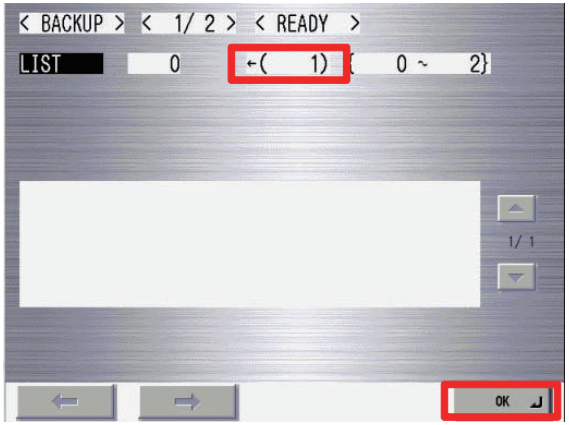

F-2-532

3. Select LIST after the screen moves to <BACKUP>.



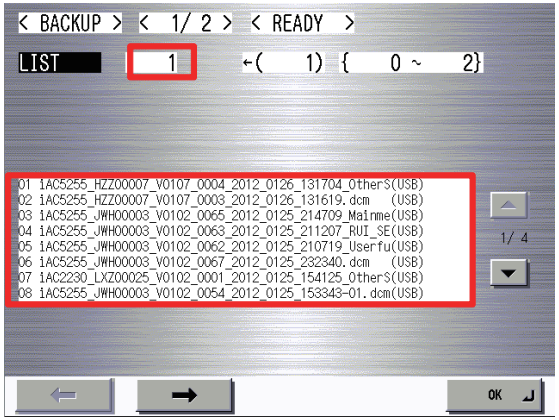

F-2-533

4. When saving to the external USB memory device, select 1 and press OK.



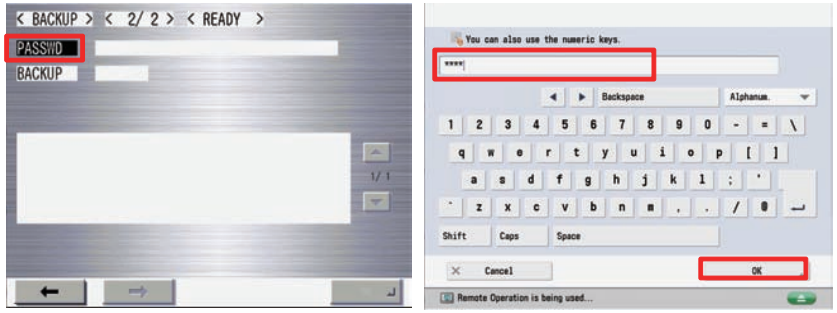

F-2-534

5. The names of .dcm files saved in the external USB memory device are displayed.




F-2-535

6. Select PASSWD, enter a password from the software keyboard, and then press OK.

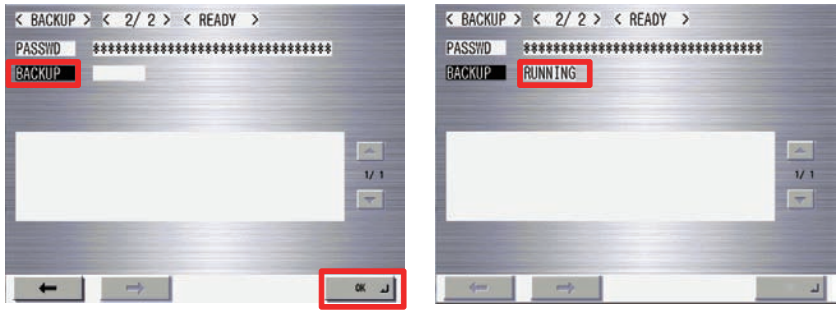



F-2-536

Note:
Limitations regarding the DCM data password
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

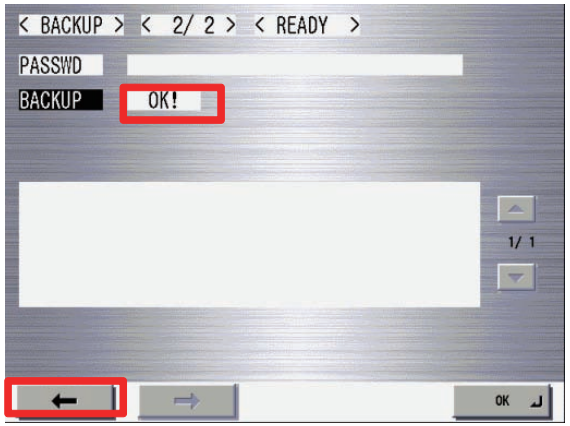
Limitations regarding the DCM data no password
- The exporte data cannot import from remote UI without appointing a password. You can import only from service mode UI.

7. After registering the password, select BACKUP. Press OK to execute export.




F-2-537

8. OK!" is displayed in the status column when the processing is successfully completed. Press <-.



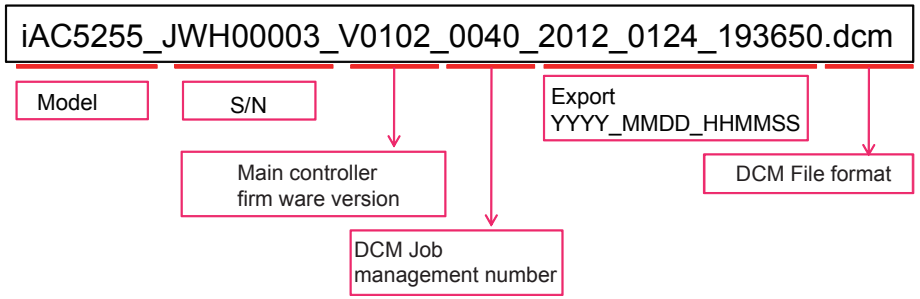

F-2-538

9. After access to the USB memory device has occurred, select LIST=0 and press OK. Unmount the USB memory device.

It can also be removed by pressing the Remove button on the main menu.

F-2-539

Reference:




F-2-540

## Import

### Preparation

- USB memory device
  * Required when importing from an external USB memory device.
- It needs to have been formatted to be recognized by the device. No firmware registration is necessary.
- When necessary, copy the files which you want to import using a PC in advance.
- Be sure to store them in the root folder of the USB memory device.
- Do not change the extension from .dcm. (only .dcm files can be recognized.)
- It is desirable to connect the USB memory device before entering service mode.

### Overall flow

Procedure for restoring data from an external USB memory device.

### Procedure

1. Select external USB memory device as save destination (LIST=1)

2. Names of saved DCM data files are displayed
3. Register password
4. Import from external USB memory device
5. Remove USB memory device
6. Specification of export file name

## Procedure for restoring data from an external USB memory device

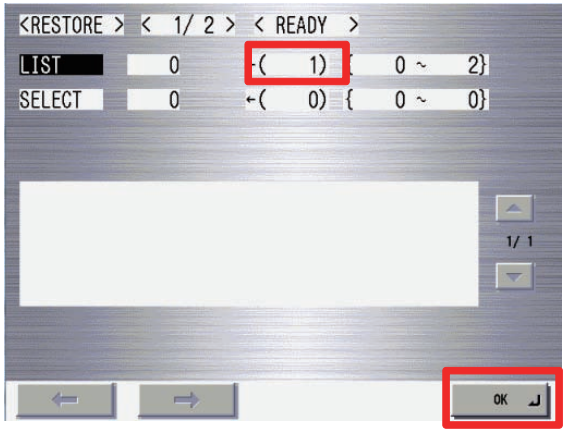
1. Connect the USB memory device. (When using the external USB memory device)
2. Log in to service mode and press RESTORE.

F-2-541

3. Select LIST after the screen moves to <RESTORE>.

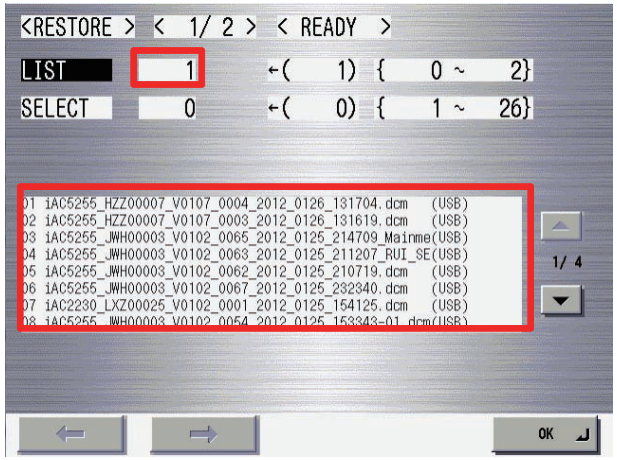
F-2-542

4. When referring to the external USB memory device, select 1 and press OK.



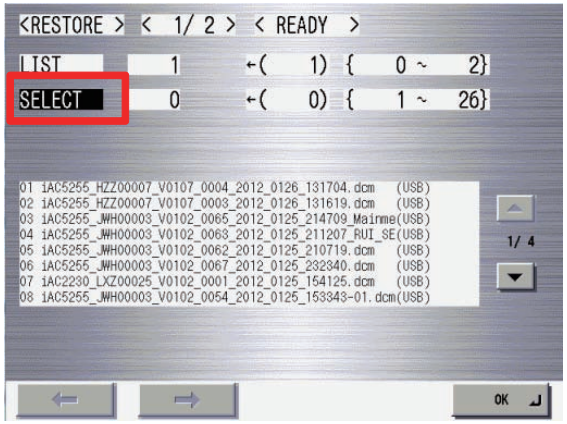

F-2-543

5. The names of .dcm files referred to in the external USB memory device are displayed.



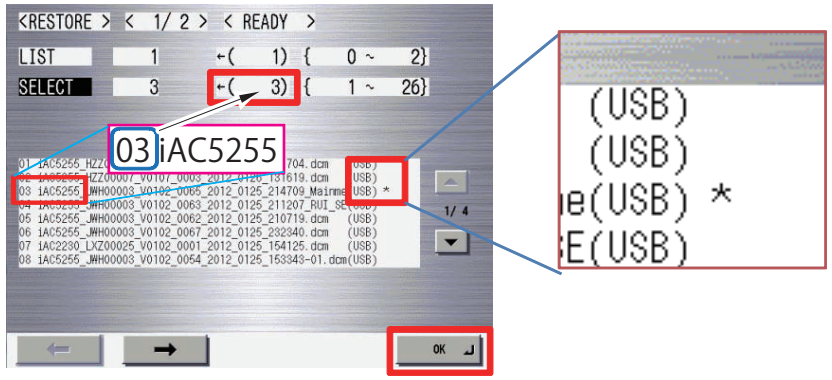

F-2-544

6. Select SELECT.



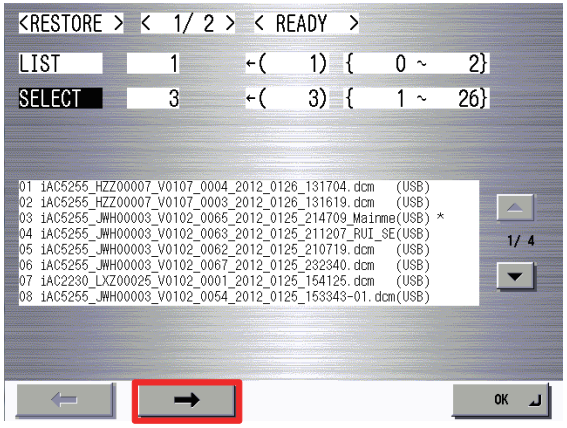

F-2-545

7. Enter the selection number displayed on the left side of the file to be selected and press OK.




F-2-546

8. When the correct file is displayed, press ->.




F-2-547

Note:

Specification of file selection display

- "*" is displayed on the right side of the file to indicate that the file has been selected in SELECT.
- USB memory device: Up to 8 files are displayed in a screen.

9. Select PASSWD, enter a password from the software keyboard, and then press OK.

F-2-548

F-2-549

Note:

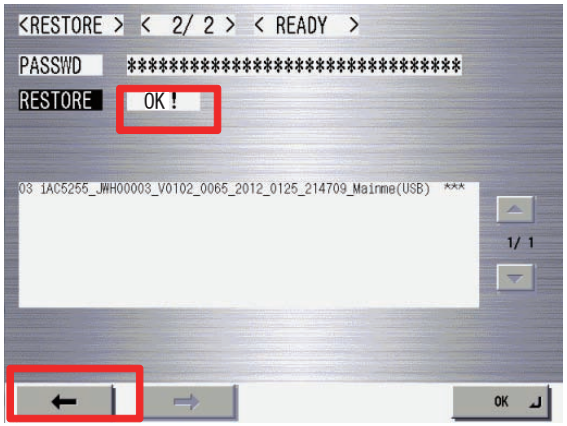
Specification of file selection display

- "<-" is displayed on the right side of the file to indicate that the selection of the file has been confirmed.
- "***" is displayed after the password is entered.

10. After registering the password, select RESTORE. Press OK to execute import.

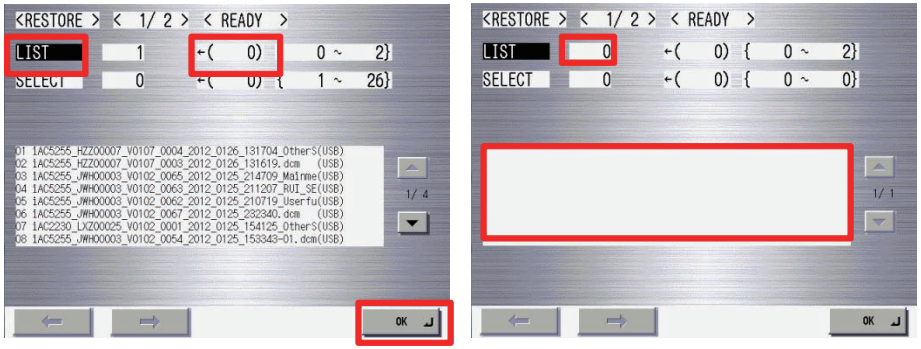
F-2-550

11. OK!" is displayed in the status column when the processing is successfully completed. Press <-.




F-2-551

12. After access to the USB memory device has occurred, select LIST=0 and press OK. Unmount the USB memory device.
It can also be removed by pressing the Remove button on the main menu.




F-2-552

## Import/export by service mode (internal)

When selecting the HDD of the machine at execution of BACKUP from the top screen of service mode, service mode settings can be saved. Setting values of Main Controller 2, Reader Controller, DC Controller, etc. can be collectively saved. It can be used when recovering the initial status after having tried multiple setting changes temporarily for troubleshooting, etc.

Note:
DCM must not be used when replacing a PCB.
Be sure to use a method such as backup of SRAM of the Main Controller 2/service mode backup of DCON/RCON.
DCM enables to back up only service mode setting values. There is still necessary information other than setting values when replacing a PCB.
SRAM backup or service mode backup enables to save data other than setting values.

### Export

#### Preparation

There is no need to newly prepare for saving data to the HDD of the machine.

#### Overall flow

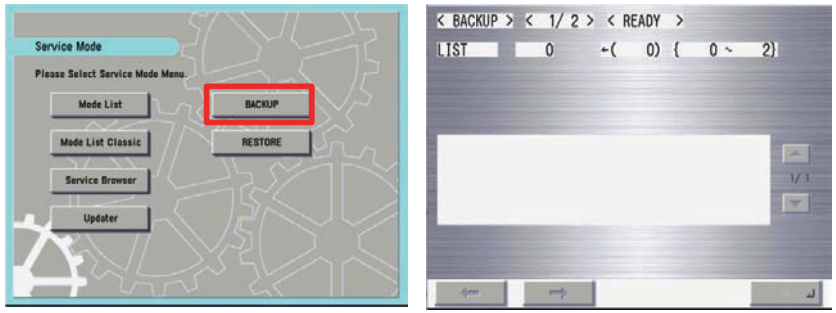
Here is a procedure for exporting data of the HDD of the machine.

#### Procedure

1. Select internal HDD as save destination (LIST=2)
2. Register password
3. Import from the internal HDD

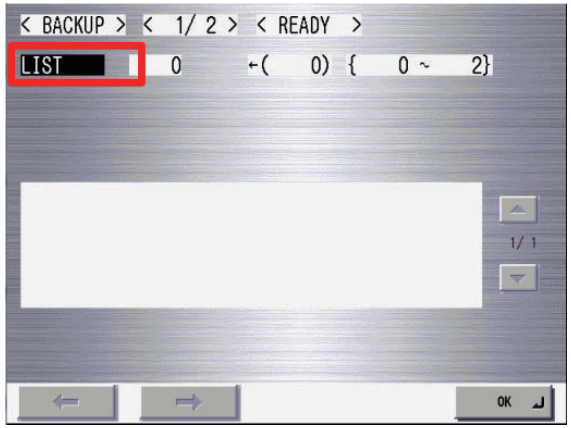
#### Procedure for backing up data to the HDD of the machine

1. Select LIST after the screen moves to <BACKUP>.



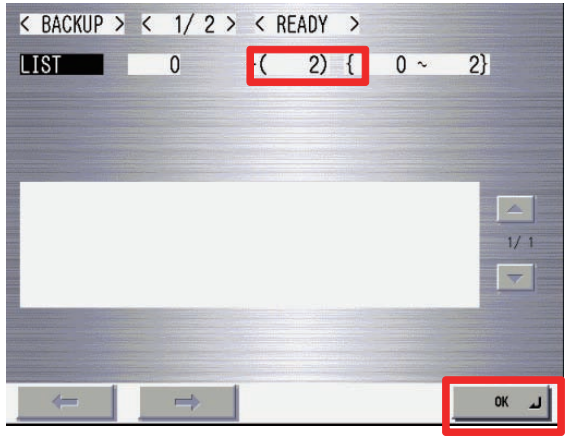

F-2-553

2. Select LIST after the screen moves to <BACKUP>.

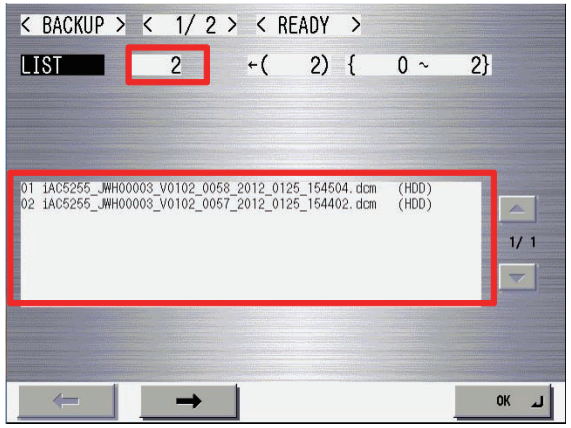



F-2-554

3. When saving to the internal HDD, select 2 and press OK.

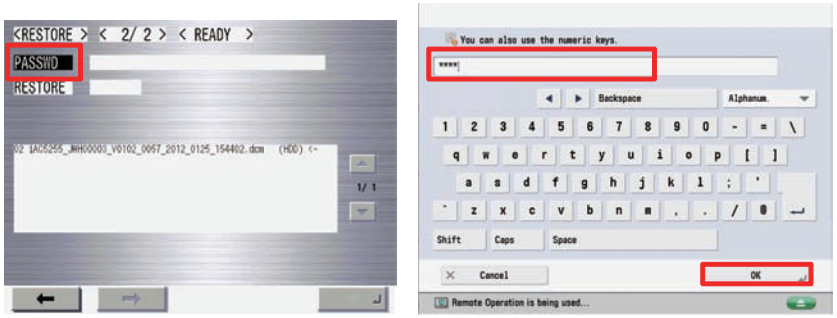



4. The names of .dcm files saved in the internal HDD are displayed. F-2-555




F-2-556

5. Select PASSWD, enter a password from the software keyboard, and then press OK.

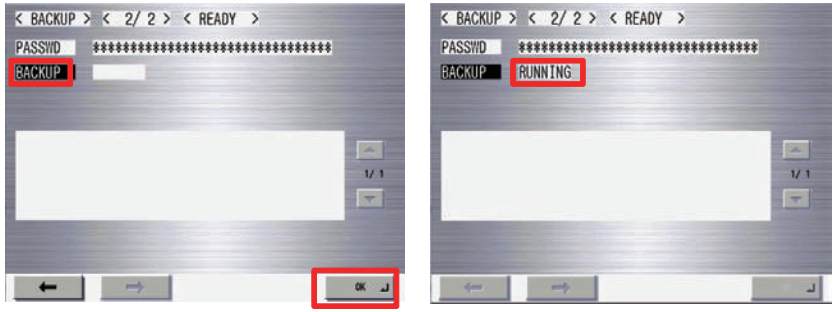



F-2-557

Note:
Limitations regarding the DCM data password

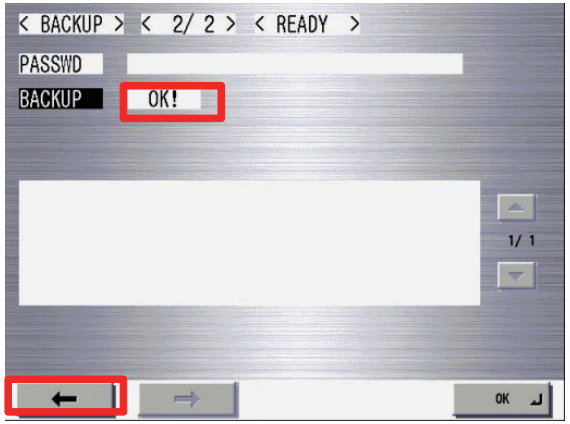
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

6. After registering the password, select BACKUP. Press OK to execute export.



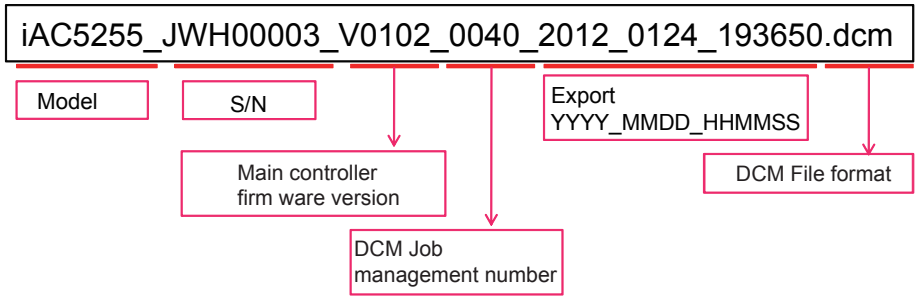

F-2-558

7. OK!" is displayed in the status column when the processing is successfully completed. Press <-.




F-2-559

Reference:




F-2-560

## ● Import

### Preparation

There is no need to newly prepare for saving data to the HDD of the machine.

### Overall flow

Here is a procedure for Importing data of the HDD of the machine.

### Procedure

1. Select internal HDD as save destination (LIST=2)
2. Register password
3. Import from the internal HDD

### Import from the internal HDD

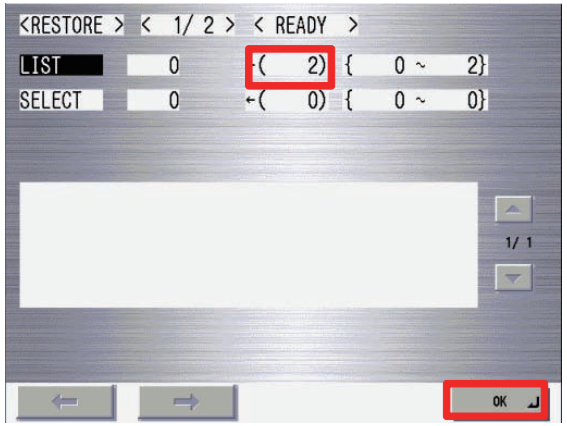
1. Log in to service mode and press RESTORE.

F-2-561

2. Select LIST after the screen moves to <RESTORE>.

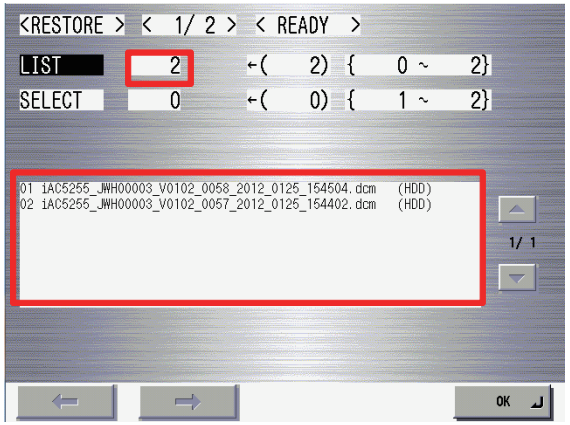
F-2-562

3. When referring to the internal HDD, select 2 and press OK.



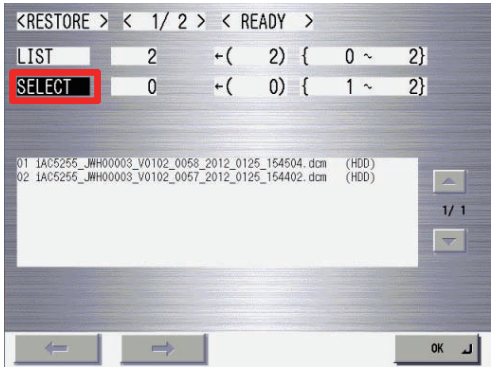

F-2-563

4. The names of .dcm files referred to in the internal HDD are displayed.



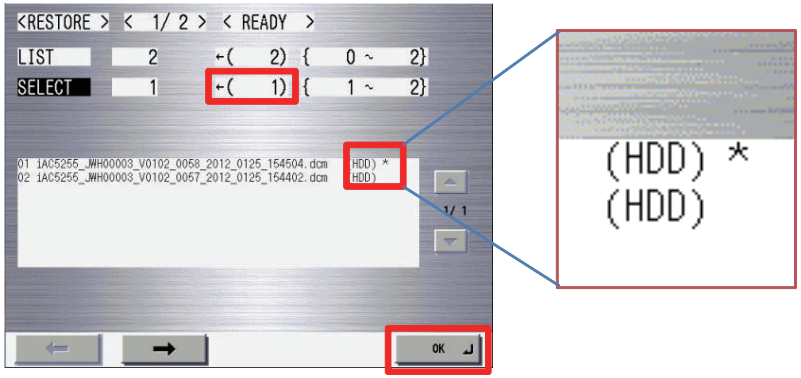

F-2-564

5. Select PASSWD.



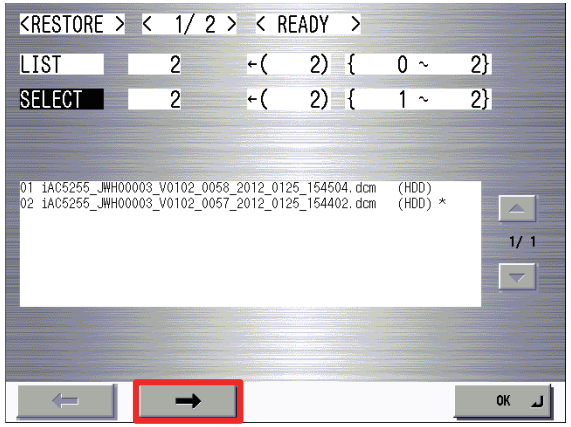

F-2-565

6. Enter the selection number displayed on the left side of the file to be selected.




F-2-566

7. When the correct file is displayed, press ->.




F-2-567

Note:
Specification of file selection display
- " *" is displayed on the right side of the file to indicate that the file has been selected in SELECT.
- HDD : Up to 2 files are displayed in a screen.

8. Select PASSWD, enter a password from the software keyboard, and then press OK.

F-2-568

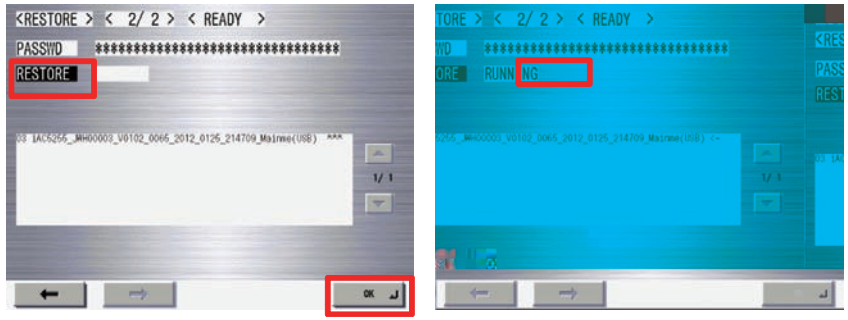
F-2-569

Note:

Specification of file selection display

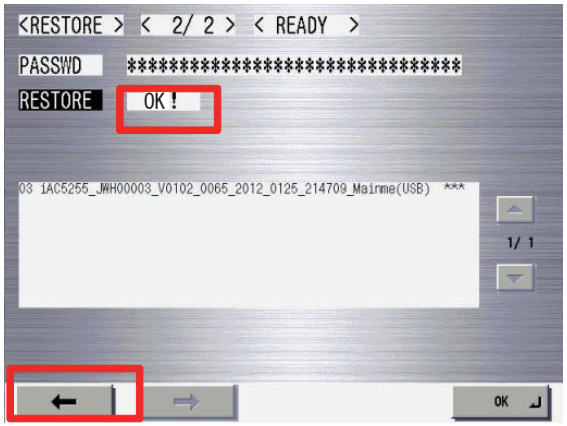
- "<-" is displayed on the right side of the file to indicate that the selection of the file has been confirmed.
- "***" is displayed after the password is entered.

9. After registering the password, select RESTORE. Press OK to execute import.




F-2-570

10. OK!" is displayed in the status column when the processing is successfully completed. Press <-.




F-2-571

# 3 Periodic Service

## Periodical Service Operation Item

# Periodical Service Operation Item

♦: Replacement (Periodical replacement) ●: Replacement (Consumable parts) Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

| No. | Category | Part Name | Part No | Number | Interval | | | | | | | | | | | Counter | | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | At installation | 120K | 250K | 300K | 500K | 600K | 1000K | 1500K | 2000K | 6000K | As needed | | | |
| 1 | Process Unit | Primary Charging Assembly | FM3-7288 | 1 | | | | | | | | ● | | | | DRBL-1 | PRM-UNIT | |
| 2 | | Primary Charging Wire | FL3-4558 | 2 | | | | | ♦ | | | | | | | PRDC-1 | PRM-WIRE | With spring:FL3-4558.In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets |
| 3 | | Primary Charging Wire cleaner | FL2-0462 | 2 | | | | | ♦ | | | | | | | PRDC-1 | PRM-CLN | In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets |
| 4 | | Primary Charging Wire cleaner holder | FL2-2720 | 2 | | | | | ♦ | | | | | | | | | In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets |
| 5 | | Grid Wire | FY1-0883 | AR | | | Δ | | ● | | | | | | | PRDC-1 | PRM-GRID | Clean with lint-free paper moistened with water. |
| 6 | | Pre-transfer Charging Assembly | FM4-3149 | 1 | | | | | | | | ● | | | | DRBL-1 | PO-UNIT | |
| 7 | | Pre-transfer Charging Wire | FL3-4559 | 1 | | | | | ♦ | | | | | | | PRDC-1 | PO-WIRE | With spring:FL3-4558.In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets |
| 8 | | Pre-transfer Charging Wire cleaner | FL2-0462 | 1 | | | | | ♦ | | | | | | | PRDC-1 | PO-CLN | |
| 9 | | Pre-transfer Charging Wire cleaner holder | FL2-2720 | 1 | | | | | ♦ | | | | | | | | | |
| 10 | | Developing Assembly | FM4-5429 | 1 | | | | | | | | ● | | | | DRBL-1 | DVG-CYL | |
| 11 | | Drum Cleaning Blade | FL3-5187 | 1 | | | | | | ● | | | | | | DRBL-1 | CLN-BLD | The blade movement is reversed at every 300 thousand sheets (1-sided). |
| 12 | | Drum Separation Claw | FB4-8018 | 3 | | | | | ● | | | | | | | DRBL-1 | SP-CLAW | In a high temperature/humidity environment (30 deg C/80%), it is 250000 sheets |
| 13 | | Drum Front Side Seal | FC8-7086 | 1 | | | | | ● | | | | | | | DRBL-1 | BS-SL-F | |
| 14 | | Drum Rear Side Seal | FC8-7086 | 1 | | | | | ● | | | | | | | DRBL-1 | BS-SL-R | |
| 15 | | Scraper | FC9-9153 | 2 | | | | | ● | | | | | | Δ | DRBL-1 | EXP-SCRP | Clean with lint-free paper moistened with alcohol. |
| 16 | | Dustproof Glass | - | 1 | | | | | | | | | | | Δ | - | - | Clean with lint-free paper moistened with alcohol. |
| 17 | | Primary Charging Assembly Shield Plate | - | 3 | | | Δ | | | | | | | | | - | - | Clean with lint-free paper moistened with water. |
| 18 | | Pre-transfer Charging Assembly Shield Plate | - | 2 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with water. |
| 19 | | Pre-transfer Charging AssemblyDust Collection Roller | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 20 | | Pre-transfer Charging Assembly Roller electrode area | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 21 | | Pre-transfer Charging AssemblyToner collection area | - | 1 | | | | | Δ | | | | | | | - | - | Remove toner in the toner collection area. |
| 22 | | Drum Cleaning Unit Plate | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 23 | | Toner collection area | - | 1 | | | | | Δ | | | | | | | - | - | Crumb toner clusters. |
| 24 | | Separation Claw Mounting Base | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 25 | | Patch Sensor | - | 1 | | | | | Δ | | | | | | | - | - | Clean in the single direction with a wet and tightly-wrung cotton swab. |
| 26 | | Process Unit Rear Guide | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 27 | | Drum Sliding Assembly | - | 1 | | | | | | | | | | | × | - | - | Apply lubricant at the Drum Sliding Assembly when abnormal sound is heard at the time of operation (FY9-6008). |

♦: Replacement (Periodical replacement) ●: Replacement (Consumable parts) Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

| No. | Category | Part Name | Part No | Number | Interval | | | | | | | | | | | Counter | | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | At installation | 120K | 250K | 300K | 500K | 600K | 1000K | 1500K | 2000K | 6000K | As needed | | | |
| 28 | Process Unit | Drum Face | - | 1 | | | | Δ | | | | | | | | | | Using lint-free paper, clean the drum with the drum cleaning powder (FY9-6024). |
| 29 | | Drum Edge | - | 1 | | | Δ | | | | | | | | | | | Clean with lint-free paper moistened |
| 30 | | The host machine surface below the Developing Assembly | - | 1 | | | | | | | | | | | Δ | - | - | Remove toner which was scattered at removal of Developing Assembly. |
| 31 | | Developing Roller | - | 4 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 32 | | Developing Sleeve Holder | - | 2 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 33 | | Lower side of Cylinder. | | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 34 | | Toner Receptacle Tray | - | 1 | | | | | | | | | | | Δ | - | - | Remove toner on the tray. |
| 35 | | Waste Toner Container | - | 1 | | | | | Δ | | | | | | | - | - | Clean when the message is displayed. |
| 36 | Image Formation System | ETB | FC8-7160 | 1 | | | | | ● | | | | | | | DRBL-1 | TR-BLT | |
| 37 | | Transfer Roller | FC8-7159 | 1 | | | | | ● | | | | | | | DRBL-1 | TR-ROLL | |
| 38 | | Brush Roller | FC9-9022 | 1 | | | | | ● | | | | | | | DRBL-1 | T-CN-BRU | |
| 39 | | ETB Cleaning Blade | FC6-1647 | 1 | | | | | ● | | | | | | | DRBL-1 | T-CLN-BD | |
| 40 | | ETB Driver Roller | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 41 | | ETB Idler Roller | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 42 | Fixing System | Fixing Cleaning Web | FC5-2286 | 1 | | | | | ● | | | | | | | DRBL-1 | FX-WEB | |
| 43 | | Fixing Cleaning Web Guide | - | | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 44 | | Fixing Roller | FL3-3601 | 1 | | | | | | ● | | | | | | DRBL-1 | FX-UP-RL | |
| 45 | | Fixing Roller Insulating Bush | FC9-8069 | 2 | | | | | | ● | | | | | | DRBL-1 | FX-IN-BS | |
| 46 | | Fixing Roller Thrust retainer | FC6-3501 | 2 | | | | | | ● | | | | | | DRBL-1 | FX-RTNR | Be sure to replace it together with the Fixing Roller. |
| 47 | | Fixing Main Thermistor (THM1) | FK2-7692 | 1 | | | | | ♦ | | | | | | | PRDC-1 | FIX-TH1 | |
| 48 | | Fixing Sub Thermistor 1(THM2) | FK2-7693 | 1 | | | | | ♦ | | | | | | | PRDC-1 | FIX-TH2 | |
| 49 | | Fixing Sub Thermistor 2(THM4) | FK2-7693 | 1 | | | | | ♦ | | | | | | | PRDC-1 | FIX-TH2 | |
| 50 | | Pressure Roller Unit | FM4-3158 | 1 | | | | | | ● | | | | | | DRBL-1 | FX-LW-RL | |
| 51 | | Pressure Roller Static Eliminator (front) | FE2-3452 | 1 | | | | | | ● | | | | | | DRBL-1 | FX-L-STC | |
| 52 | | Pressure Roller Static Eliminator (rear) | FE2-3453 | 1 | | | | | | ● | | | | | | DRBL-1 | FX-L-STC | |
| 53 | | Fixing Inlet Guide | - | 1 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper.<br>Also, remove paper lint covered on the Inlet Sensor Flag. |
| 54 | | Fixing Oil Receiver | - | 1 | | | | | Δ | | | | | | | - | - | Dry wiping |
| 55 | | Fixing Right Stay | - | 1 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper. |
| 56 | | Dowel | - | 4 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper. |
| 57 | | Dowel Holder | - | 4 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper. |
| 58 | | Fixing Inlet Sensor Flag | - | 1 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper. |
| 59 | | Fixing Roller Static Eliminator | - | 1 | | | | | Δ | | | | | | | - | - | Dry wiping |
| 60 | | Inner Delivery Roller | - | 4 | | | | | Δ | | | | | | | - | - | Clean with solvent and lint-free paper. |

♦: Replacement (Periodical replacement) ●: Replacement (Consumable parts) Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

| No. | Category | Part Name | Part No | Number | Interval | | | | | | | | | | | Counter | | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | At installation | 120K | 250K | 300K | 500K | 600K | 1000K | 1500K | 2000K | 6000K | As needed | | | |
| 61 | Pickup/ Feeding System | Upper Separation Claw | FB5-3625 | 6 | | | | | ● Δ | | | | | | | DRBL-1 | DLV-UCLW | Clean this part when it is not replaced.<br>Clean with solvent and lint-free paper. |
| 62 | | Cassette 3 Pickup Roller / Cassette 4 Pickup Roller | FC5-2524 | 2 | | | | | ● | | | | | | | DRBL-1 | 3: C3-PU-RL<br>4: C4-PU-RL | Actual use in terms of number of prints.<br>1 pc. each (3/4) |
| 63 | | Cassette 3 Feed Roller / Cassette 4 Feed Roller | FC5-2526 | 2 | | | | | ● | | | | | | | DRBL-1 | 3: C3-FD-RL<br>4: C4-FD-RL | Actual use in terms of number of prints.<br>1 pc. each (3/4) |
| 64 | | Cassette 3 Separation Roller / Cassette 4 Separation Roller | FC5-2528 | 2 | | | | | ● | | | | | | | DRBL-1 | 3: C3-SP-RL<br>4: C4-SP-RL | Actual use in terms of number of prints.<br>1 pc. each (3/4) |
| 65 | | Right Deck Pickup Roller / Left Deck Pickup Roller | FC5-2524 | 2 | | | | | ● | | | | | | | DRBL-1 | Right: C1-PU-RL<br>Left: C2-PU-RL | Actual use in terms of number of prints.<br>1 pc. each (Left/Right) |
| 66 | | Right Deck Feed Roller / Left Deck Feed Roller | FC5-2526 | 2 | | | | | ● | | | | | | | DRBL-1 | Right: C1-FD-RL<br>Left: C2-FD-RL | Actual use in terms of number of prints.<br>1 pc. each (Left/Right) |
| 67 | | Right Deck Separation Roller / Left Deck Separation Roller | FC5-2528 | 2 | | | | | ● | | | | | | | DRBL-1 | Right: C1-SP-RL<br>Left: C2-SP-RL | Actual use in terms of number of prints.<br>1 pc. each (Left/Right) |
| 68 | | Multi-purpose Tray Separation Roller | FC6-6661 | 1 | | ● | | | | | | | | | | DRBL-1 | M-SP-RL | Actual use in terms of number of prints. |
| 69 | | Multi-purpose Tray Feed Roller | FB1-8581 | 1 | | ● | | | | | | | | | | DRBL-1 | M-FD-RL | Actual use in terms of number of prints. |
| 70 | | Feed Guide | - | - | | | | | Δ | | | | | | | - | - | Remove paper lint with lint-free paper and cleaning tool. |
| 71 | | Rollers/wheels | - | - | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 72 | | Separation Static Eliminator | - | 1 | | | | | Δ | | | | | | | - | - | Remove paper lint (toner) with Blower. |
| 73 | | Duplex Unit Cleaning Brush | - | 2 | | | | | Δ | | | | | | | - | - | Using Blower, remove paper lint which was collected by Cleaning Brush. |
| 74 | | Registration Unit Magnet | - | 1 | | | | | Δ | | | | | | | - | - | Clean with lint-free paper moistened with alcohol. |
| 75 | | Scanner Sensor(Pickup Assembly) | - | 4 | | | | | | | Δ * | | | | | - | - | sing Blower, remove paper lint<br>Left Deck Pickup Sensor 2 (PS20),Right Deck Pickup Sensor 2 (PS19) ,Cassette 3 Pickup Sensor 2 (PS21),Cassette 4 Pickup Sensor 1 (PS22)<br>* when replacing Separation Roller |
| 76 | | Scanner Sensor(Feeding Assembly) | - | 7 | | | | | | | Δ | | | | | - | - | Using Blower, remove paper lint<br>Vertical Path Sensor 1 (PS24) ,the Multi-purpose Tray Last Paper Sensor (PS28),the Registration Sensor (PS29),Reverse Vertical Path Sensor (PS65),Duplex Outlet Sensor (PS64), Duplex Merge Sensor (PS67), and Duplex Left Sensor (PS66) |
| 77 | Filter | Ozone Filter | FL3-2134 | 1 | | | | | | | | | | ♦ | | PRDC-1 | OZ-FIL1 | |
| 78 | | Dustproof Filter | FC8-9564 | 1 | | | | | | | | | ♦ | | | PRDC-1 | AR-FIL1 | |

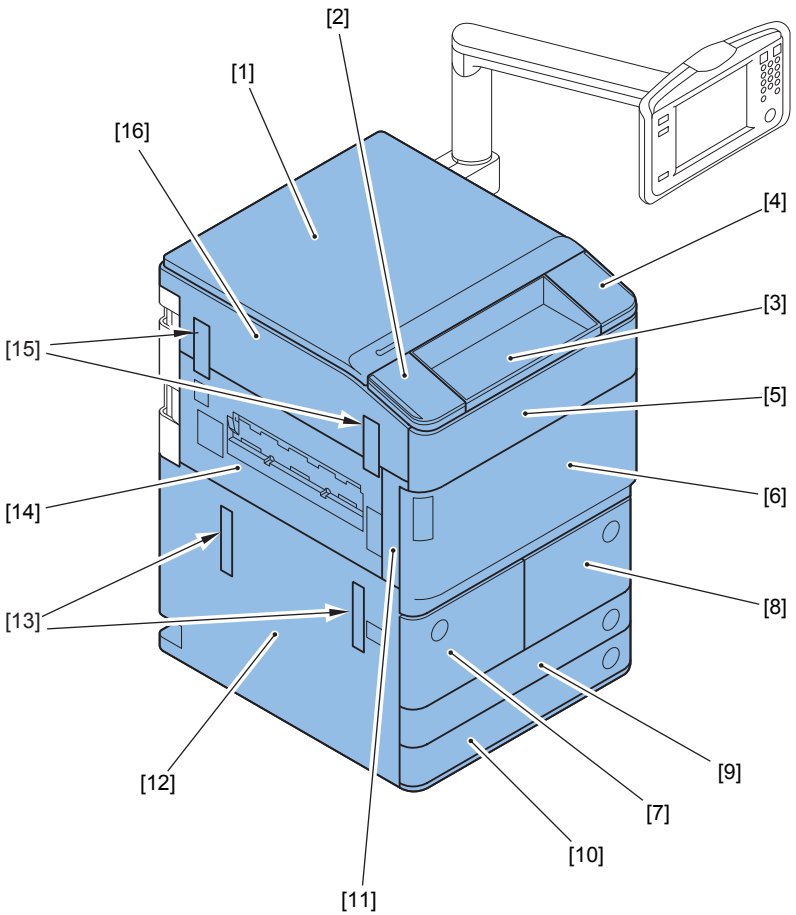
T-3-1

# 4 Parts Replacement and Clearning


- List of Parts
- Main Controller
- Laser Exposure System
- Image Formation System
- Fixing
- Pickup/Feed System
- External Auxiliary System

# List of Parts

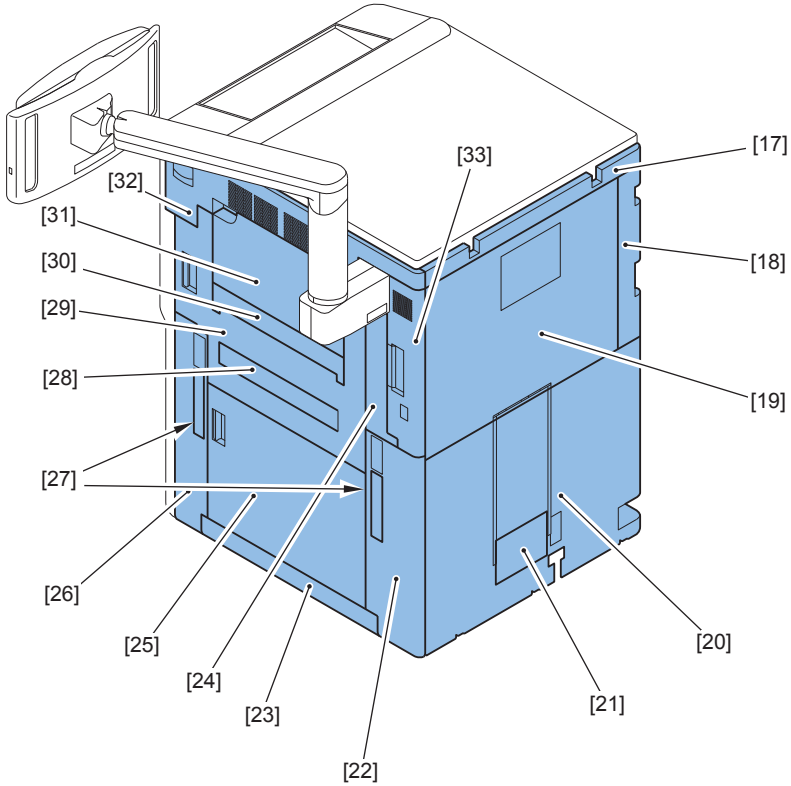
## List of External / Internal Cover




F-4-1

| No | Name | Reference |
|---|---|---|
| [1] | Upper Cover | |
| [2] | Upper Left Cover | |
| [3] | Upper Middle Cover | |
| [4] | Upper Right Cover | |
| [5] | Toner Exchange Cover | |
| [6] | Front Cover | |
| [7] | Deck Left Cover | |
| [8] | Deck Right Cover | |
| [9] | Cassette Front Cover | |
| [10] | Cassette Front Cover | |
| [11] | Left Front Cover | |
| [12] | Left Lower Cover | |
| [13] | Left Handle Cover | |
| [14] | Delivery Cover | |
| [15] | Finisher Connector Cover | |
| [16] | Left Upper Cover | |

T-4-1

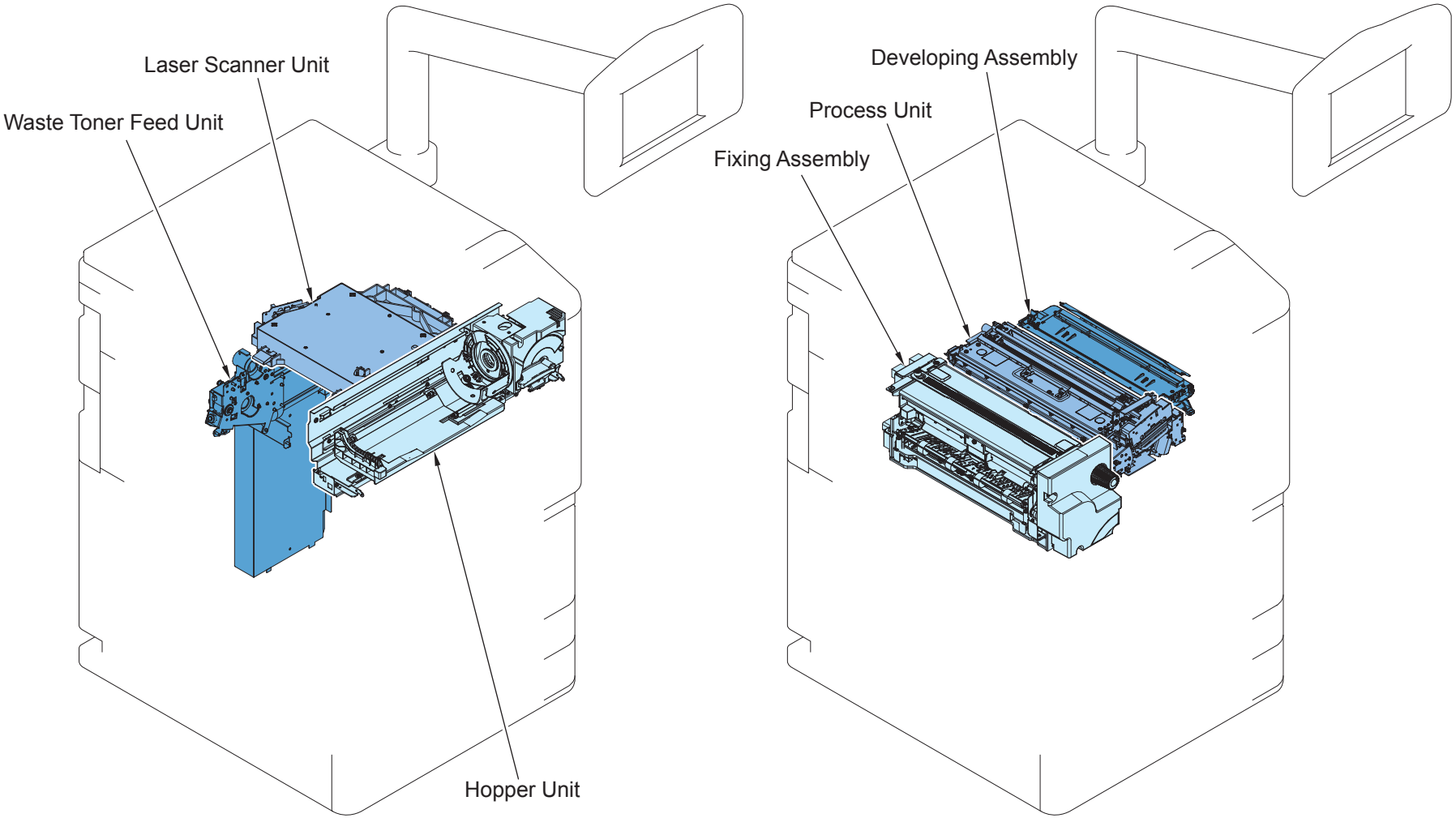



F-4-2

| No | Name | Reference |
|---|---|---|
| [17] | Upper Rear Cover | |
| [18] | Left Rear Cover | |
| [19] | Rear Upper Cover | |
| [20] | Rear Lower Cover | |
| [21] | Filter Cover | |
| [22] | Waste Toner Container Cover | |
| [23] | Right Lower Cover | |
| [24] | Right Rear Cover 2 | |
| [25] | Vertical Path Cover | |
| [26] | Right Front Cover | |
| [27] | Right Handle Cover | |
| [28] | Duplex Delivery Cover | |
| [29] | Right Cover | |
| [30] | MP Pickup Tray Sub Cover | |
| [31] | MP Pickup Tray | |
| [32] | Right Upper Cover | |
| [33] | Right Rear Cover 1 | |

T-4-2

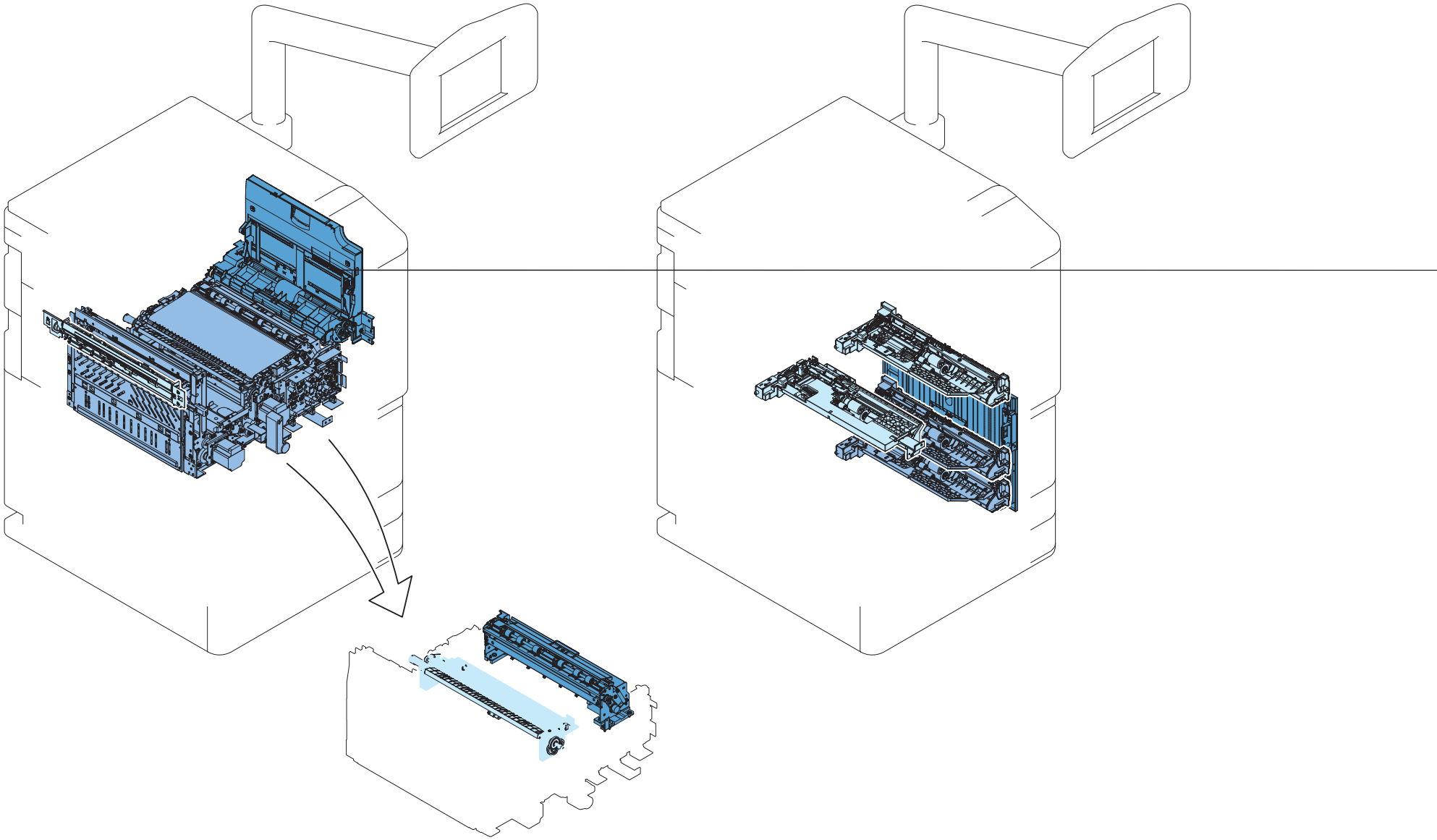
## List of Main Unit




F-4-3

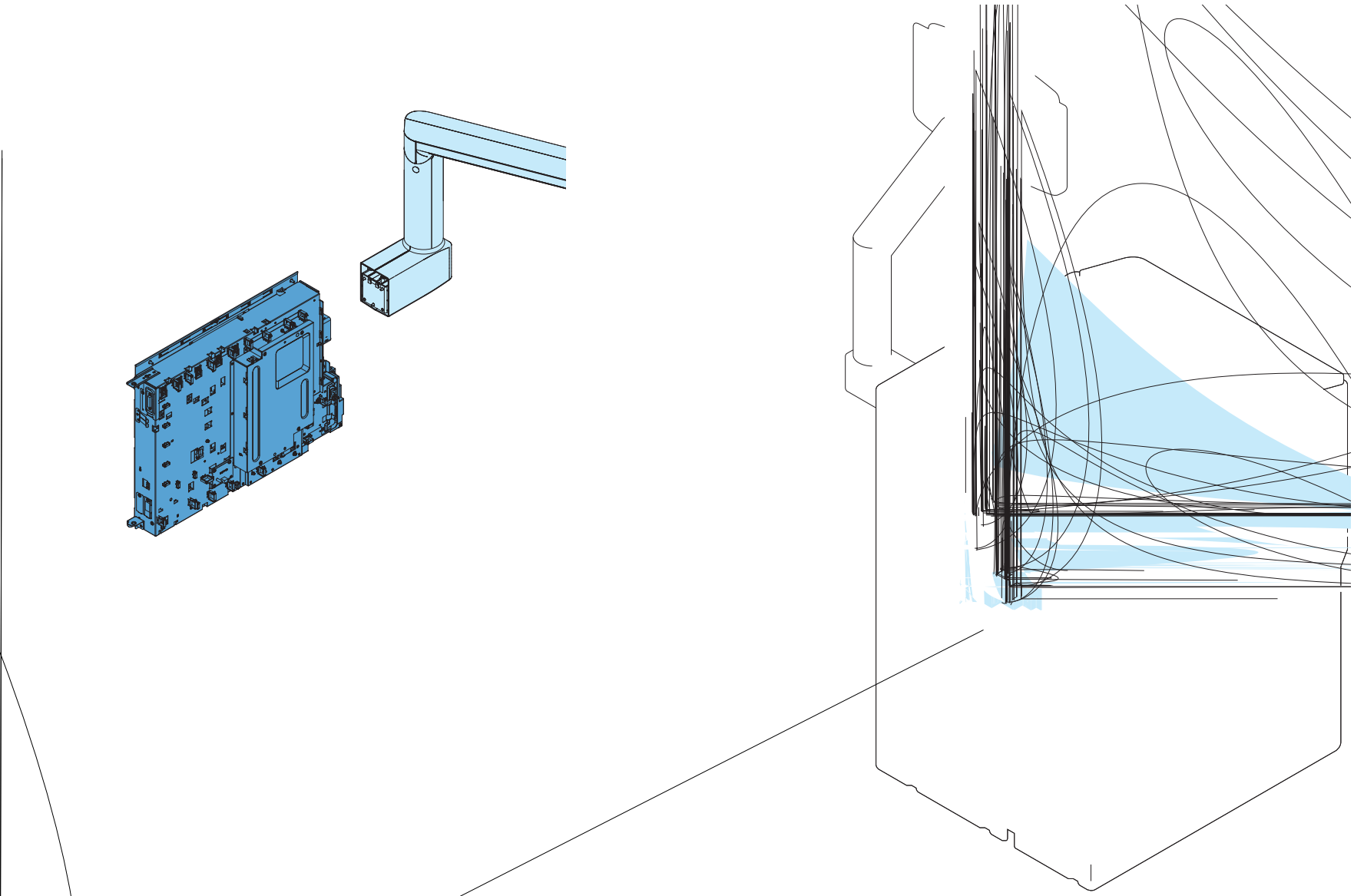
| No | Name | Service Parts No. | Reference |
|---|---|---|---|
| [1] | Waste Toner Feed Unit | FM4-0899 | "Removing the Waste Toner Feed Unit"(page 4-159). |
| [2] | Laser Scanner Unit | FM3-7531 | "Removing the Laser Scanner Unit"(page 4-85). |
| [3] | Hopper Unit | FM4-0883 | "Removing the Hopper Unit"(page 4-150). |
| [4] | Fixing Assembly | NPN | "Removing the Fixing Assembly"(page 4-168). |
| [5] | Process Uint | FM3-7291 | "Removing the Process Unit"(page 4-107). |
| [6] | Developing Assembly | FM4-5429 | "Removing the Developing Assembly"(page 4-122). |

T-4-3



| No | Name | Service Parts No. | Reference |
|---|---|---|---|
| [7] | Outer Delivery Unit | FM3-7379 | |
| [8] | Fixing Feed Unit | NPN | |
| [9] | Multi-purpose Tray Pickup Unit | FM3-7367 | |
| [10] | Left Deck Pickup Unit | FM0-3210 | "Removing the Left Deck Pickup Unit"(page 4-210). |
| [11] | Right Deck Pickup Unit | FM0-3209 | "Removing the Right Deck Pickup Unit"(page 4-211). |
| [12] | Vertical Path Unit | FM4-0943 | |
| [13] | Cassette 3 Pickup Unit | FM0-3209 | "Removing the Cassettes 3 and 4 Pickup Unit"(page 4-212). |
| [14] | Cassette 4 Pickup Unit | FM0-3209 | "Removing the Cassettes 3 and 4 Pickup Unit"(page 4-212). |
| [15] | Registration Unit | FM4-5156 | "Removing the Registration Unit"(page 4-216). |
| [16] | Reverse Delivery Unit | FM4-5316 | |
| [17] | ETB Cleaning Unit | FM4-0913 | "Removing the ETB Unit"(page 4-127). |
| [18] | ETB Unit | FM4-0916 | "Removing the ETB Unit"(page 4-127). |

T-4-4

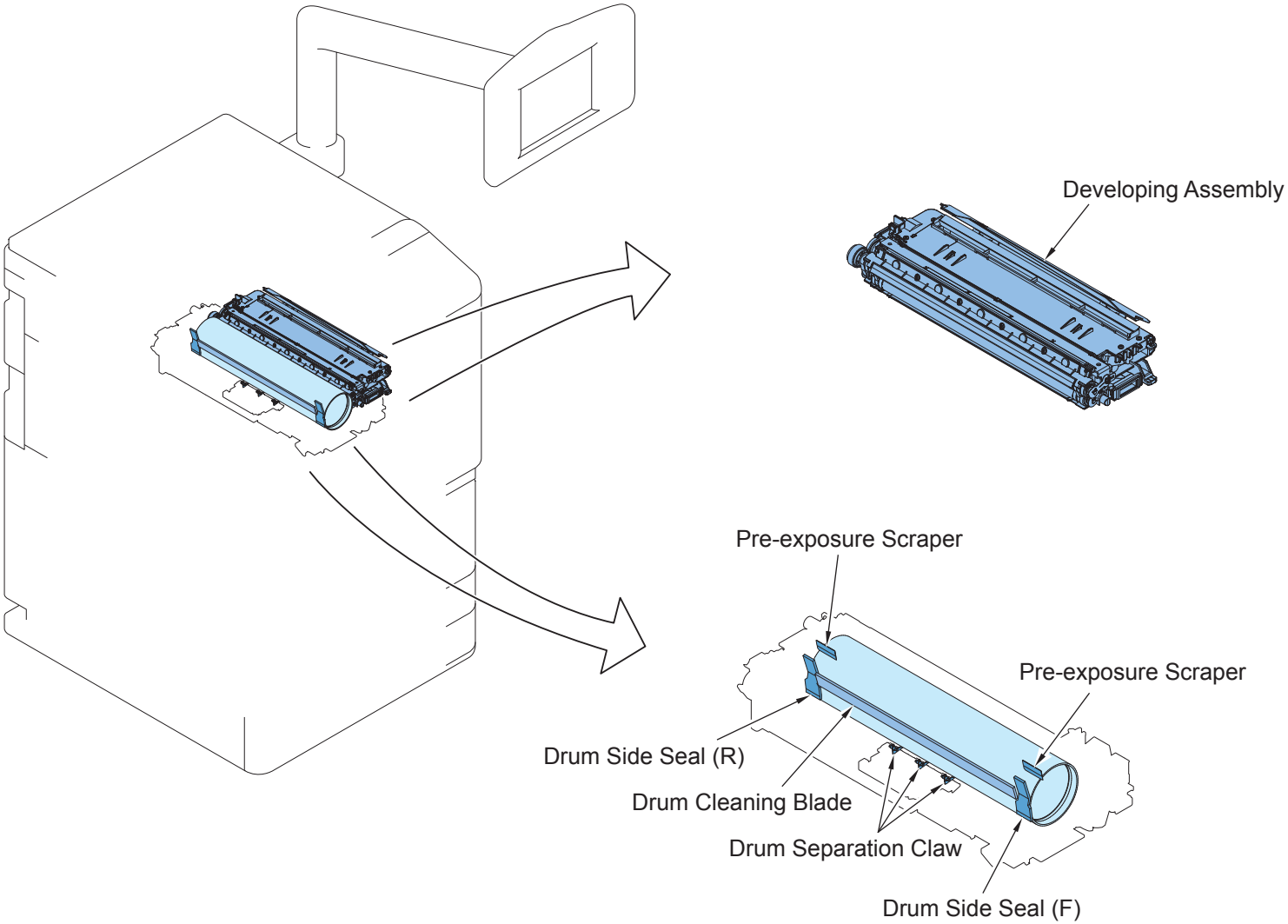


| No | Name | Service Parts No. | Reference |
|---|---|---|---|
| [19] | Upright Control Panel Unit | FM0-0905 | |
| [20] | Controller Box | NPN | |
| [21] | Drum Drive Unit | FM4-0975 | "Removing the Drum Drive Unit"(page 4-163). |
| [22] | Developing Drive Unit | FM4-0958 | "Removing the Developing Drive Unit"(page 4-165). |
| [23] | Main Drive Unit | NPN | "Removing the Main Drive Unit"(page 4-220). |
| [24] | Vertical Path Cassette Pickup Drive Unit | FM3-7374 | "Removing the Vertical Path Cassette Pickup Drive Unit"(page 4-213). |
| [25] | Left Deck Drive Unit | | "Removing the Left Deck Pickup Drive Unit"(page 4-219). |
| [26] | ETB Drive Unit | NPN | "Removing the ETB Drive Unit"(page 4-145). |

T-4-5

# Periodic Replacing Parts,Durable Parts,Cleaning Parts

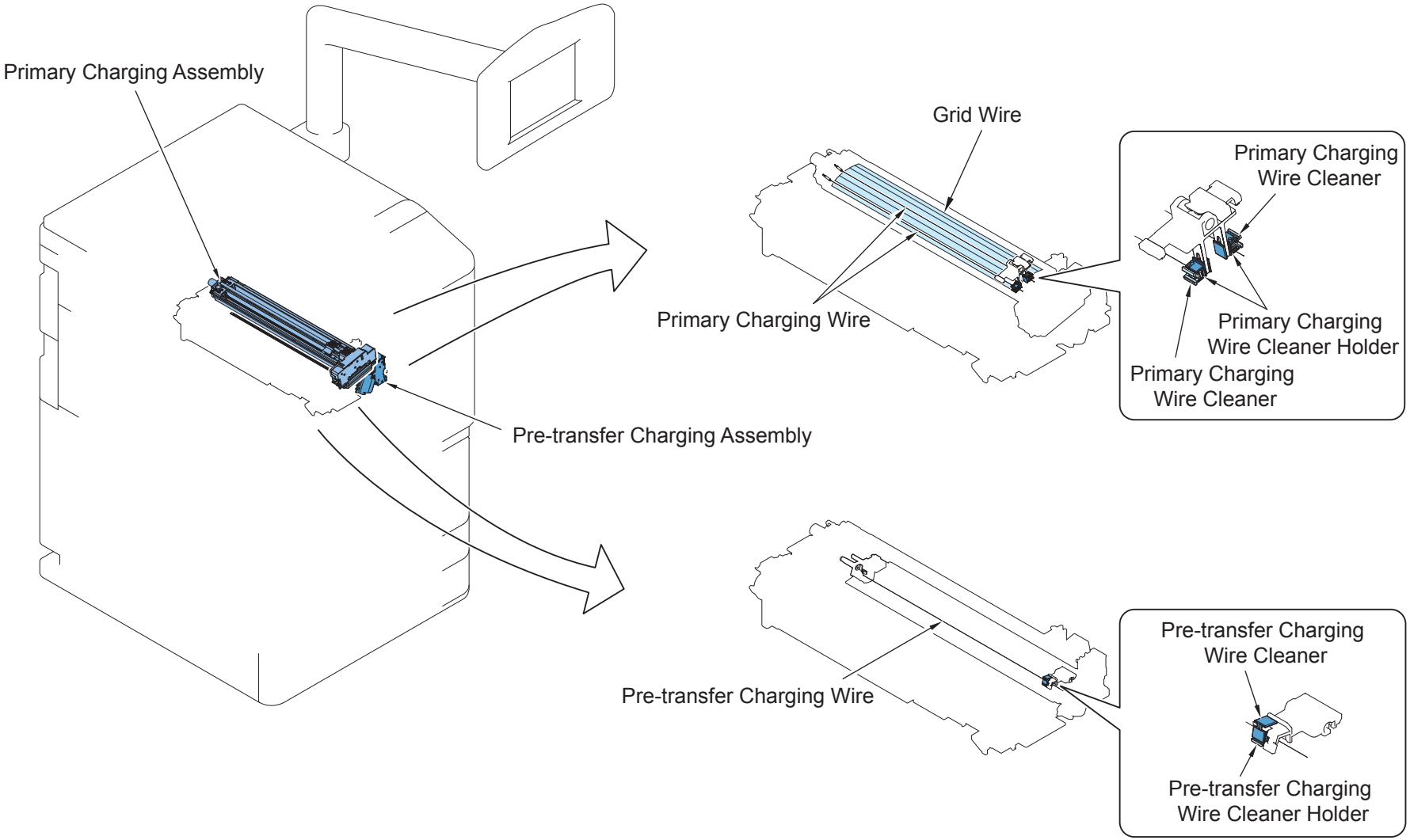
## Periodic Replacing Parts,Durable Parts




F-4-6

| No | Name | Main Unit | Service Parts No. | Reference | Adjustment during parts replacement |
|---|---|---|---|---|---|
| [1] | Developing Assembly | Developing Assembly | FM3-7297 | "Removing the Developing Assembly"(page 4-122). | "Developing Assembly"(page 5-11). |
| [2] | Drum Side Seal(Rear) | Process Uni | FC8-7086 | "Removing the Side Seal"(page 4-121). | - |
| [3] | Drum Cleaning Blade | Process Unit | FL3-6291 | "Removing the Drum Cleaning Blade"(page 4-111). | - |
| [4] | Drum Separation Claw | Process Unit | FB4-8018-010 | "Removing the Cleaner Separation Claw"(page 4-121). | - |
| [5] | Drum Side Seal(Front) | Process Unit | FC8-7085 | "Removing the Side Seal"(page 4-121). | - |
| [6] | Pre-exposure Scraper | Drum Cleaning Unit | FC9-9153 | "Replacing the Pre-exposure Plastic Film"(page 4-114). | |

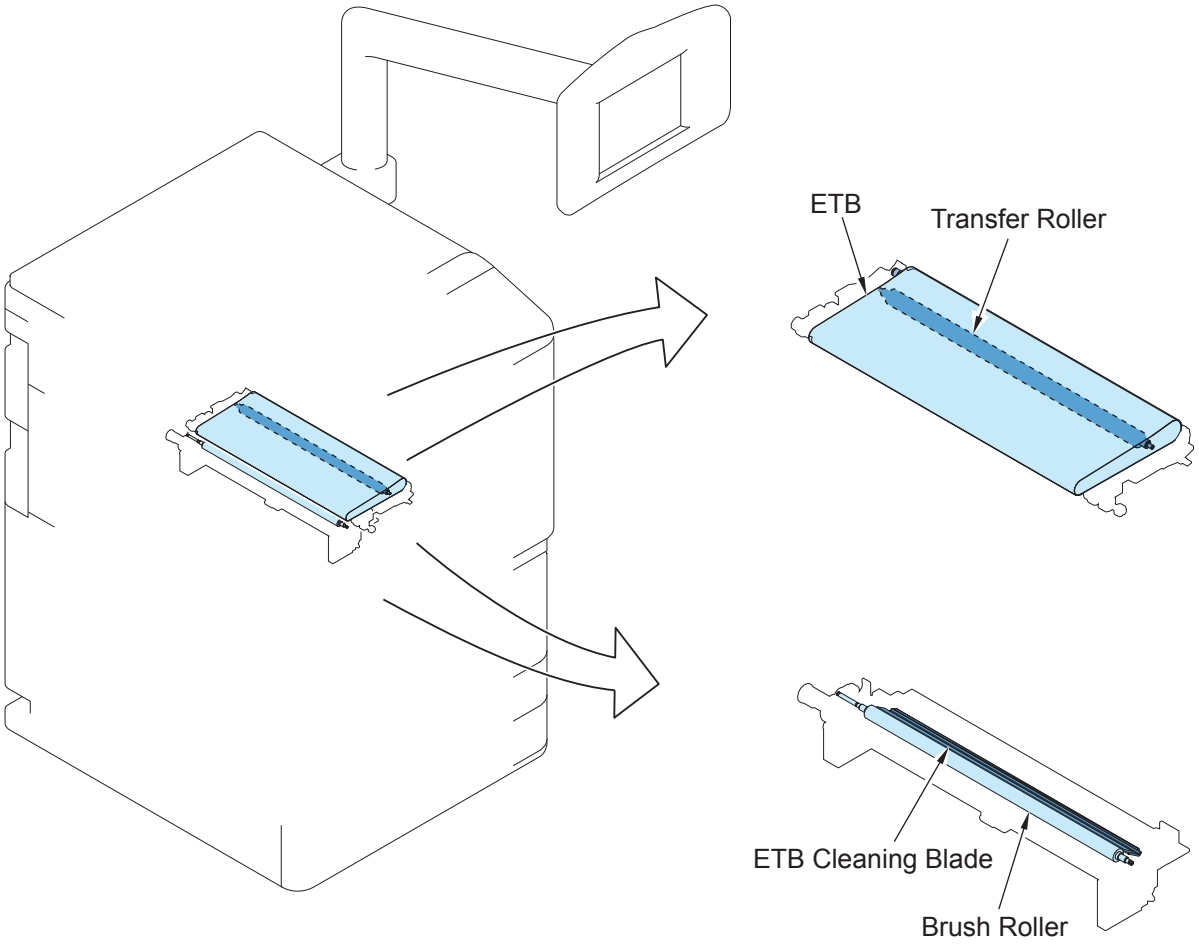
T-4-6


Primary Charging Assembly
Grid Wire
Primary Charging Wire Cleaner
Primary Charging Wire
Primary Charging Wire Cleaner Holder
Primary Charging Wire Cleaner
Pre-transfer Charging Assembly
Pre-transfer Charging Wire Cleaner
Pre-transfer Charging Wire
Pre-transfer Charging Wire Cleaner Holder

F-4-7

| No | Name | Main Unit | Service Parts No. | Reference | Adjustment during parts replacement |
|---|---|---|---|---|---|
| [1] | Primary Charging Assembly | Process Unit | FM3-7288 | "Removing the Primary Charging Assembly"(page 4-89). | "Primary Charging Assembly"(page 5-7). |
| [2] | Pre-transfer Charging Assembly | Process Unit | FM4-3149 | "Removing the Pre-transfer Charging Assembly"(page 4-100). | "Pre-transfer Charging Assembly"(page 5-9). |
| [3] | Primary Charging Wire | Primary Charging Assembly | FB4-3687<br>FL3-4558 | "Replacing the Primary Charging Wire"(page 4-96).<br>Primary Charging Wire(with Spring) | "Primary Charging Wire"(page 5-7). |
| [4] | Pre-transfer Charging Wire | Pre-transfer Charging Assembly | FB4-3687<br>FL3-4559 | "Replacing the Pre-transfer Charging Wire"(page 4-104).<br>Pre-transfer Charging Wire(with Spring) | "Pre-transfer Charging Wire"(page 5-9). |
| [5] | Primary Charging Wire Cleaner | Primary Charging Assembly | FL2-4271 | "Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/Left)"(page 4-90). | - |
| [6] | Primary Charging Wire Cleaner Holder | Primary Charging Assembly | FL2-2720 | "Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/Left)"(page 4-90). | - |
| [7] | Grid Wire | Primary Charging Assembly | FY1-0883 | "Replacing the Primary Charging Assembly Grid Wire"(page 4-93). | - |
| [8] | Pre-transfer Charging Wire Cleaner | Pre-transfer Charging Assembly | FL2-4271 | "Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder"(page 4-101). | - |
| [9] | Pre-transfer Charging Wire Cleaner Holder | Pre-transfer Charging Assembly | FL2-2720 | "Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder"(page 4-101). | - |

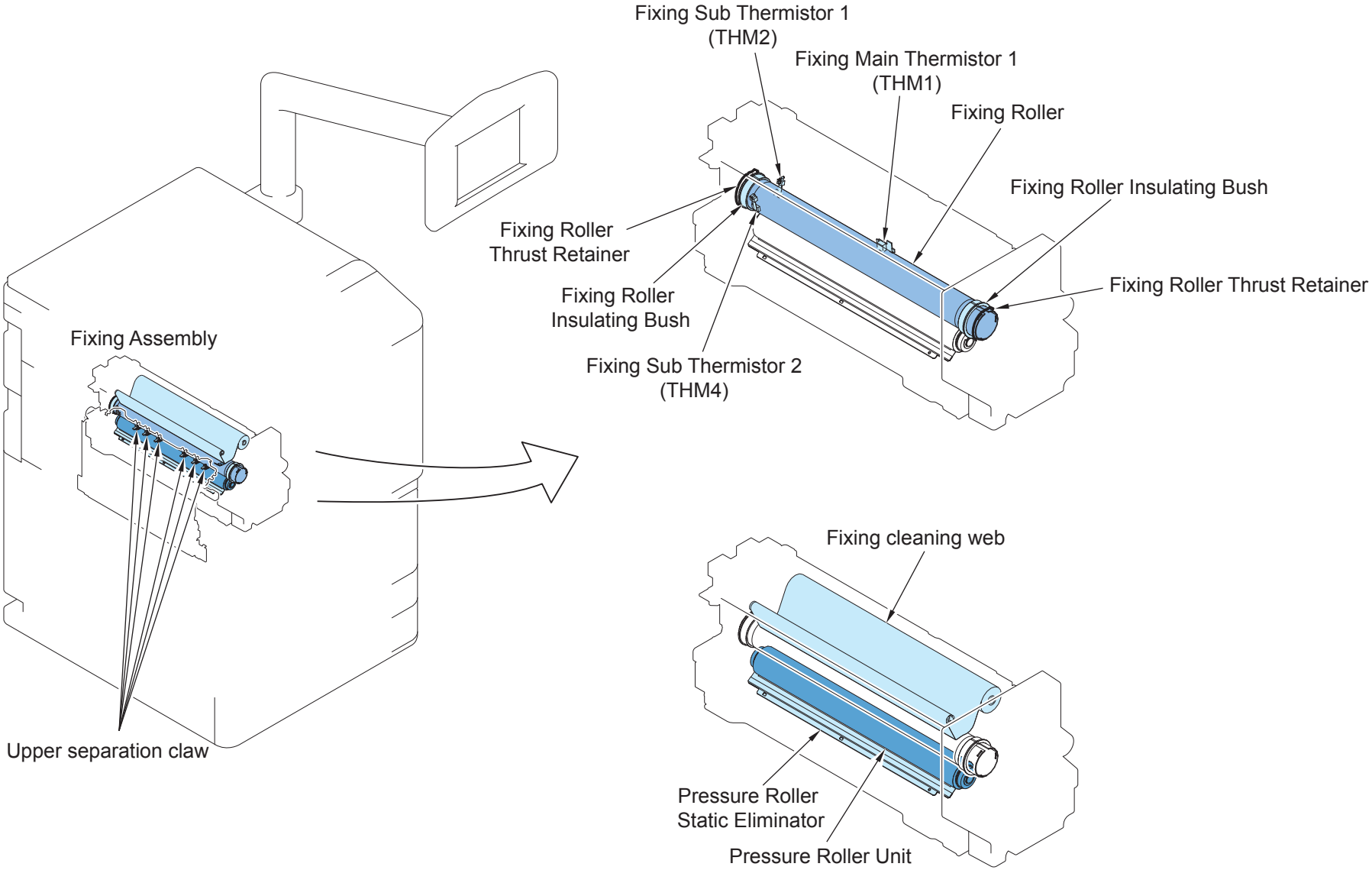
T-4-7




F-4-8

| No | Name | Main Unit | Service Parts No. | Reference | Adjustment during parts replacement |
|---|---|---|---|---|---|
| [1] | ETB | ETB Unit | FC8-7160 | "Removing the ETB Unit"(page 4-127). | - |
| [2] | Transfer Roller | ETB Unit | FC8-7159 | "Removing the Transfer Roller"(page 4-131). | |
| [3] | ETB Cleaning Blade | ETB Cleaning Unit | FC6-1647 | "Removing the ETB Cleaning Blade"(page 4-132). | - |
| [4] | Brush Roller | ETB Cleaning Unit | FC8-7175 | "Removing the ETB Brush Roller"(page 4-132). | - |

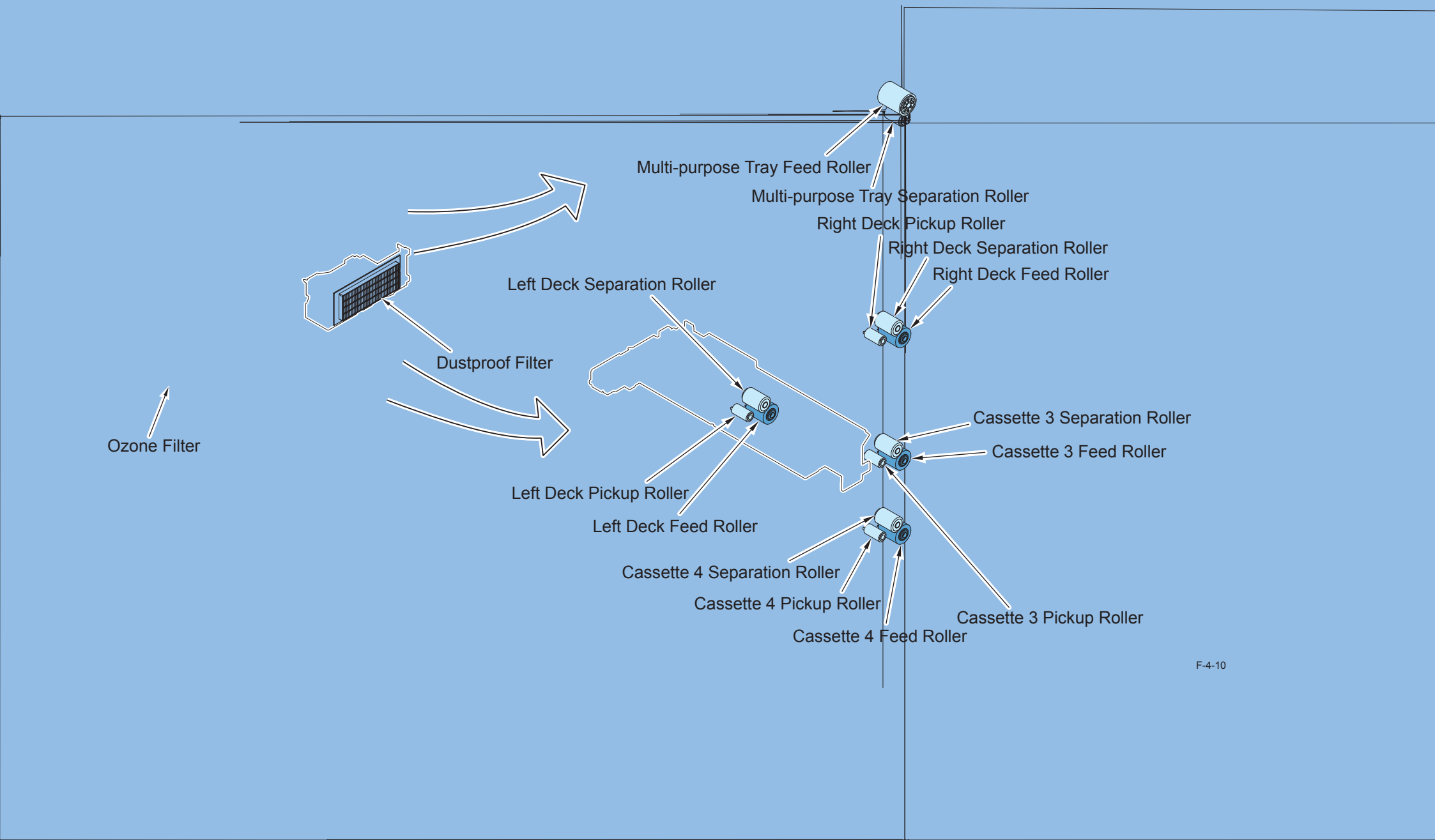
T-4-8


Fixing Sub Thermistor 1
(THM2)
Fixing Main Thermistor 1
(THM1)
Fixing Roller
Fixing Roller Insulating Bush
Fixing Roller
Thrust Retainer
Fixing Roller Thrust Retainer
Fixing Roller
Insulating Bush
Fixing Sub Thermistor 2
(THM4)
Fixing Assembly
Upper separation claw
Fixing cleaning web
Pressure Roller
Static Eliminator
Pressure Roller Unit

F-4-9

| No | Name | Main Unit | Service Parts No. | Reference | Adjustment during parts replacement |
|---|---|---|---|---|---|
| [1] | Fixing Sub Thermister 1(THM2) | Fixing Assembly | FK2-7693 | "Removing the Sub Thermistor 1"(page 4-183). | - |
| [2] | Fixing Main Thermister(THM1) | Fixing Assembly | FK2-7692 | "Removing the Main Thermistor"(page 4-181). | - |
| [3] | Fixing Roller | Fixing Assembly | FL3-3602 | "Removing the Fixing Roller, Insulating Bush and Thrust Stopper"(page 4-177). | "Fixing Roller"(page 5-12). |
| [4] | Fixing Roller Insulating Bushing | Fixing Assembly | FC9-8069 | "Removing the Fixing Roller, Insulating Bush and Thrust Stopper"(page 4-177). | - |
| [5] | Fixing Roller Thrust Retainer | Fixing Assembly | FC6-3501 | "Removing the Fixing Roller, Insulating Bush and Thrust Stopper"(page 4-177). | - |
| [6] | Fixing Sub Thermister 2(THM4) | Fixing Assembly | FK2-7693 | "Removing the Sub Thermistor 2"(page 4-184). | - |
| [7] | Fixing Cleaning Web | Fixing Assembly | FC5-2286 | "Removing the Fixing Cleaning Web"(page 4-172). | - |
| [8] | Pressure Roller Static Eliminator (front) | Fixing Assembly | FE2-3452 | "Removing the Pressure Roller Static Eliminator"(page 4-180). | - |
| [9] | Pressure Roller Static Eliminator (rear) | Fixing Assembly | FE2-3453 | "Removing the Pressure Roller Static Eliminator"(page 4-180). | - |
| [10] | Pressure Roller Unit | Fixing Assembly | FM4-3158 | "Removing the Pressure Roller"(page 4-179). | - |
| [11] | Upper Separation Claw | Fixing Assembly | FB5-3625 | "Removing the Upper Separation Claw"(page 4-185). | |

T-4-9

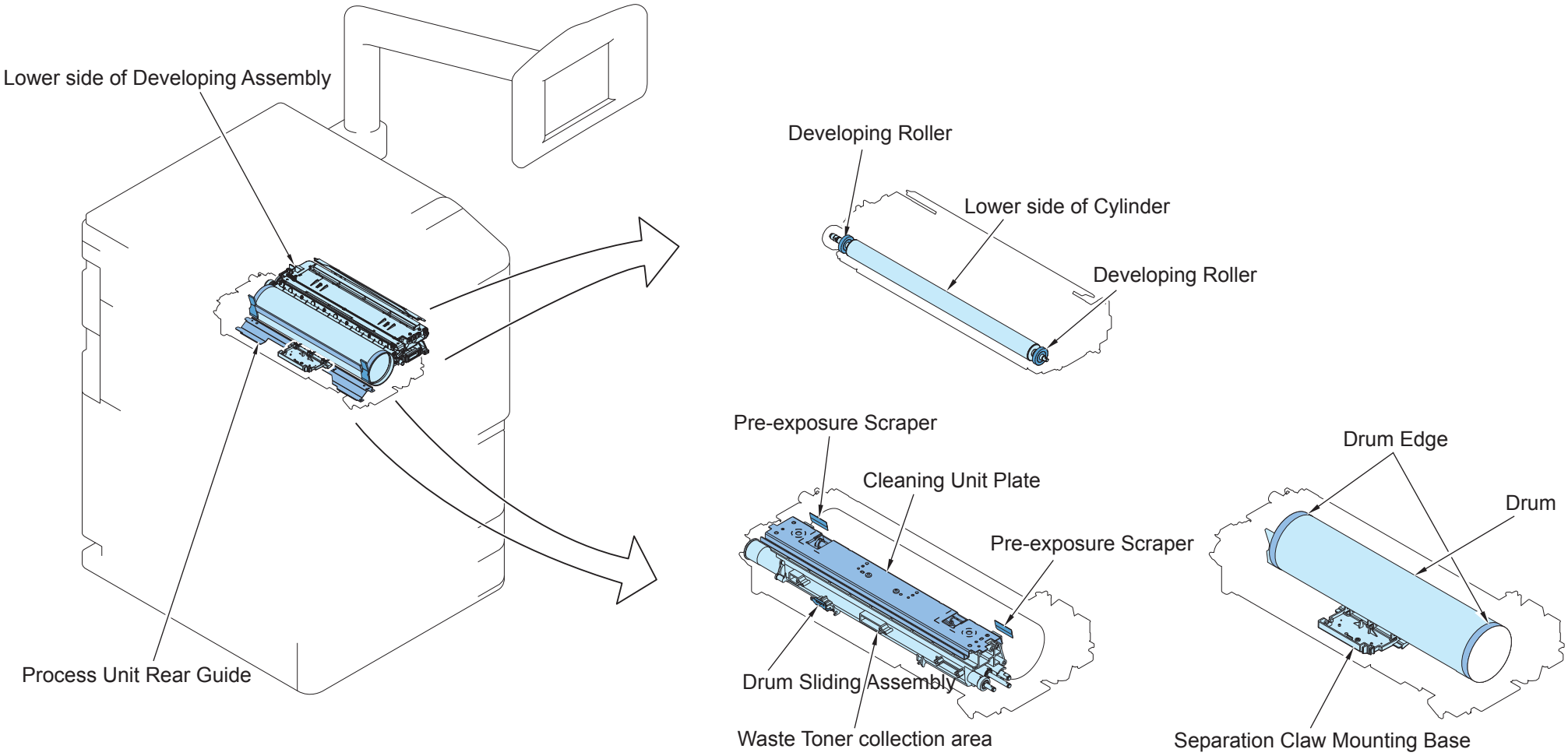

Multi-purpose Tray Feed Roller
Multi-purpose Tray Separation Roller
Right Deck Pickup Roller
Right Deck Separation Roller
Right Deck Feed Roller
Left Deck Separation Roller
Dustproof Filter
Ozone Filter
Cassette 3 Separation Roller
Cassette 3 Feed Roller
Left Deck Pickup Roller
Left Deck Feed Roller
Cassette 4 Separation Roller
Cassette 4 Pickup Roller
Cassette 3 Pickup Roller
Cassette 4 Feed Roller

F-4-10

| No | Name | Main Unit | Reference | Adjustment during parts replacement |
|---|---|---|---|---|
| [1] | Multi-purpose Tray Feed Roller | Multi-purpose Pickup Unit | "Removing the Multi-purpose Tray Feed Roller"(page 4-198). | - |
| [2] | Multi-purpose Tray Separation Roller | Multi-purpose Pickup Unit | "Removing the Multi-purpose Tray Separation Roller"(page 4-200). | - |
| [3] | Right Deck Pickup Roller | Right Deck Pickup Unit | "Removing the Right Deck Pickup Roller"(page 4-191). | - |
| [4] | Right Deck Separation Roller | Right Deck Pickup Unit | "Removing the Right Deck Separation Roller /Cleaning the Right Deck Pickup Sensor 2 (PS19)"(page 4-192). | - |
| [5] | Right Deck Feed Roller | Right Deck Pickup Unit | "Removing the Right Deck Feed Roller"(page 4-192). | - |
| [6] | Left Deck Separation Roller | Left Deck Pickup Unit | "Removing the Left Deck Separation Roller /Cleaning the Left Deck Pickup Sensor 2 (PS20)"(page 4-191). | - |
| [7] | Left Deck Pickup Roller | Left Deck Pickup Unit | "Removing the Left Deck Pickup Roller"(page 4-189). | - |
| [8] | Left Deck Feed Roller | Left Deck Pickup Unit | "Removing the Left Deck Feed Roller"(page 4-190). | - |
| [9] | Cassette 3 Separation Roller | Cassette 3 Pickup Unit | "Removing the Upper Cassette Separation Roller /Cleaning the Cassette 3 Pickup Sensor 2 (PS21)"(page 4-195). | - |
| [10] | Cassette 3 Feed Roller | Cassette 3 Pickup Unit | "Removing the Upper Cassette Feed Roller"(page 4-194). | - |
| [11] | Cassette 3 Pickup Roller | Cassette 3 Pickup Unit | "Removing the Upper Cassette Pickup Roller"(page 4-194). | - |
| [12] | Cassette 4 Separation Roller | Cassette 4 Pickup Unit | "Removing the Lower Cassette Separation Roller /Cleaning the Cassette 4 Pickup Sensor 1 (PS22)"(page 4-197). | - |
| [13] | Cassette 4 Feed Roller | Cassette 4 Pickup Unit | "Removing the Lower Cassette Feed Roller"(page 4-197). | - |
| [14] | Cassette 4 Pickup Roller | Cassette 4 Pickup Unit | "Removing the Lower Cassette Pickup Roller"(page 4-196). | - |
| [15] | Dustproof Filter | Product configuration | "Removing the Filter (for primary charging)"(page 4-225). | - |
| [16] | Ozone Filter | Product configuration | "Removing the Ozone Filter"(page 4-225). | - |

T-4-10

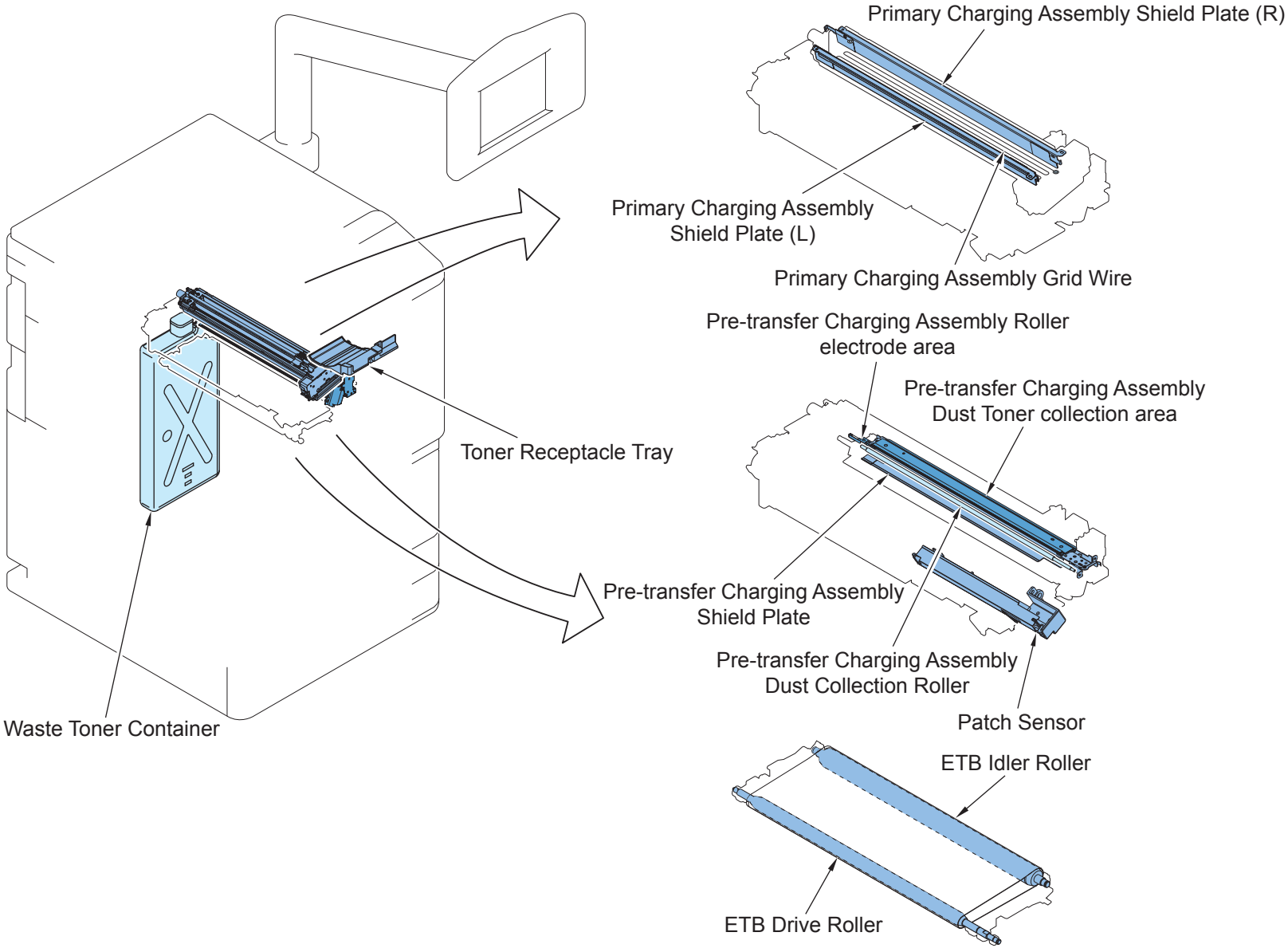
## List of Cleaning Parts




F-4-11

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Cleaning Unit Plate | Drum Cleaning Unit | "Cleaning the Drum Cleaning Unit"(page 4-113). |
| [2] | Pre-exposure Scraper | Drum Cleaning Unit | "Cleaning the Drum Cleaning Unit"(page 4-113). |
| [3] | Waste Toner Collection Area | Drum Cleaning Unit | "Cleaning the Drum Cleaning Unit"(page 4-113). |
| [4] | Separation Claw Mounting Base | Process Unit | "Cleaning the Process Unit"(page 4-109). |
| [5] | Process Unit Rear Guide | Process Unit | "Cleaning the Process Unit"(page 4-109). |
| [6] | Drum Sliding Assembly | Process Unit | "Cleaning the Process Unit"(page 4-109). |
| [7] | Drum | Process Unit | "Cleaning Photosensitive Drum"(page 4-119). |
| [8] | Drum Edge | Process Unit | "Cleaning the Drum edges"(page 4-120). |
| [9] | Lower side of Developing Assembly | Developing Assembly | "Cleaning the Developing Assembly"(page 4-125). |
| [10] | Developing Roller | Developing Assembly | "Cleaning the Developing Assembly"(page 4-125). |
| [11] | Lower side of Cylinder | Developing Assembly | "Cleaning the Developing Assembly"(page 4-125). |

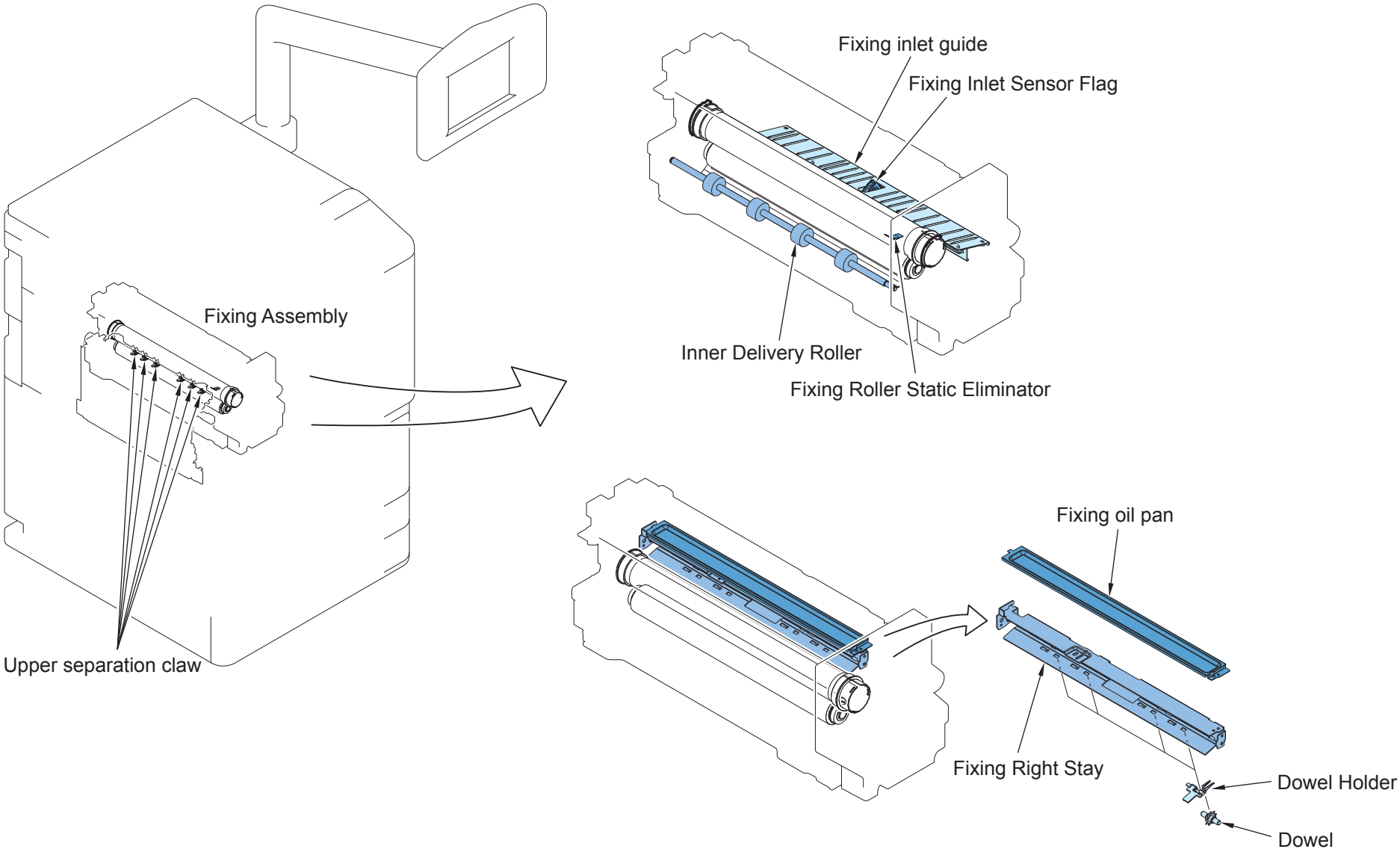
T-4-11


Primary Charging Assembly Shield Plate (R)
Primary Charging Assembly Shield Plate (L)
Primary Charging Assembly Grid Wire
Pre-transfer Charging Assembly Roller electrode area
Pre-transfer Charging Assembly Dust Toner collection area
Toner Receptacle Tray
Pre-transfer Charging Assembly Shield Plate
Pre-transfer Charging Assembly Dust Collection Roller
Patch Sensor
Waste Toner Container
ETB Idler Roller
ETB Drive Roller

F-4-12

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Primary Charging Assembly Grid Wire | Primary Charging Assembly | "Cleaning the Primary Charging Assembly Grid Wire"(page 4-99). |
| [2] | Primary Charging Assembly Shield Plate | Primary Charging Assembly | "Cleaning the Primary Charging Assembly Grid Wire"(page 4-99). |
| [3] | Pre-transfer Charging Assembly Shield Plate | Pre-transfer Charging Assembly | "Cleaning the Pre-transfer Charging Wire"(page 4-106). |
| [4] | Pre-transfer Charging  Assembly Dust Collection Roller | Pre-transfer Charging Assembly | "Cleaning the Pre-transfer Charging Wire"(page 4-106). |
| [5] | Pre-transfer Charging  Assembly Roller Electrode Area | Pre-transfer Charging Assembly | "Cleaning the Pre-transfer Charging Wire"(page 4-106). |
| [6] | Drum Cleaning Unit Toner Collection Area | Drum Cleaning Unit | "Cleaning the Pre-transfer Charging Wire"(page 4-106). |
| [7] | Patch Sensor | Process Unit | "Cleaning the Process Unit"(page 4-109). |
| [8] | ETB Drive Roller | ETB | "Cleaning the ETB"(page 4-130). |
| [9] | ETB Idler Roller | ETB | "Cleaning the ETB"(page 4-130). |
| [10] | Toner Receptacle Tray | Hopper Unit | "Removing the Toner Receptacle Tray"(page 4-149). |
| [11] | Waste Toner Container | Hopper Unit | "Removing the Waste Toner Feed Unit"(page 4-159). |

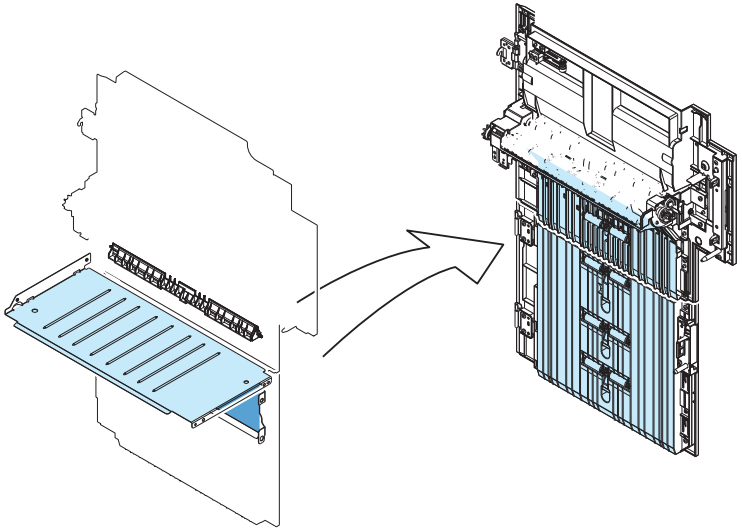
T-4-12

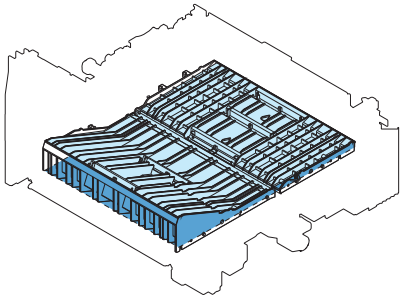

Fixing Assembly
Upper separation claw
Fixing inlet guide
Fixing Inlet Sensor Flag
Inner Delivery Roller
Fixing Roller Static Eliminator
Fixing oil pan
Fixing Right Stay
Dowel Holder
Dowel

F-4-13

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Fixing Inlet Guide | Fixing Assembly | "Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder"(page 4-170). |
| [2] | Fixing Right Stay | Fixing Assembly | "Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder"(page 4-170). |
| [3] | Dowel | Fixing Assembly | "Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder"(page 4-170). |
| [4] | Dowel Holder | Fixing Assembly | "Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder"(page 4-170). |
| [5] | Fixing Oil Pan | Fixing Assembly | "Cleaning the Fixing Oil Pan"(page 4-172). |
| [6] | Upper Separation Claw | Fixing Assembly | "Cleaning the Upper Separation Claw"(page 4-185). |
| [7] | Fixing Roller Static Eliminator | Fixing Assembly | "Cleaning the Fixing Roller Static Eliminator"(page 4-174). |
| [8] | Fixing Inlet Sensor Flag | Fixing Assembly | "Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder"(page 4-170). |
| [9] | Inner Delivery Roller | Fixing Assembly | "Cleaning the Inner Delivery Roller"(page 4-171). |

T-4-13

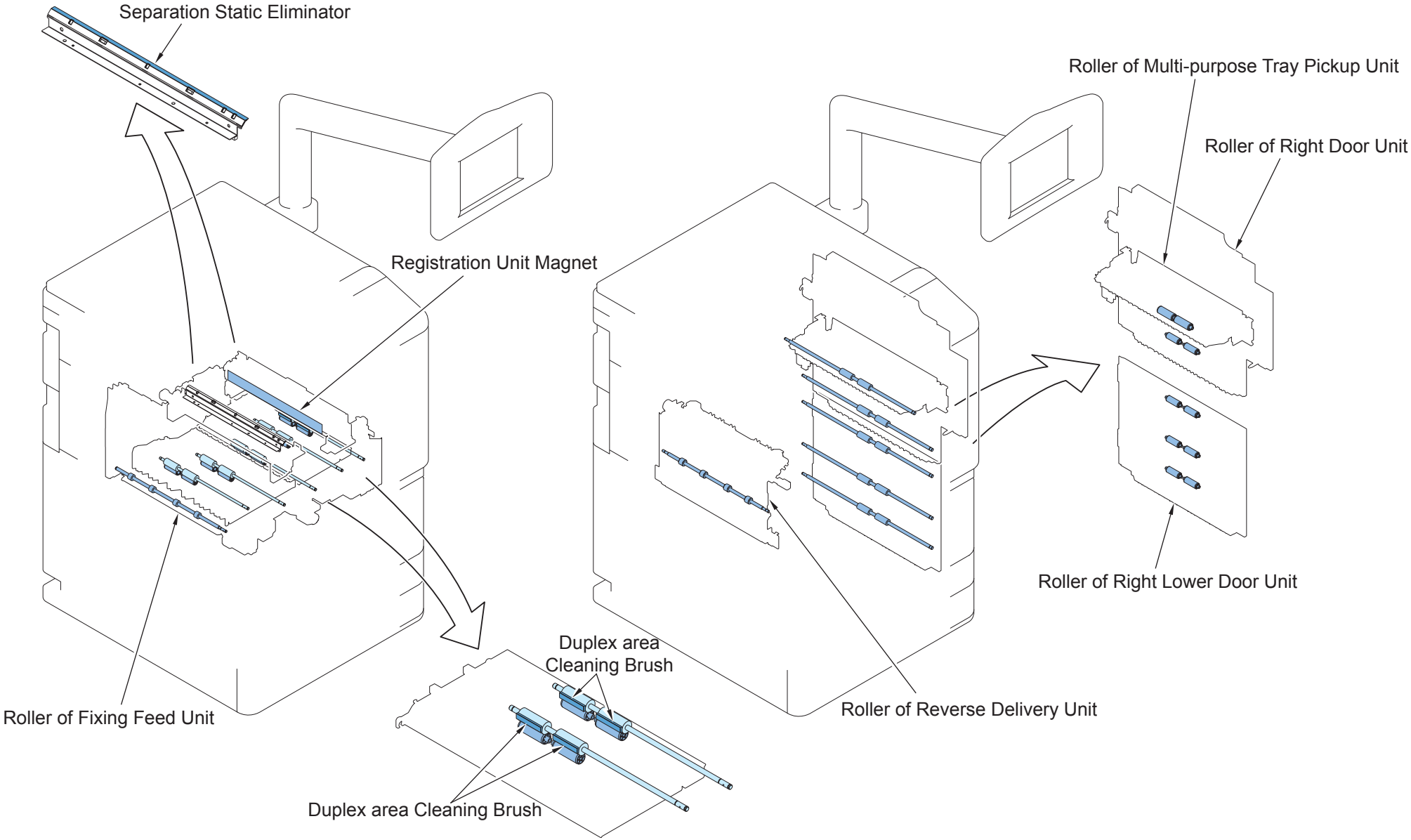




4 Parts Replacement and Clearning > List of Parts > Periodic Replacing Parts,Durable Parts,Cleaning Parts > List of Cleaning Parts
4-26

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Registration Unit Feed Guide | Registration Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [2] | Reverse Delivery Unit Feed Guide | Reverse Delivery Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [3] | Fixing Feed Unit (Duplex/Rear)Feed Guide | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [4] | Inner Feed Guide | Product Specification | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [5] | Right Door Unit Feed Guide | Right Door Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [6] | Right Lower Door Unit Feed Guide | Right Lower Door Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |

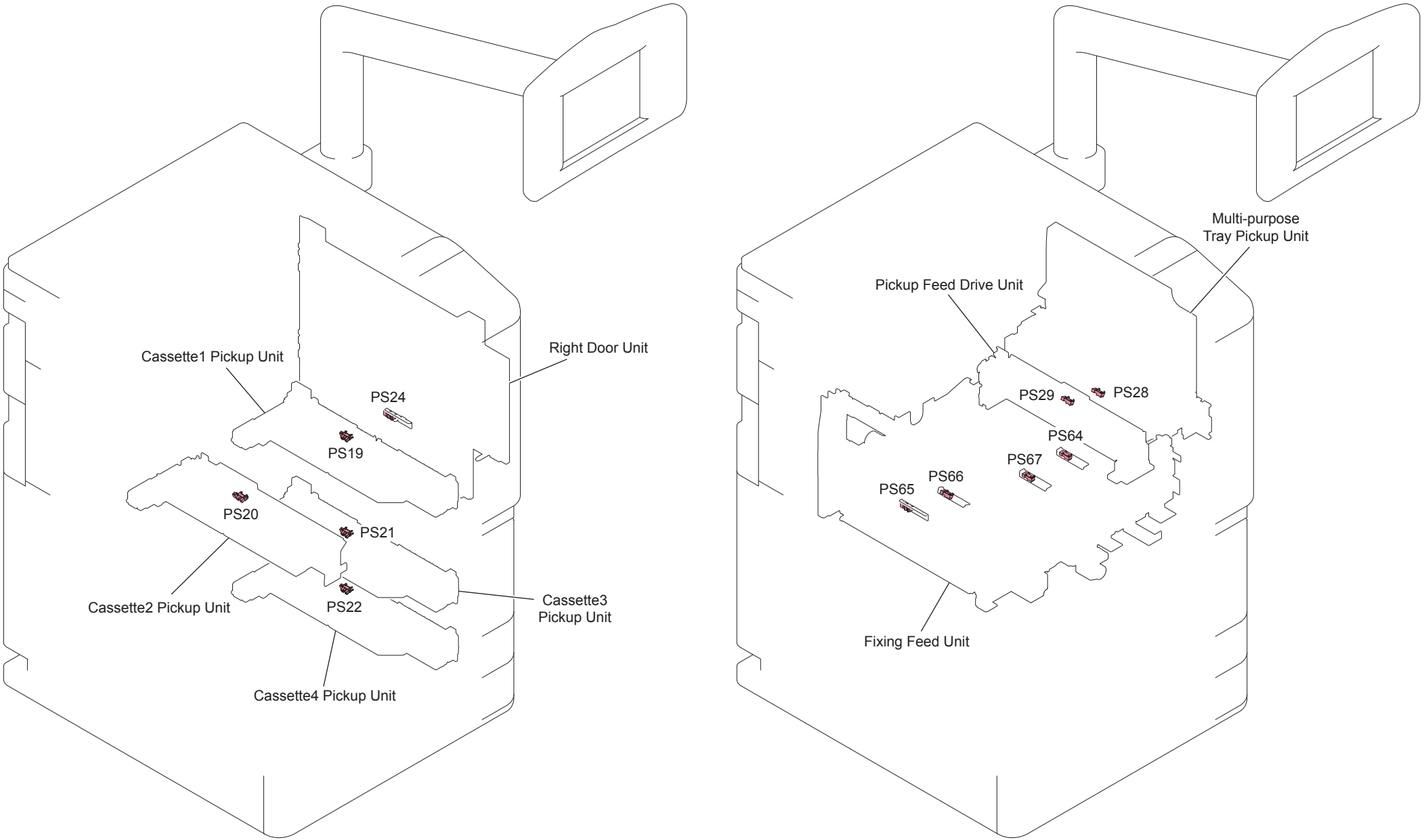
T-4-14


Separation Static Eliminator
Roller of Multi-purpose Tray Pickup Unit
Roller of Right Door Unit
Registration Unit Magnet
Roller of Right Lower Door Unit
Duplex area
Cleaning Brush
Roller of Fixing Feed Unit
Roller of Reverse Delivery Unit
Duplex area Cleaning Brush

F-4-15

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Roller of Fixing Feed Unit | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [2] | Registration Unit Magnet | Registration Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [3] | Roller of Multi-purpose Tray Pickup Unit | Multi-purpose Tray Pickup Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [4] | Roller of Right Door Unit | Right Door Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [5] | Roller of Right Lower Door Unit | Right Lower Door Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [6] | Roller of Reverse Delivery Unit | Reverse Delivery Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [7] | Duplex area Cleaning Brush | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| [8] | Separation Static Eliminator | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |

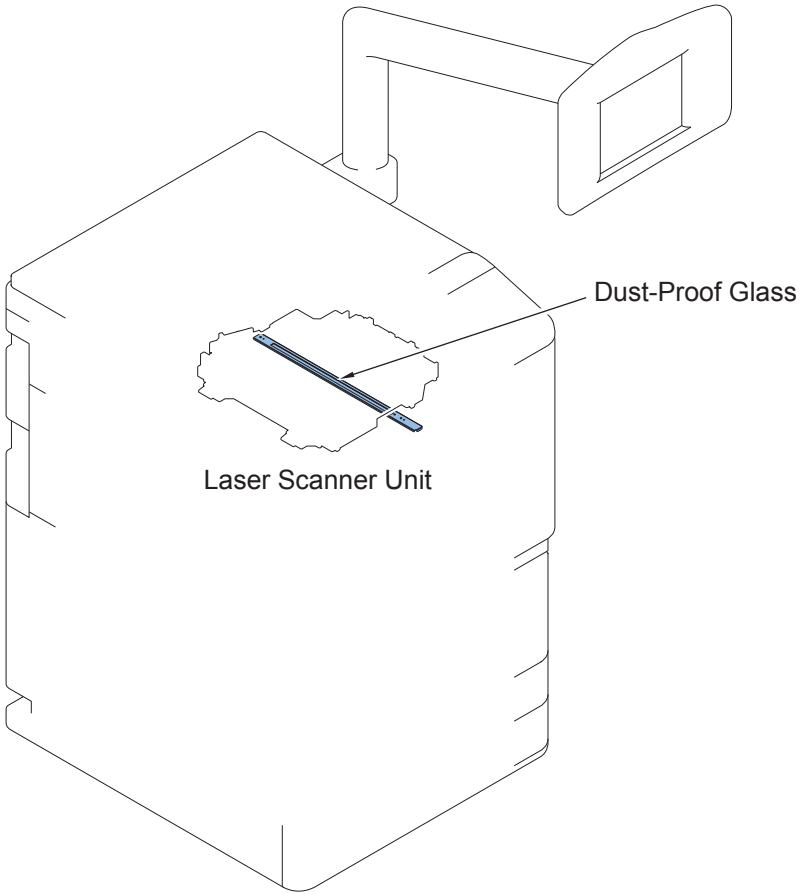
T-4-15


Cassette1 Pickup Unit
Right Door Unit
PS24
PS19
PS20
PS21
PS22
Cassette2 Pickup Unit
Cassette3
Pickup Unit
Cassette4 Pickup Unit
Multi-purpose
Tray Pickup Unit
Pickup Feed Drive Unit
PS29
PS28
PS64
PS67
PS66
PS65
Fixing Feed Unit

F-4-16

| No | Name | Main Unit | Reference |
|---|---|---|---|
| PS19 | Right Deck Pickup Sensor 1 | Right Deck Unit | "Removing the Right Deck Separation Roller /Cleaning the Right Deck Pickup Sensor 2 (PS19)"(page 4-192). |
| PS20 | Left Deck Pickup Sensor 2 | Left Deck Unit | "Removing the Left Deck Separation Roller /Cleaning the Left Deck Pickup Sensor 2 (PS20)"(page 4-191). |
| PS21 | Cassette 3 Pickup Sensor 2 | Cassette 3 Pickup Unit | "Removing the Upper Cassette Separation Roller /Cleaning the Cassette 3 Pickup Sensor 2 (PS21)"(page 4-195). |
| PS22 | Cassette 4 Pickup Sensor 1 | Cassette 4 Pickup Uni | "Removing the Lower Cassette Separation Roller /Cleaning the Cassette 4 Pickup Sensor 1 (PS22)"(page 4-197). |
| PS24 | Vertical Path Sensor 1 | Vertical Path Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| PS28 | Multi-purpose Tray Last Paper Sensor | Multi-purpose Tray Pickup Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| PS29 | Registration Sensor | Pickup Feed Drive Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| PS64 | Duplex Outlet Sensor | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| PS66 | Duplex Left Sensor | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |
| PS67 | Duplex Merging Sensor | Fixing Feed Unit | "Cleaning the Pickup and Fixing Feed Assembly"(page 4-201). |

T-4-16

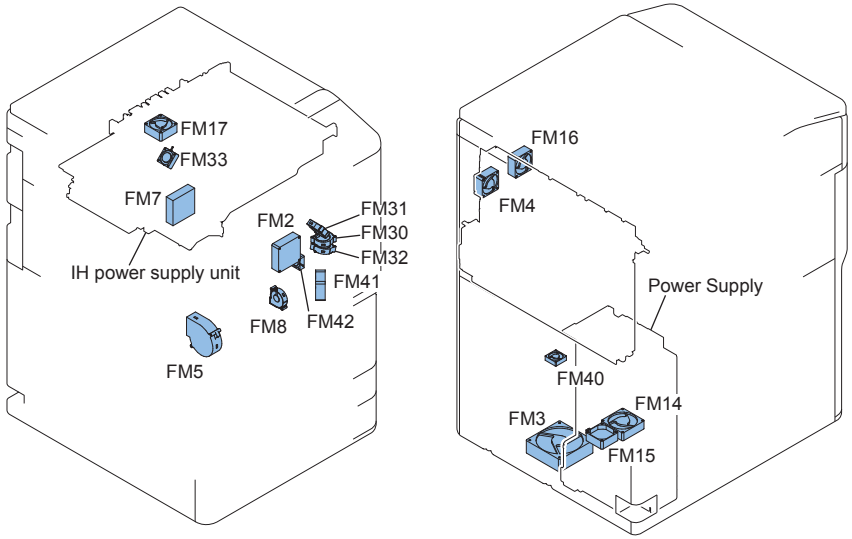



F-4-17

| No | Name | Main Unit | Reference |
|---|---|---|---|
| [1] | Dustproof Glass | Product Configuration | "Cleaning the Dust Collecting Glass"(page 4-88). |

T-4-17

# List of Fan

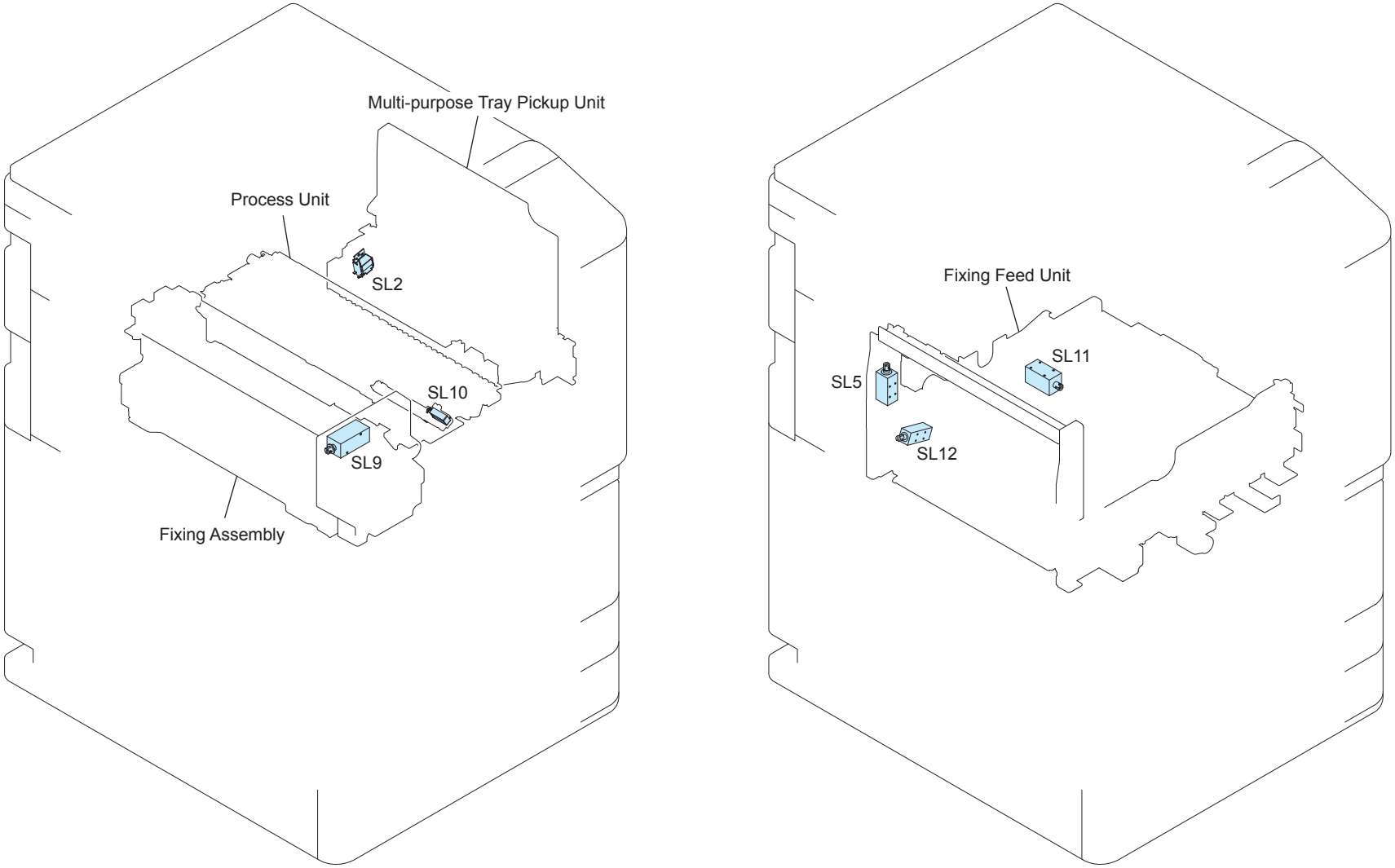



F-4-18

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| FM2 | Primary Charging Assembly Air Supply Fan | Product configuration | | |
| FM3 | Making Image Exhaust Fan | Product configuration | | |
| FM4 | Main Controller Cooling Fan | Product configuration | | |
| FM5 | Paper Cooling Fan | Product configuration | | |
| FM7 | Fixing Power Supply Cooling Fan | Product configuration | | |
| FM8 | Transfer Cleaner Cooling Fan | Product configuration | | |
| FM14 | Power Supply Cooling Fan 1 | Product configuration | | |
| FM15 | Power Supply Cooling Fan 2 | Product configuration | | |
| FM16 | Laser Scanner Cooling Fan | Product configuration | | |
| FM17 | Primary Charging Assembly Exhaust Fan | Product configuration | | |
| FM30 | Developing Assembly Lower Cooling Fan | Product configuration | | |
| FM31 | Developing Assembly Upper Cooling Fan | Product configuration | | |
| FM32 | Pre-transfer Charging Assembly Air Supply Fan | Product configuration | | |
| FM33 | Pre-transfer Charging Assembly Exhaust Fan | Product configuration | | |
| FM40 | Feed Driver Cooling Fan | Product configuration | | |
| FM41 | Duplex Driver Cooling Fan | Product configuration | | |
| FM42 | Registration Motor/Duplex Motor Cooling Fan | Product configuration | | |

T-4-18

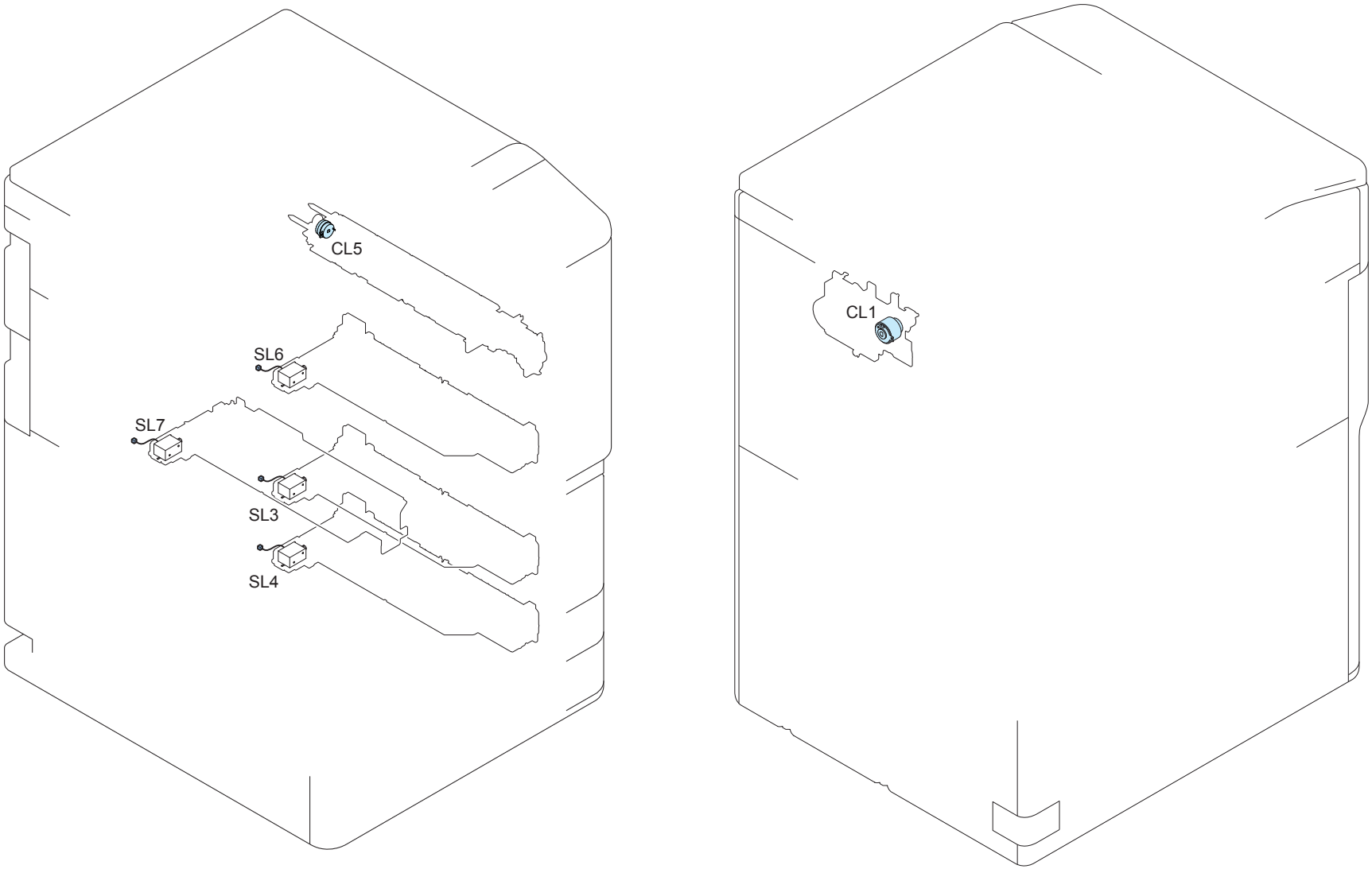
# List of Clutch / Solenoid




F-4-19

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| SL2 | Multi-purpose Tray Pickup Solenoid | Multi-purpose Pickup Unit | | - |
| SL5 | Reverse Upper Flapper Solenoid | Fixing Feed Unit | | - |
| SL9 | Fixing Cleaning Web Drive Solenoid | Fixing Assembly | | - |
| SL10 | Patch Sensor Shutter Solenoid | Process Unit | | - |
| SL11 | Left Deck Merging Solenoid | Fixing Feed Unit | | - |
| SL12 | Reverse Detachment Solenoid | Fixing Feed Unit | | - |

T-4-19

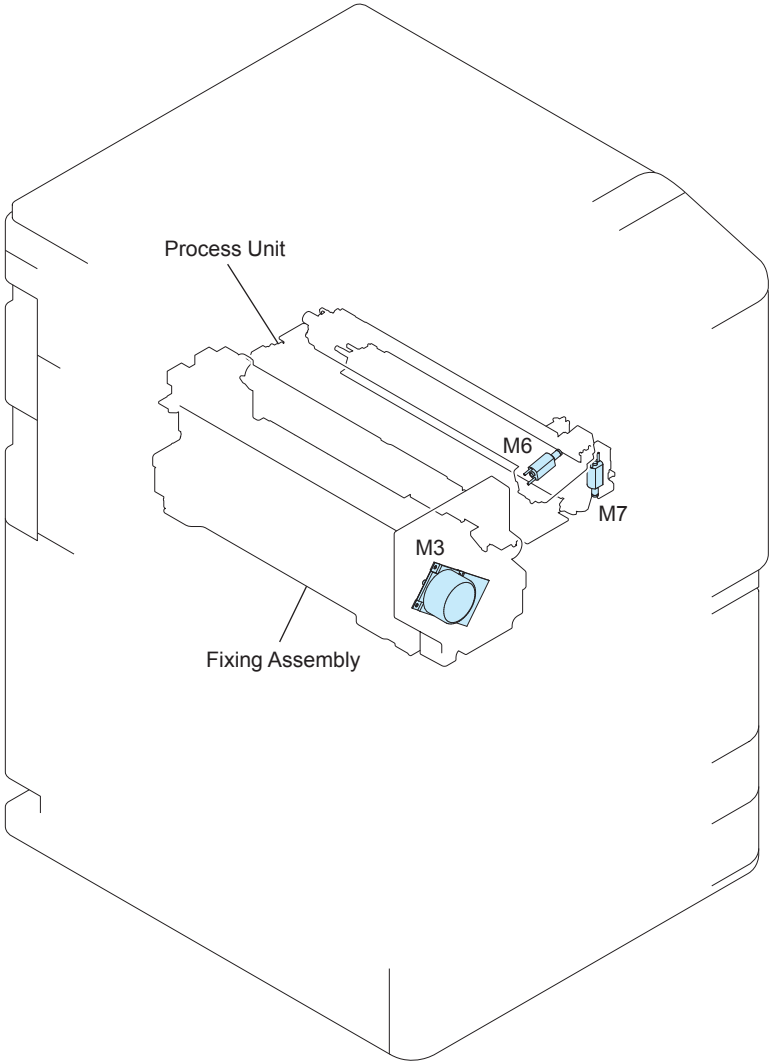


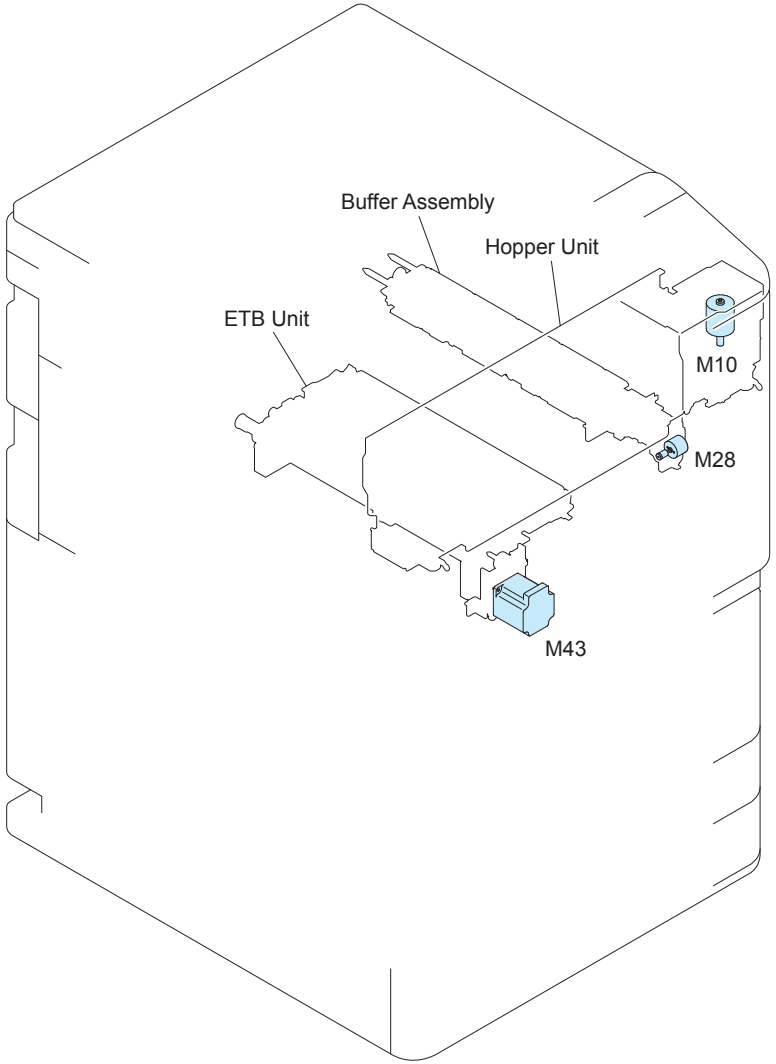

F-4-20

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| CL1 | Developing Clutch | Developing Assembly | | |
| SL3 | Cassette 3 Pickup Solenoid | Cassette 3 Pickup Unit | | - |
| SL4 | Cassette 4 Pickup Solenoid | Cassette 4 Pickup Unit | | - |
| CL5 | Magnet Roller Clutch | Hopper Unit | | |
| SL6 | Right Deck Pickup Solenoid | Right Deck Pickup Unit | | - |
| SL7 | Left Deck Pickup Solenoid | Left Deck Pickup Unit | | - |

T-4-20

# List of Motor

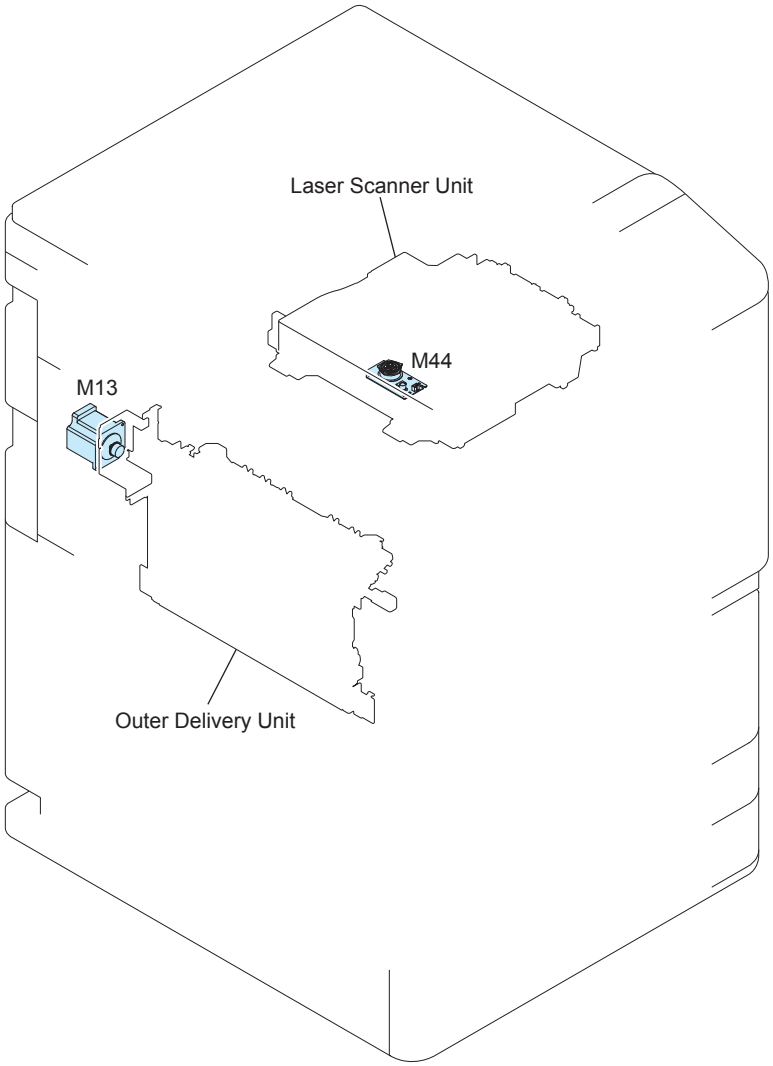


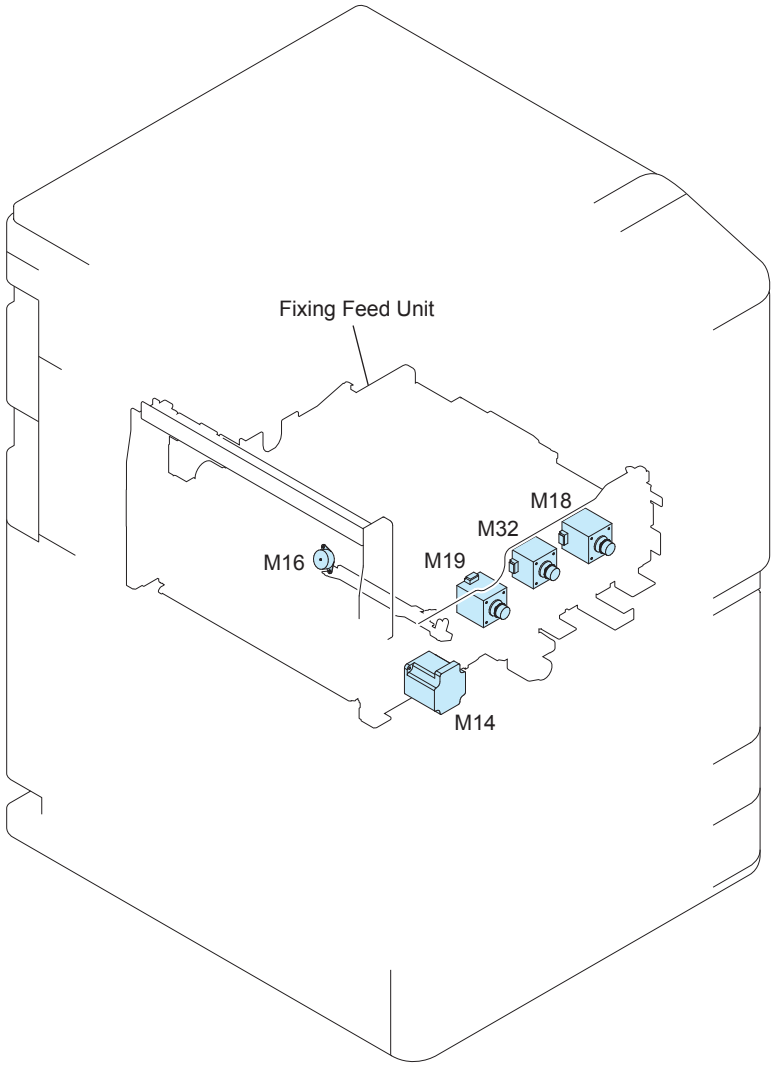




F-4-21

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| M3 | Fixing Motor | Fixing Assembly | | - |
| M6 | Primary Charging Wire Cleaning Motor | Process Unit | | - |
| M7 | Pre-transfer Charging Wire Cleaning Motor | Process Unit | | - |
| M10 | Toner Supply Motor | Hopper Unit | | - |
| M28 | Toner Feed Motor | Hopper Unit | | - |
| M43 | ETB Motor | ETB Unit | | - |

T-4-21

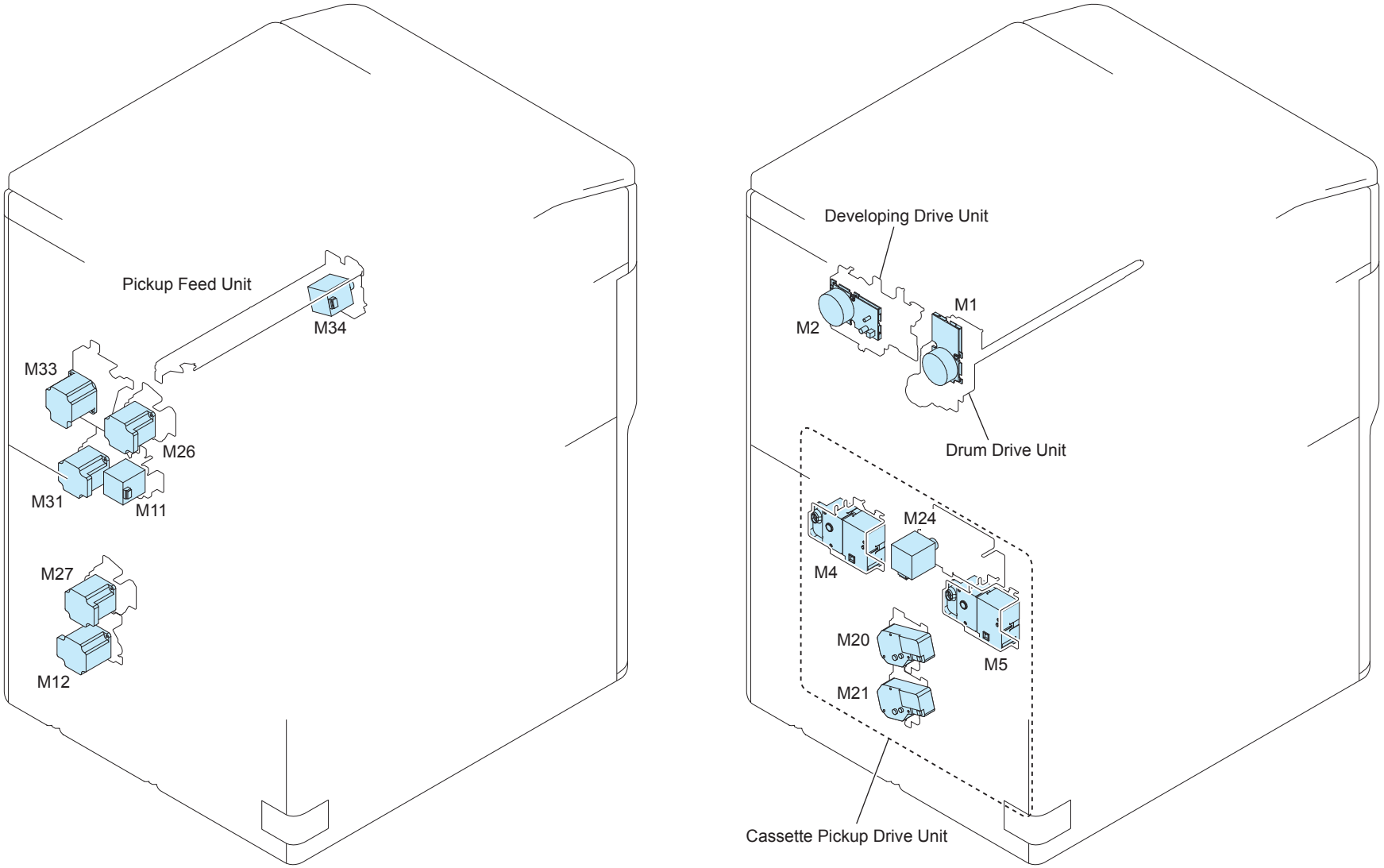

Laser Scanner Unit
M44
M13
Outer Delivery Unit


Fixing Feed Unit
M18
M32
M16
M19
M14

F-4-22

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| M13 | Delivery Motor | Outer Delivery Unit | | - |
| M14 | Reverse Motor | Fixing Feed Unit | | - |
| M16 | Side Registration Motor | Fixing Feed Unit | | - |
| M18 | Duplex Feed Right Motor | Fixing Feed Unit | | - |
| M19 | Duplex Feed Left Motor | Fixing Feed Unit | | - |
| M32 | Duplex Feed Merging Motor | Fixing Feed Unit | | - |
| M44 | Polygon Motor | Laser Scanner Unit | | - |

T-4-22

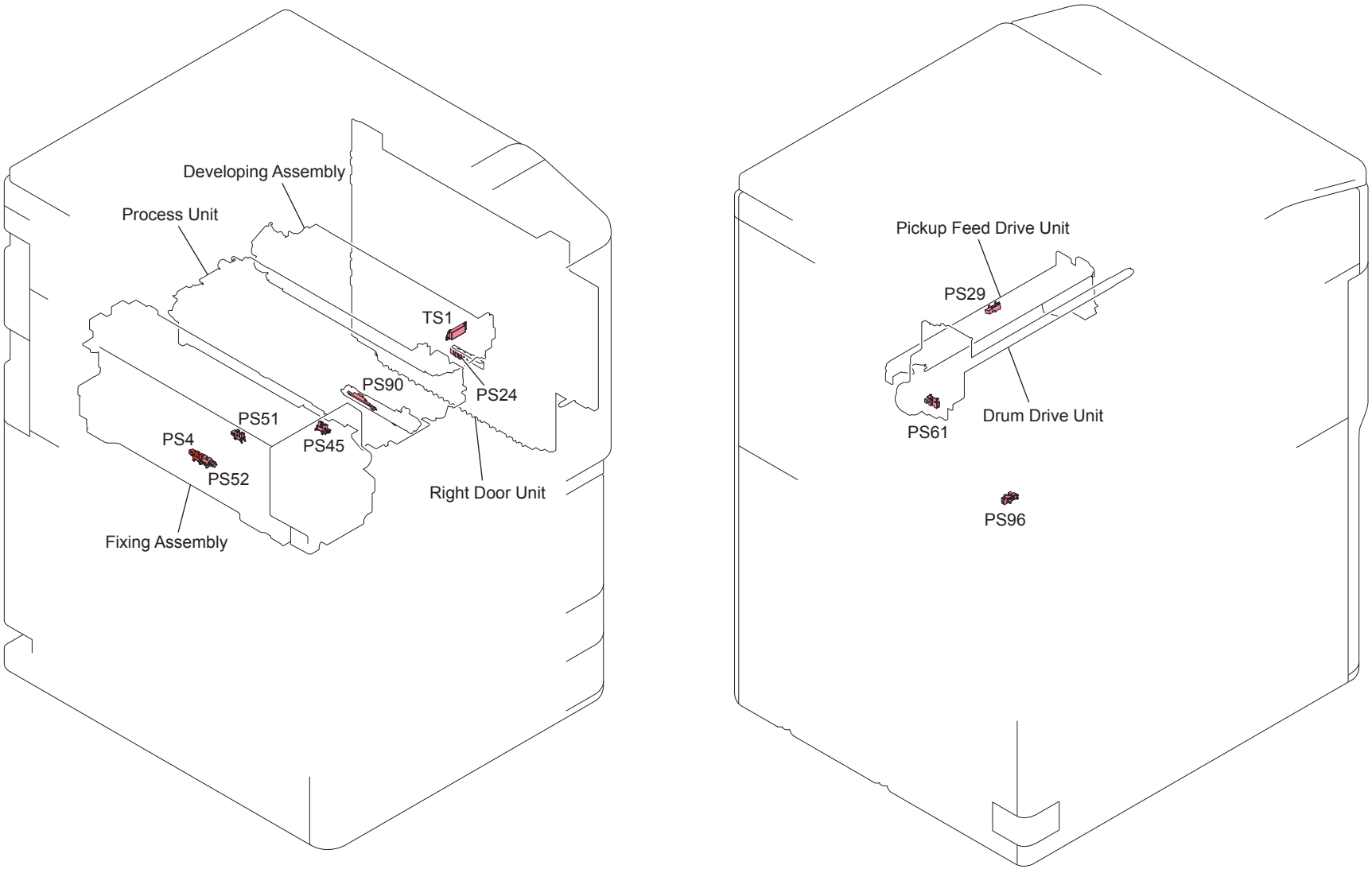

Pickup Feed Unit
M34
M33
M26
M31
M11
M27
M12
Developing Drive Unit
M1
M2
Drum Drive Unit
M24
M4
M20
M5
M21
Cassette Pickup Drive Unit

F-4-23

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| M1 | Drum Motor | Drum Drive Unit | | - |
| M2 | Developing Motor | Developing Assembly Drive Unit | | - |
| M4 | Right Deck Lifter Motor | Cassette Pickup Drive Unit | | - |
| M5 | Left Deck Lifter Motor | Cassette Pickup Drive Unit | | - |
| M11 | Right Deck Pickup Motor | Pickup Feed Unit | | - |
| M12 | Cassette 3,4 Pickup Motor | Pickup Feed Unit | | - |
| M20 | Cassette 3 Lifter Motor | Cassette Pickup Drive Unit | | - |
| M21 | Cassette 4 Lifter Motor | Cassette Pickup Drive Unit | | - |
| M24 | Left Deck Pickup Motor | Cassette Pickup Drive Unit | | - |
| M26 | Vertical Path Upper Motor | Pickup Feed Unit | | - |
| M27 | Vertical Path Lower Motor | Pickup Feed Unit | | - |
| M31 | Vertical Path Middle Motor | Pickup Feed Unit | | - |
| M33 | Multi-purpose Tray Registration Front Motor | Pickup Feed Unit | | - |
| M34 | Registration Motor | Pickup Feed Unit | | - |

T-4-23

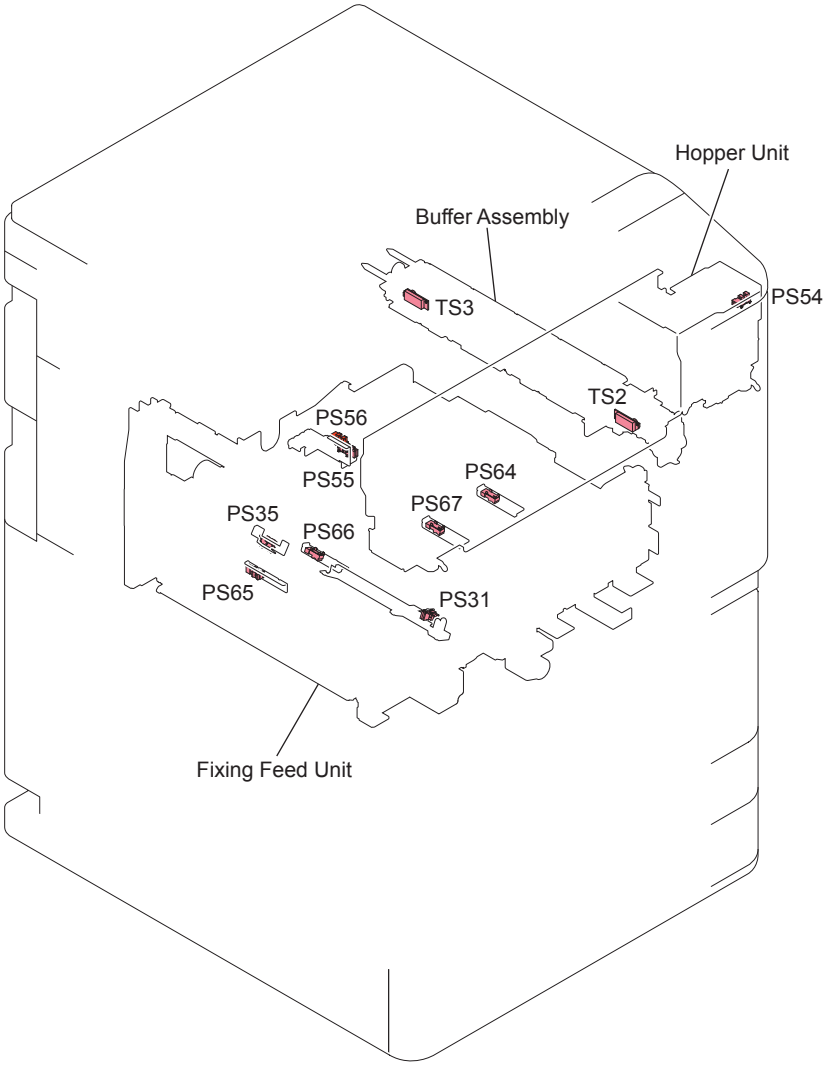
# List of Sensor

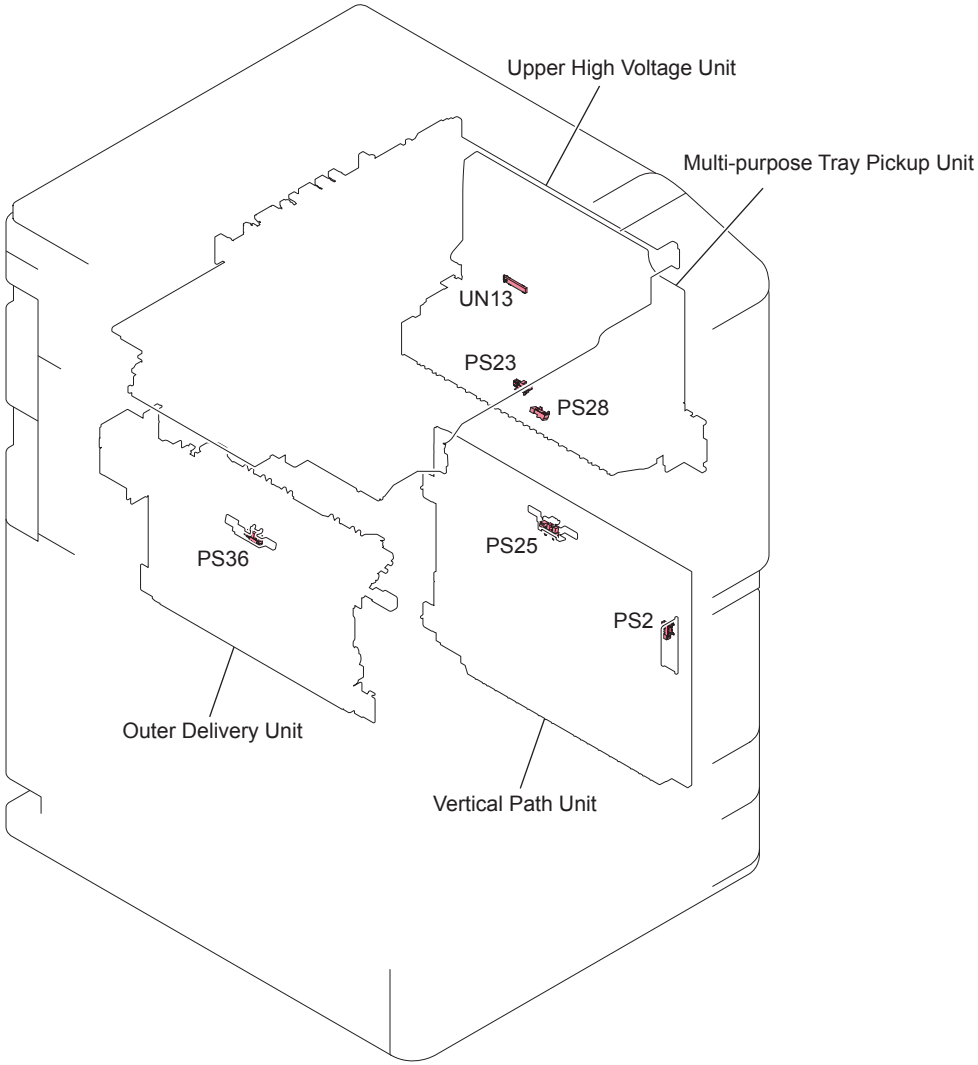



F-4-24

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| PS4 | Fixing Toenail Jam Sensor | Fixing Assembly | | |
| PS24 | Vertical Path Sensor 1 | Vertical Path Unit | | |
| PS29 | Registration Sensor | Pickup Feed Drive Unit | | |
| PS45 | Fixing Cleaning Web Level Sensor | Fixing Assembly | | |
| PS51 | Fixing Inlet Sensor | Fixing Assembly | | |
| PS52 | Fixing Outlet Sensor | Fixing Assembly | | |
| PS61 | Drum Home Position Sensor | Drum Drive Unit | | |
| PS90 | Patch Sensor | Process Unit | | "Patch Sensor"(page 5-11). |
| PS96 | Fixed Feed Lever Sensor | Fixing Feed Unit | | |
| TS1 | Developing Assembly Toner Sensor | Developing Assembly | | |

T-4-24

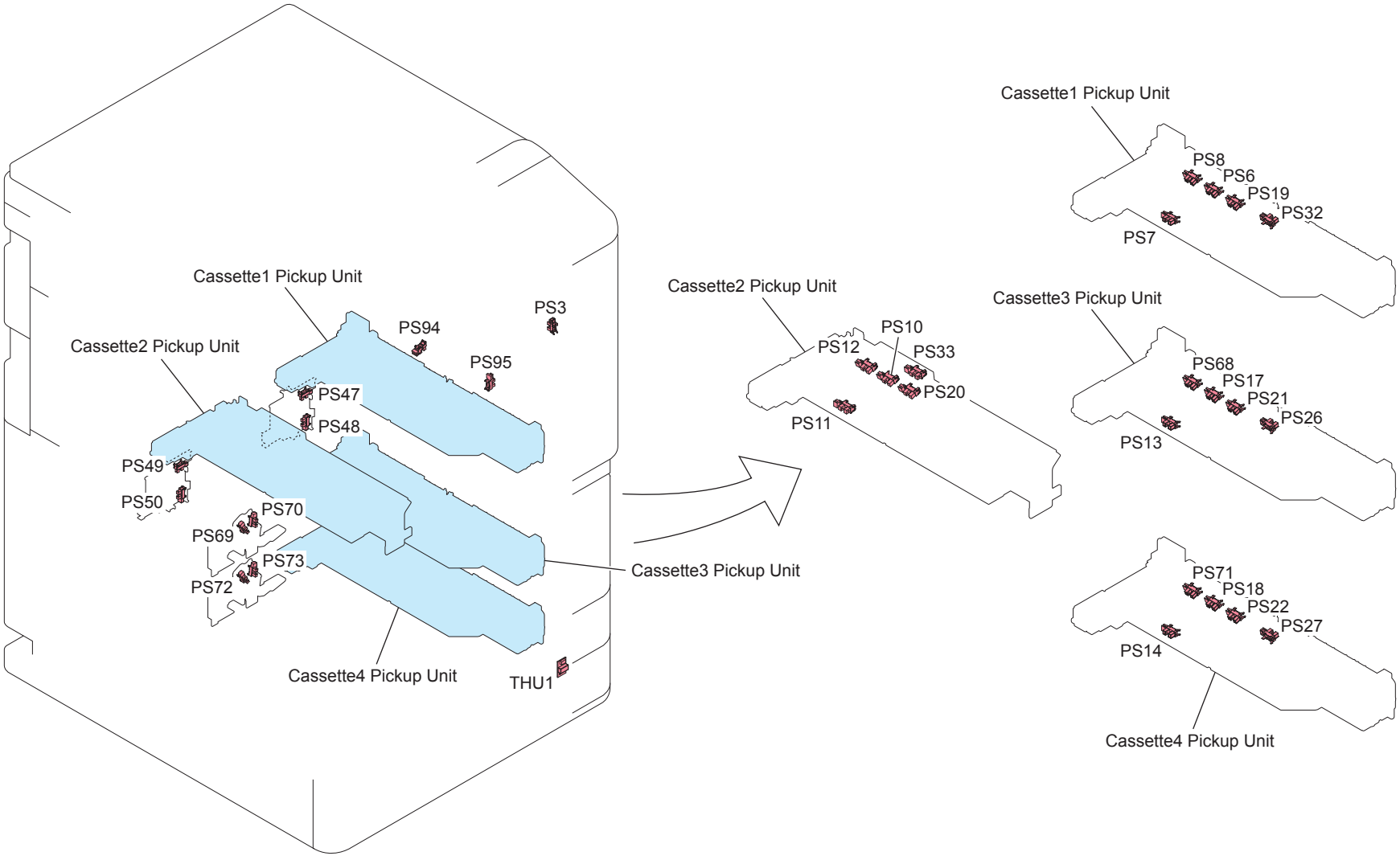

Hopper Unit
Buffer Assembly
TS3
PS54
TS2
PS56
PS55
PS64
PS67
PS35
PS66
PS65
PS31
Fixing Feed Unit


Upper High Voltage Unit
Multi-purpose Tray Pickup Unit
UN13
PS23
PS28
PS36
PS25
PS2
Outer Delivery Unit
Vertical Path Unit

F-4-25

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| PS2 | Vertical Path Cover Open/Close Sensor | Vertical Path Unit | | - |
| PS23 | Multi-purpose Tray Paper Sensor | Multi-purpose Pickup Unit | | - |
| PS25 | Vertical Path Sensor 2 | Vertical Path Unit | | - |
| PS28 | Multi-purpose Tray Last Paper Sensor | Multi-purpose Pickup Unit | | - |
| PS31 | Side Registration Sensor | Fixing Feed Unit | | - |
| PS35 | Inner Delivery Sensor | Fixing Feed Unit | | - |
| PS36 | Outer Delivery Sensor | Outer Delivery Unit | | - |
| PS54 | Toner Exchange Cover Open/Close Sensor | Hopper Unit | | - |
| PS55 | Transfer Belt Engage Sensor | Fixing Feed Unit | | - |
| PS56 | Transfer Belt Disengage Sensor | Fixing Feed Unit | | - |
| PS64 | Duplex Outlet Sensor | Fixing Feed Unit | | - |
| PS65 | Reverse Vertical Path Sensor | Fixing Feed Unit | | - |
| PS66 | Duplex Left Sensor | Fixing Feed Unit | | - |
| PS67 | Duplex Merging Sensor | Fixing Feed Unit | | - |
| TS2 | Buffer Toner Sensor 1 | Hopper Unit | | - |
| TS3 | Buffer Toner Sensor 2 | Hopper Unit | | - |
| UN13 | Multi-purpose Tray Paper Width Sensor | Multi-purpose Pickup Unit | | - |

T-4-25

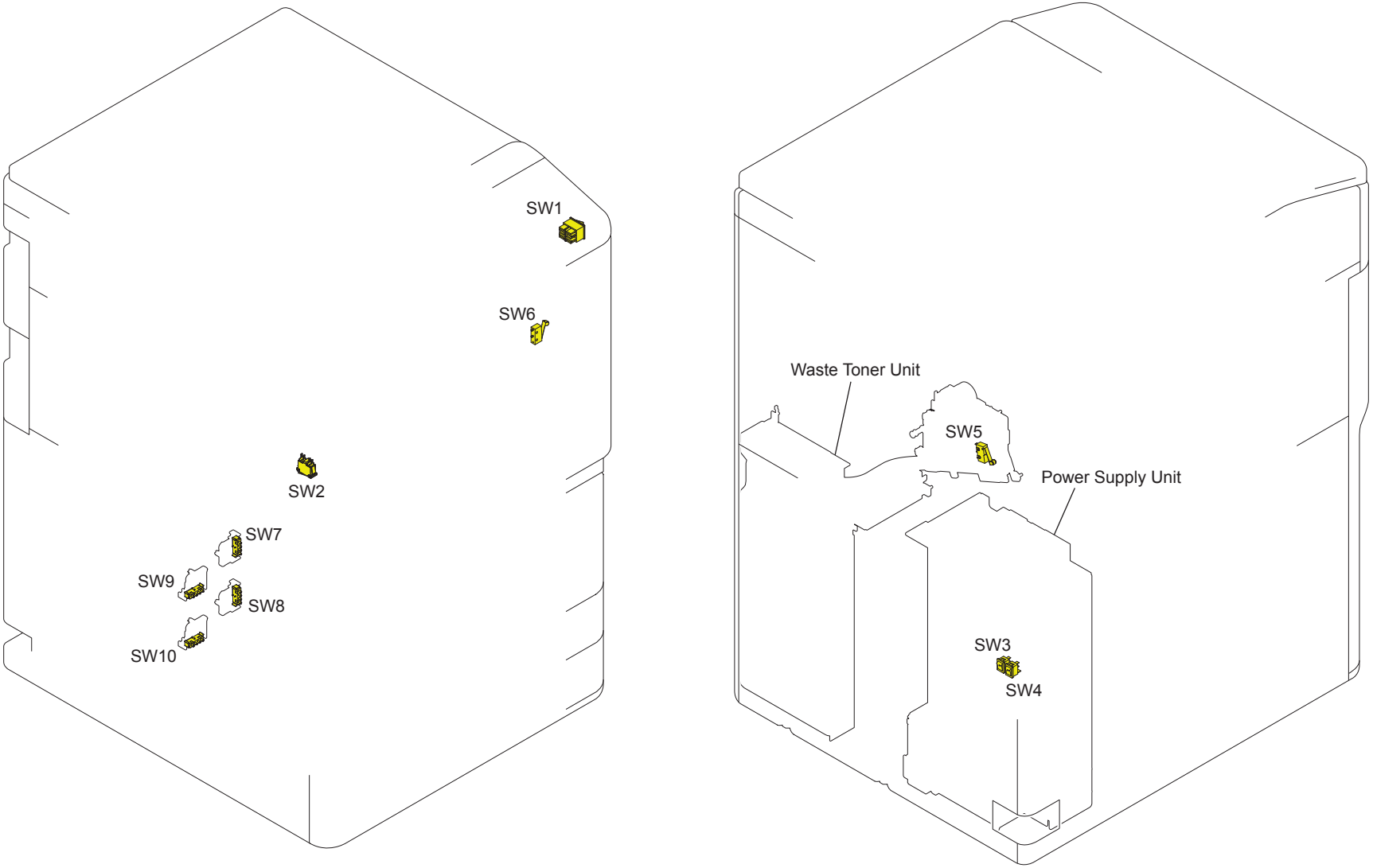

Cassette1 Pickup Unit
Cassette2 Pickup Unit
PS94
PS3
PS95
PS47
PS48
PS49
PS50
PS70
PS69
PS73
PS72
Cassette3 Pickup Unit
Cassette4 Pickup Unit
THU1
Cassette2 Pickup Unit
PS12
PS10
PS33
PS20
PS11
Cassette1 Pickup Unit
PS8
PS6
PS19
PS32
PS7
Cassette3 Pickup Unit
PS68
PS17
PS21
PS26
PS13
PS71
PS18
PS22
PS27
PS14
Cassette4 Pickup Unit

F-4-26

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| PS3 | Multi-purpose Tray Cover Open/Close Sensor | Multi-purpose Tray Pickup Unit | | |
| PS6 | Right Deck Paper Height Sensor | Right Deck Unit | | |
| PS7 | Right Deck Paper Sensor | Right Deck Unit | | |
| PS8 | Right Deck Upper Limit Sensor | Right Deck Unit | | |
| PS10 | Left Deck Paper Height Sensor | Left Deck Unit | | |
| PS11 | Left Deck Paper Sensor | Left Deck Unit | | |
| PS12 | Left Deck Upper Limit Sensor | Left Deck Unit | | |
| PS13 | Cassette 3 Paper Sensor | Cassette 3 Pickup Unit | | |
| PS14 | Cassette 4 Paper Sensor | Cassette 4 Pickup Unit | | |
| PS17 | Cassette 3 Paper Height Sensor | Cassette 3 Pickup Unit | | |
| PS18 | Cassette 4 Paper Height Sensor | Cassette 4 Pickup Unit | | |
| PS19 | Right Deck Pickup Sensor 2 | Right Deck Unit | | |
| PS20 | Left Deck Pickup Sensor 2 | Left Deck Unit | | |
| PS21 | Cassette 3 Pickup Sensor 2 | Cassette 3 Pickup Unit | | |
| PS22 | Cassette 4 Pickup Sensor 1 | Cassette 4 Pickup Unit | | |
| PS26 | Vertical Path Sensor 3 | Vertical Path Unit | | |
| PS27 | Vertical Path Sensor 4 | Vertical Path Unit | | |
| PS32 | Right Deck Pull Out Sensor | Right Deck Unit | | |
| PS33 | Left Deck Pull Out Sensor | Left Deck Unit | | |
| PS47 | Right Deck Paper Level Sensor 1 | Right Deck Unit | | |
| PS48 | Right Deck Paper Level Sensor 2 | Right Deck Unit | | |
| PS49 | Left Deck Paper Level Sensor 1 | Left Deck Unit | | |
| PS50 | Left Deck Paper Level Sensor 2 | Left Deck Unit | | |
| PS68 | Cassette 3 Upper Limit Sensor | Cassette 3 Pickup Unit | | |
| PS69 | Cassette 3 Paper Level Sensor 1 | Cassette 3 Pickup Unit | | |
| PS70 | Cassette 3 Paper Level Sensor 2 | Cassette 3 Pickup Unit | | |
| PS71 | Cassette 4 Upper Limit Sensor | Cassette 4 Pickup Unit | | |
| PS72 | Cassette 4 Paper Level Sensor 1 | Cassette 4 Pickup Unit | | |
| PS73 | Cassette 4 Paper Level Sensor 2 | Cassette 4 Pickup Unit | | |
| PS94 | Primary Charging Assembly Shutter Open/Close Sensor | Primary Charging Assembly | | |
| PS95 | Pre-transfer Charging Assembly Shutter Open/Close Sensor | Pre-transfer Charging Assembly | | |
| THU1 | Environment Sensor | Main Body | | |

T-4-26

# List of Switch

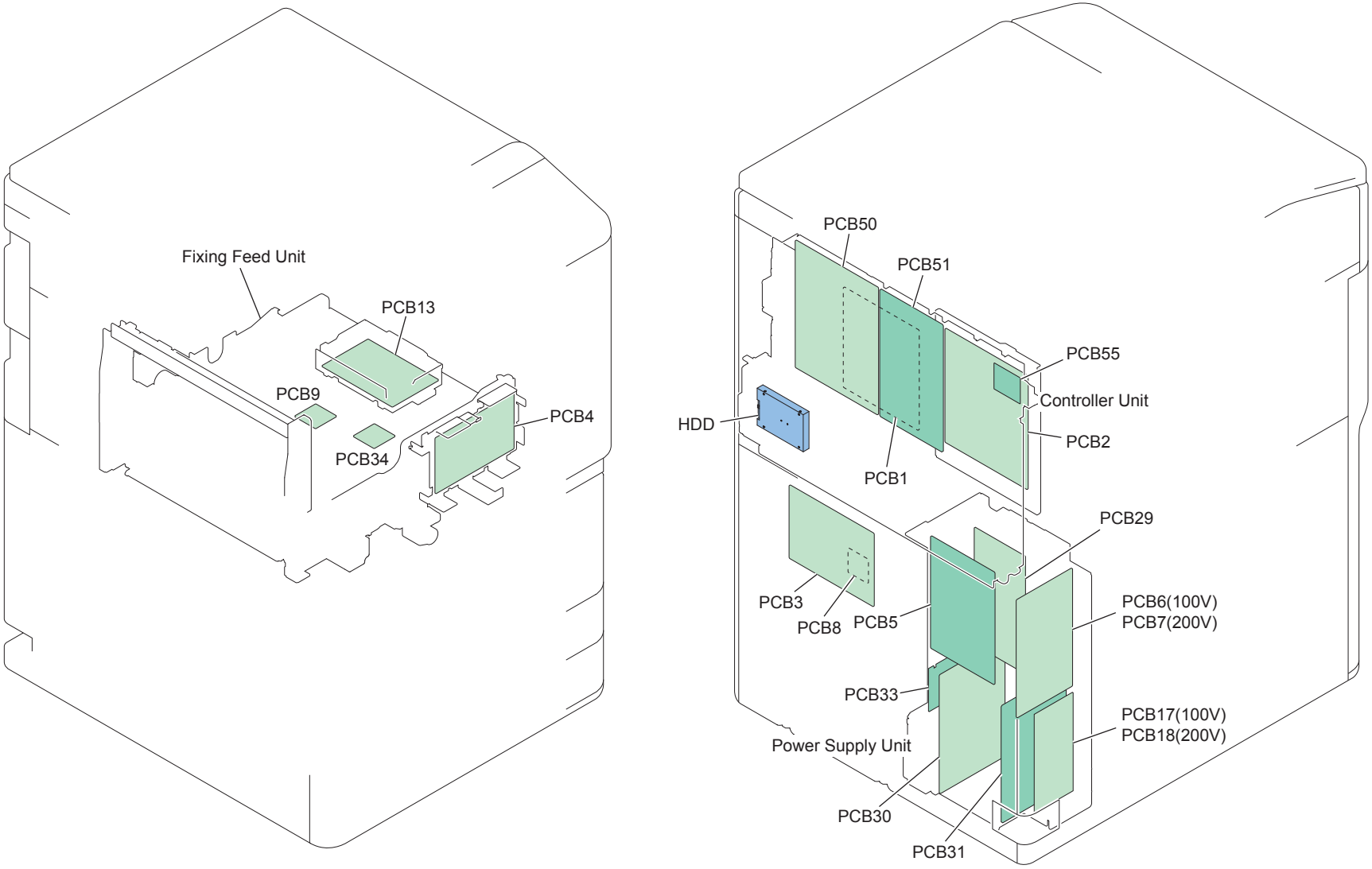



F-4-27

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| SW1 | Power Switch | Product configuration | | |
| SW2 | Front Door Open Detection Switch | Product configuration | | |
| SW3 | Environment Switch | Product configuration | | |
| SW4 | Cassette Heater Switch | Product configuration | | |
| SW5 | Waste Toner Lock Detection Switch | Waste Toner Unit | | |
| SW6 | Multi Door Switch | Product configuration | | |
| SW7 | Cassette 3 Paper Width Detection Switch | Cassette 3 Pickup Unit | | |
| SW8 | Cassette 4 Paper Width Detection Switch | Cassette 4 Pickup Unit | | |
| SW9 | Cassette 3 Paper Length Detection Switch | Cassette 3 Pickup Unit | | |
| SW10 | Cassette 4 Paper Length Detection Switch | Cassette 4 Pickup Unit | | |

T-4-27

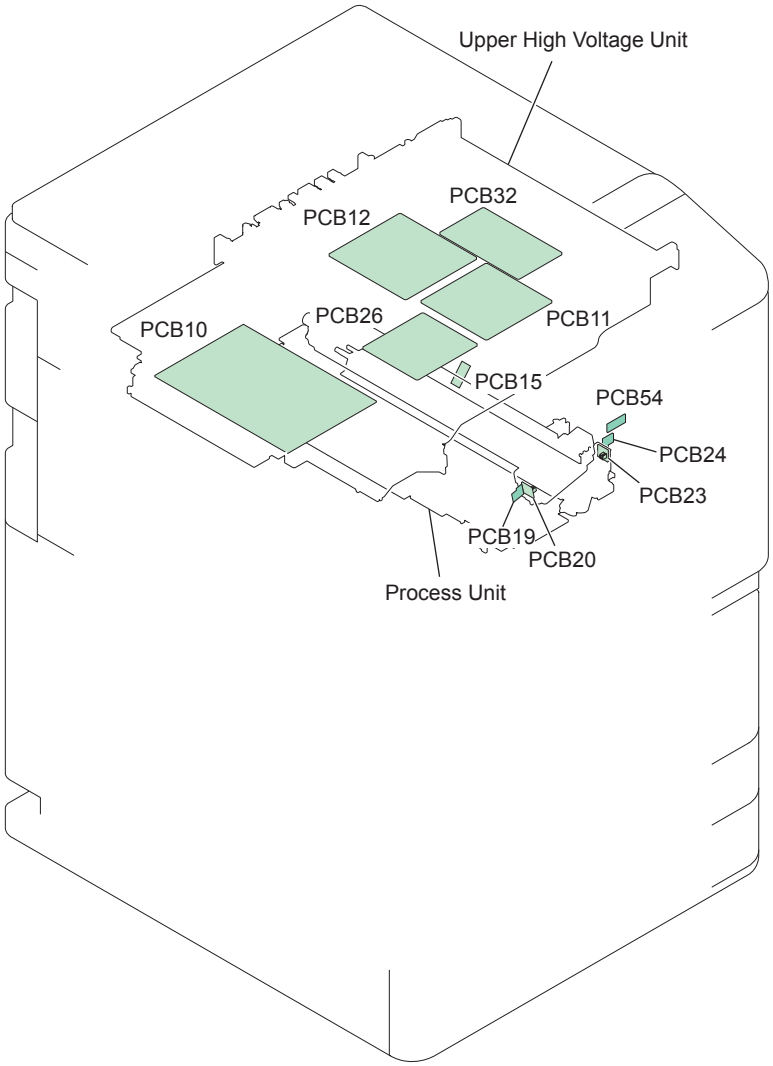
# List of PCB

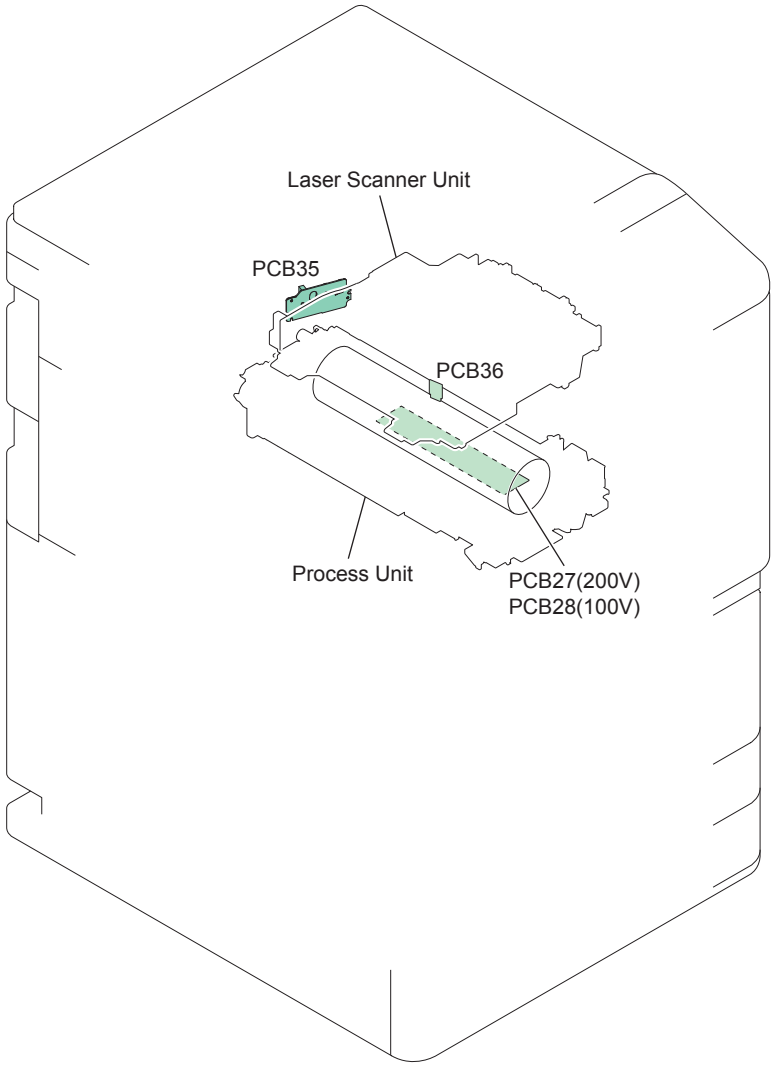



F-4-28

| No | Name | Main Unit | Service Parts No. | Adjustment during parts replacement | Reference |
|---|---|---|---|---|---|
| PCB1 | DC Controller PCB | Product configuration | FM0-4159 | | "DC Controller PCB"(page 5-12). |
| PCB2 | Main Driver PCB | Product configuration | FM4-1083 | | |
| PCB3 | Feed Driver PCB | Product configuration | FM4-1084 | | |
| PCB4 | Duplex Driver PCB | Product configuration | FM4-1085 | | |
| PCB5 | Relay PCB | Product configuration | FM0-2963 | | |
| PCB6 | AC Driver PCB(100V) | Product configuration | FM0-2961 | | |
| PCB7 | AC Driver PCB(200V) | Product configuration | FM0-2962 | | |
| PCB8 | DC-DC Converter PCB | Product configuration | FM4-1089 | | |
| PCB9 | DC-DC Converter PCB | Product configuration | FM4-1089 | | |
| PCB13 | Transfer High Voltage PCB | Product configuration | FM4-1095 | | |
| PCB17 | Noise Filter(100V) | Product configuration | FM0-2958 | | |
| PCB18 | Noise Filter(200V) | Product configuration | FM0-2959 | | |
| PCB29 | DC Power Supply(12V) | Product configuration | FM0-4161 | | |
| PCB30 | DC Power Supply(24V) | Product configuration | FM0-4153 | | |
| PCB31 | DC Power Supply(24V) | Product configuration | FM0-4152 | | |
| PCB33 | All-night Power Supply PCB | Product configuration | FK3-1998 | | |
| PCB34 | Transfer High Voltage Registance PCB | Product configuration | FM2-7196 | | |
| PCB50 | Main Controller PCB 1 | Product configuration | iR-ADV8285:FM4-2518<br>iR-ADV8295:FM4-2519<br>iR-ADV8205:FM4-2520 | | "Main Controller PCB 1"(page 5-4). |
| PCB51 | Main Controller PCB 2 | Product configuration | FM4-2497 | | "Main Controller PCB 2"(page 5-5). |
| PCB55 | ARCNET PCB | Product configuration | FM4-8569 | | ""(page 4-232). |

T-4-28


Upper High Voltage Unit
PCB32
PCB12
PCB10
PCB26
PCB11
PCB15
PCB54
PCB24
PCB23
PCB19
PCB20
Process Unit

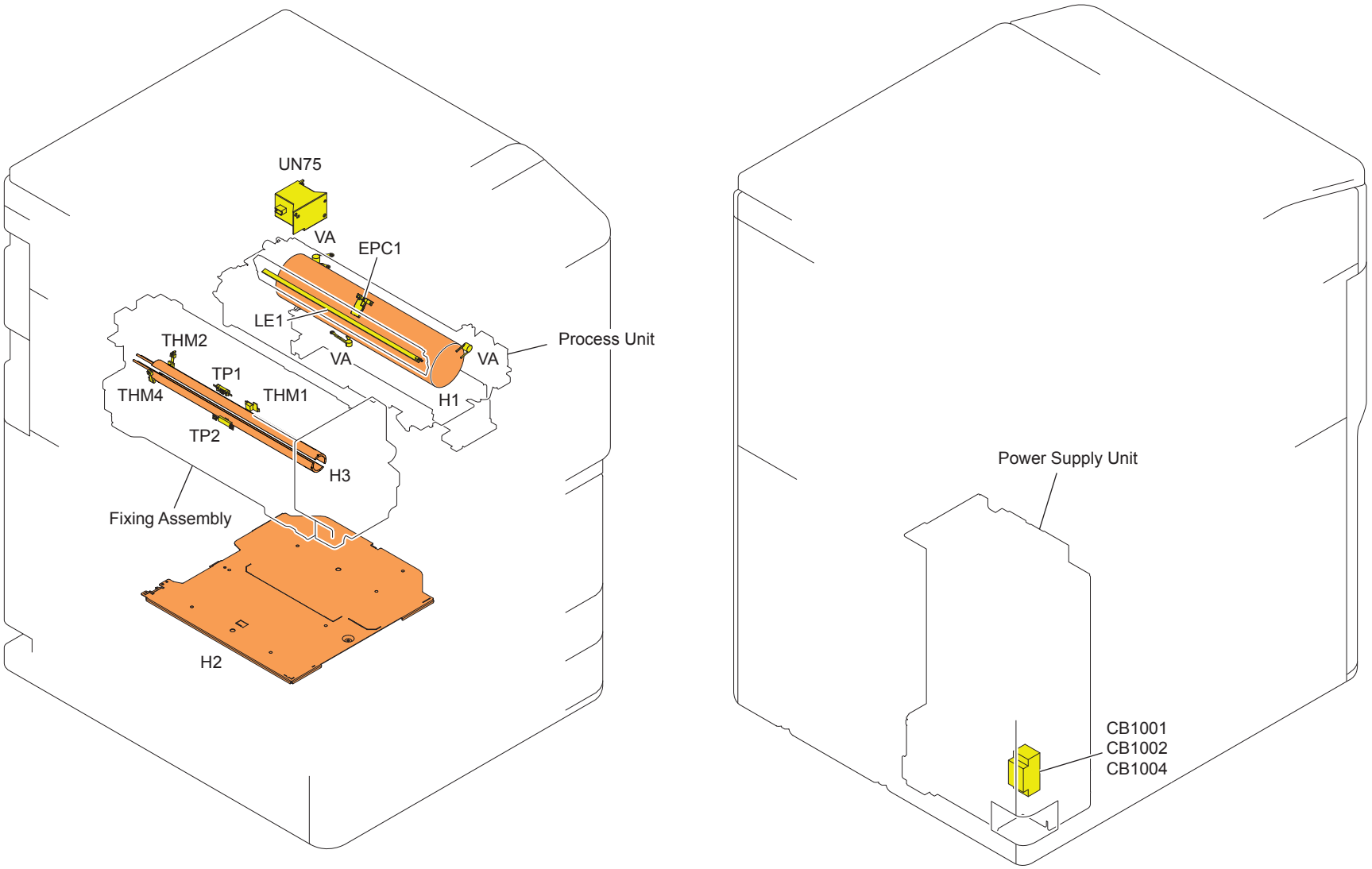

Laser Scanner Unit
PCB35
PCB36
Process Unit
PCB27(200V)
PCB28(100V)

F-4-29

| No | Name | Main Unit | Service Parts No. | Adjustment during parts replacement | Refernce |
|---|---|---|---|---|---|
| PCB10 | Fixing power Supply PCB | Product configuration | FM4-1099 | | |
| PCB11 | Primary Charging High Voltage PCB | Product configuration | FM4-1093 | | |
| PCB12 | Developing High Voltage PCB | Product configuration | FM4-1094 | | |
| PCB15 | Potential Sensor PCB | Product configuration | FM4-1096 | | "Potential Sensor / Potential Control PCB"(page 5-11). |
| PCB19 | Primary Charging Contact A PCB | Product configuration | FM4-5148 | | |
| PCB20 | Primary Charging Contact B PCB | Product configuration | FM4-1102 | | |
| PCB23 | Pre-transfer Charging Contact A PCB | Product configuration | FM4-5148 | | |
| PCB24 | Pre-transfer Charging Contact A PCB | Product configuration | FM4-1102 | | |
| PCB26 | Pre-transfer Charging PCB | Product configuration | FM4-1106 | | |
| PCB27 | Drum Heater Driver PCB(200V) | Product configuration | FM4-1107 | | |
| PCB28 | Drum Heater Driver PCB(100V) | Product configuration | FM4-1108 | | |
| PCB32 | Potential Control PCB | Product configuration | FM4-1096 | | "Potential Sensor / Potential Control PCB"(page 5-11). |
| PCB35 | Laser Driver PCB | Product configuration | Laser Scanner Unit: FM3-7531 | | |
| PCB36 | BD PCB | Product configuration | Laser Scanner Unit: FM3-7531 | | |
| PCB54 | Drum Rom PCB | Product configuration | FM2-7734 | | |

T-4-29

# Heater,others

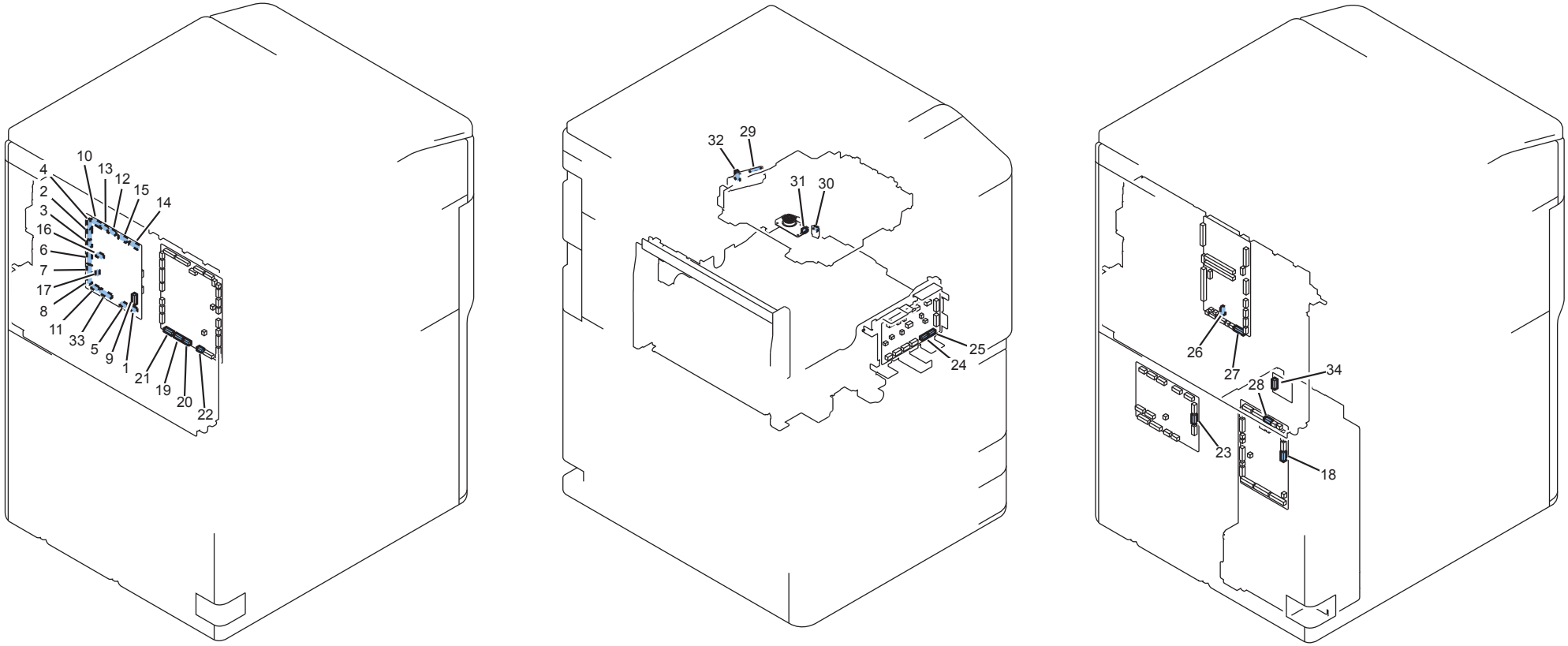



F-4-30

| No | Name | Main Unit | Adjustment during parts replacement | Reference |
|---|---|---|---|---|
| H1 | Drum Heater | Process Unit | | |
| LE1 | Pre-exposure LED | Process Unit | | |
| H2 | Multi Cassette Heater | Product configuration | | |
| H3 | Fixing Heater | Fixing Assembly | | |
| TP1 | Fixing Thermal Switch 1 | Fixing Assembly | | |
| TP2 | Fixing Thermal Switch 2 | Fixing Assembly | | |
| THM1 | Fixing Main Thermistor | Fixing Assembly | | |
| THM2 | Fixing Sub Thermistor 1 | Fixing Assembly | | |
| THM4 | Fixing Sub Thermistor 2 | Fixing Assembly | | |
| EPC1 | Potential Sensor | Process Unit | | |
| CB1001 | Leakage Breaker | Product configuration | | |
| CB1002 | Leakage Breaker | Product configuration | | |
| CB1004 | Leakage Breaker | Product configuration | | |

T-4-30

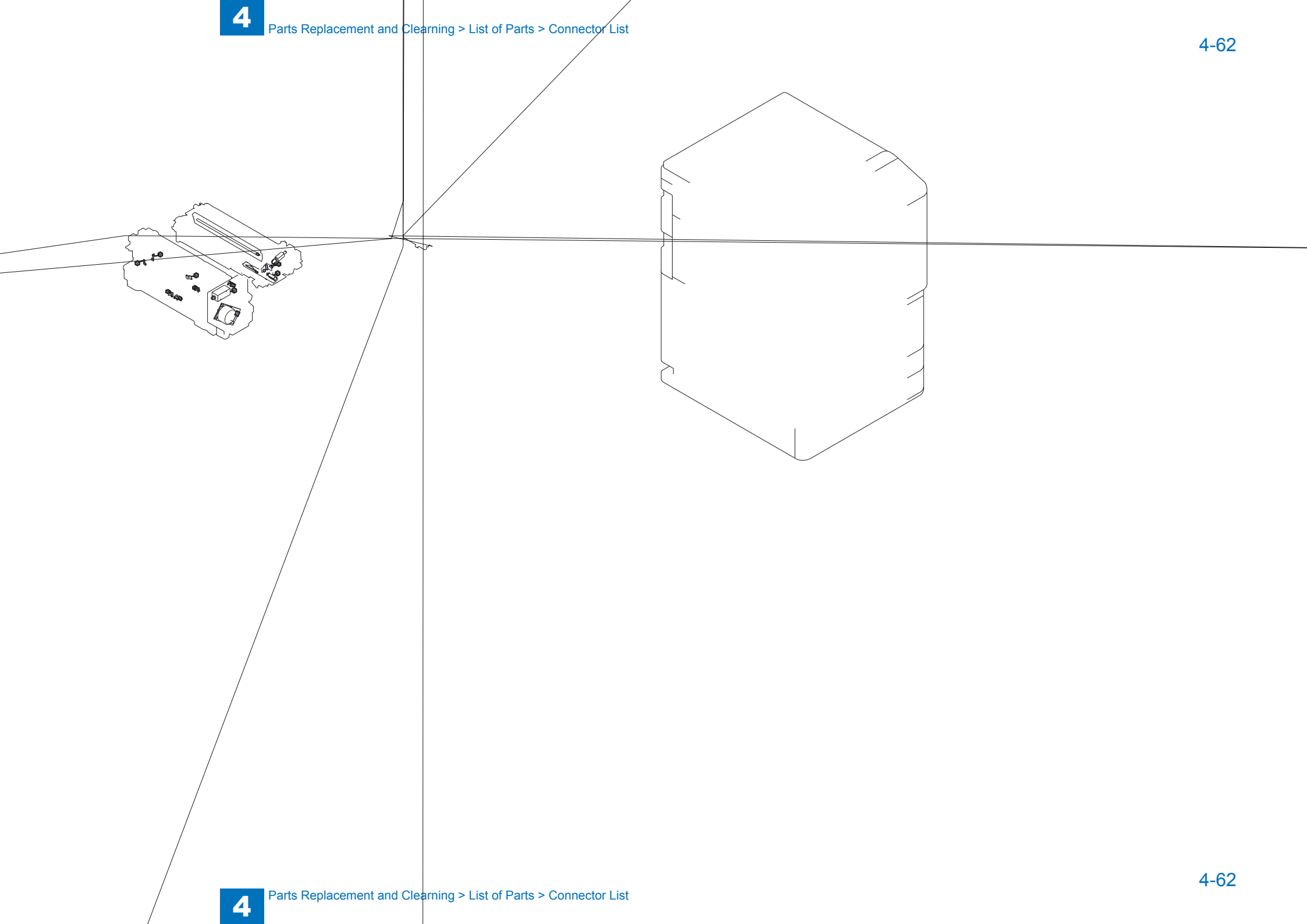
# Connector List




F-4-31

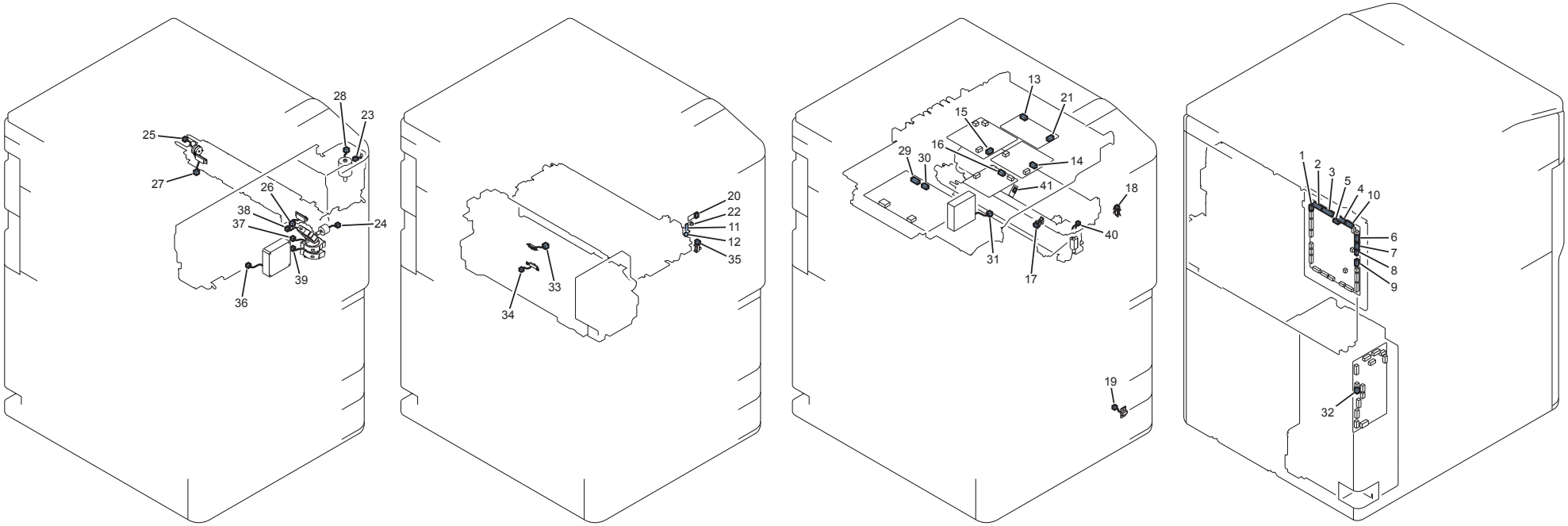
| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J401 | PCB1 | DC Controller PCB | | | | | | | 18 | J518 | PCB5 | Relay PCB | |
| 2 | J411 | PCB1 | DC Controller PCB | | | | | | | 19 | J126 | PCB2 | Main Driver PCB | |
| 3 | J412 | PCB1 | DC Controller PCB | | | | | | | 20 | J125 | PCB2 | Main Driver PCB | |
| 4 | J413 | PCB1 | DC Controller PCB | | | | | | | 21 | J124 | PCB2 | Main Driver PCB | |
| 5 | J414 | PCB1 | DC Controller PCB | | | | | | | 22 | J128 | PCB2 | Main Driver PCB | |
| 6 | J421 | PCB1 | DC Controller PCB | J3017 | | | | | | 23 | J204 | PCB3 | Feed Driver PCB | |
| 7 | J431 | PCB1 | DC Controller PCB | J3002 | | | | | | 24 | J300 | PCB4 | Duplex Driver PCB | |
| 8 | J432 | PCB1 | DC Controller PCB | J3002 | | | | | | 25 | J301 | PCB4 | Duplex Driver PCB | |
| 9 | J441 | PCB1 | DC Controller PCB | | | | | | | 26 | J21 | PCB51 | Main Controller PCB 2 | |
| 10 | J442 | PCB1 | DC Controller PCB | | | | | | | 27 | J22 | PCB51 | Main Controller PCB 2 | |
| 11 | J451 | PCB1 | DC Controller PCB | | | | | | | 28 | J514 | PCB5 | Relay PCB | |
| 12 | J461 | PCB1 | DC Controller PCB | J3123 | J9040 | | | | | - | - | - | DECK LATTICE | |
| 12 | J461 | PCB1 | DC Controller PCB | J3130 | J9040 | | | | | - | - | - | DECK LATTICE | |
| 13 | J462 | PCB1 | DC Controller PCB | J3241 | J9043 | | | | | - | - | - | FINISHER LATTICE | |
| 14 | J471 | PCB1 | DC Controller PCB | | | | | | | 29 | J5100 | PCB35 | Laser Driver PCB | |
| 15 | J472 | PCB1 | DC Controller PCB | J3018 | J3011 | | | | | 30 | J403 | PCB36 | BD PCB | |
| 15 | J472 | PCB1 | DC Controller PCB | J3018 | J3011 | | | | | 31 | J2159 | M44 | Polygon Motor | |
| 15 | J472 | PCB1 | DC Controller PCB | | | | | | | 32 | J5101 | PCB35 | Laser Driver PCB | |
| 16 | J491 | PCB1 | DC Controller PCB | J2087 | | | | | | - | - | - | - | |
| 17 | J493 | PCB1 | DC Controller PCB | J2102 | | | | | | - | - | - | - | |
| 33 | J463 | PCB1 | DC Controller PCB | | | | | | | 34 | J4500 | PCB55 | ARCNET PCB | |

T-4-31



| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J101 | PCB2 | Main Driver PCB | | | | | | | 13 | J515 | PCB5 | Relay PCB | |
| 2 | J102 | PCB2 | Main Driver PCB | | | | | | | 14 | J2009 | M13 | Delivery Motor | |
| 3 | J103 | PCB2 | Main Driver PCB | J3174 | | | | | | 15 | J615 | PCB6,7 | AC Driver PCB | |
| 3 | J103 | PCB2 | Main Driver PCB | J3251 | | | | | | 16 | J2136 | PS36 | Outer Delivery Sensor | |
| 3 | J103 | PCB2 | Main Driver PCB | | | | | | | 17 | J2140 | PS96 | Fixed Feed Lever Sensor | |
| 3 | J103 | PCB2 | Main Driver PCB | | | | | | | 18 | J3050 | SW5 | Waste Toner Lock Detection Switch | |
| 4 | J104 | PCB2 | Main Driver PCB | J3200 | J3207 | | | | | 19 | J2161 | PS45 | Fixing Cleaning Web Level Sensor | |
| 4 | J104 | PCB2 | Main Driver PCB | J3200 | | | | | | 20 | J3204 | THM4 | Fixing Sub Thermistor 2 | |
| 4 | J104 | PCB2 | Main Driver PCB | J3200 | | | | | | 21 | J3206 | THM2 | Fixing Sub Thermistor 1 | |
| 4 | J104 | PCB2 | Main Driver PCB | J3200 | | | | | | 22 | J3271 | THM1 | Fixing Main Thermistor | |
| 5 | J105 | PCB2 | Main Driver PCB | J3200 | J3208 | J3209 | | | | 23 | J1 | M3 | Fixing Motor | |
| 5 | J105 | PCB2 | Main Driver PCB | J3200 | J3208 | J3209 | | | | 24 | J2162 | SL9 | Fixing Cleaning Web Drive Solenoid | |
| 5 | J105 | PCB2 | Main Driver PCB | J3200 | J3210 | | | | | 25 | J2164 | PS51 | Fixing Inlet Sensor | |
| 5 | J105 | PCB2 | Main Driver PCB | J3200 | J3211 | | | | | 26 | J2165 | PS52 | Fixing Outlet Sensor | |
| 5 | J105 | PCB2 | Main Driver PCB | J3200 | J3211 | | | | | 27 | J2166 | PS4 | Fixing Toenail Jam Sensor | |
| 6 | J106 | PCB2 | Main Driver PCB | J3235 | J3121 | | | | | 28 | J2001 | SL2 | Multi-purpose Pickup Solenoid | |
| 6 | J106 | PCB2 | Main Driver PCB | J3235 | J3121 | | | | | 29 | J2002 | PS23 | Multi-purpose Tray Paper Sensor | |
| 6 | J106 | PCB2 | Main Driver PCB | J3235 | J3121 | J3122 | | | | 30 | J2003 | UN13 | Multi-purpose Tray Paper Width Sensor | |
| 6 | J106 | PCB2 | Main Driver PCB | J3235 | J3121 | J3101 | | | | 31 | J2005 | PS24 | Vertical Path Sensor1 | |
| 6 | J106 | PCB2 | Main Driver PCB | J3235 | J3121 | | | | | 32 | J2053 | PS28 | Multi-purpose Tray Paper Last paper Sensor | |
| 7 | J107 | PCB2 | Main Driver PCB | | | | | | | 33 | J2137 | PS61 | Drum Home Position Sensor | |
| 7 | J107 | PCB2 | Main Driver PCB | J3177 | J3060 | J3255 | | | | 34 | J2143 | PS90 | Patch Sensor | |
| 7 | J107 | PCB2 | Main Driver PCB | J3177 | J3060 | | | | | 35 | J3049 | SL10 | Patch Sensor Shutter Solenoid | |
| 7 | J107 | PCB2 | Main Driver PCB | J3177 | J3060 | | | | | 36 | J2141 | LED03 | LE1 | |
| 7 | J107 | PCB2 | Main Driver PCB | J3177 | J3060 | | | | | 37 | J151 | PCB19 | Pre-tranfer Charging Contact A PCB | |
| 8 | J108 | PCB2 | Main Driver PCB | | | | | | | 38 | J522 | PCB5 | Relay PCB | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 39 | J2004 | FM33 | Pre-transfer Charging Exhaust Fan | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 40 | J2006 | CL1 | Developing Clutch | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 41 | J2007 | FM16 | Laser Scanner Cooling Fan | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 42 | J2008 | FM17 | Primary Charging Exhaust Fan | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 43 | J2138 | M1 | Drum Motor | |
| 9 | J109 | PCB2 | Main Driver PCB | | | | | | | 44 | J2139 | M2 | Developing Motor | |
| 10 | J110 | PCB2 | Main Driver PCB | J3272 | J3167 | | | | | - | - | SW2 | Front Door Open Detection Switch | |
| 10 | J110 | PCB2 | Main Driver PCB | J3272 | J3167 | | | | | 45 | J3253 | SW6 | Multi Door Switch | |
| 11 | J152 | PCB19 | Pre-tranfer Charging Contact A PCB | | | | | | | - | - | PCB20 | Pre-tranfer Charging Contact B PCB | |
| 12 | J153 | PCB20 | Pre-tranfer Charging Contact B PCB | | | | | | | 46 | J3107 | M6 | Primary Charging Wire Cleaning Motor | |

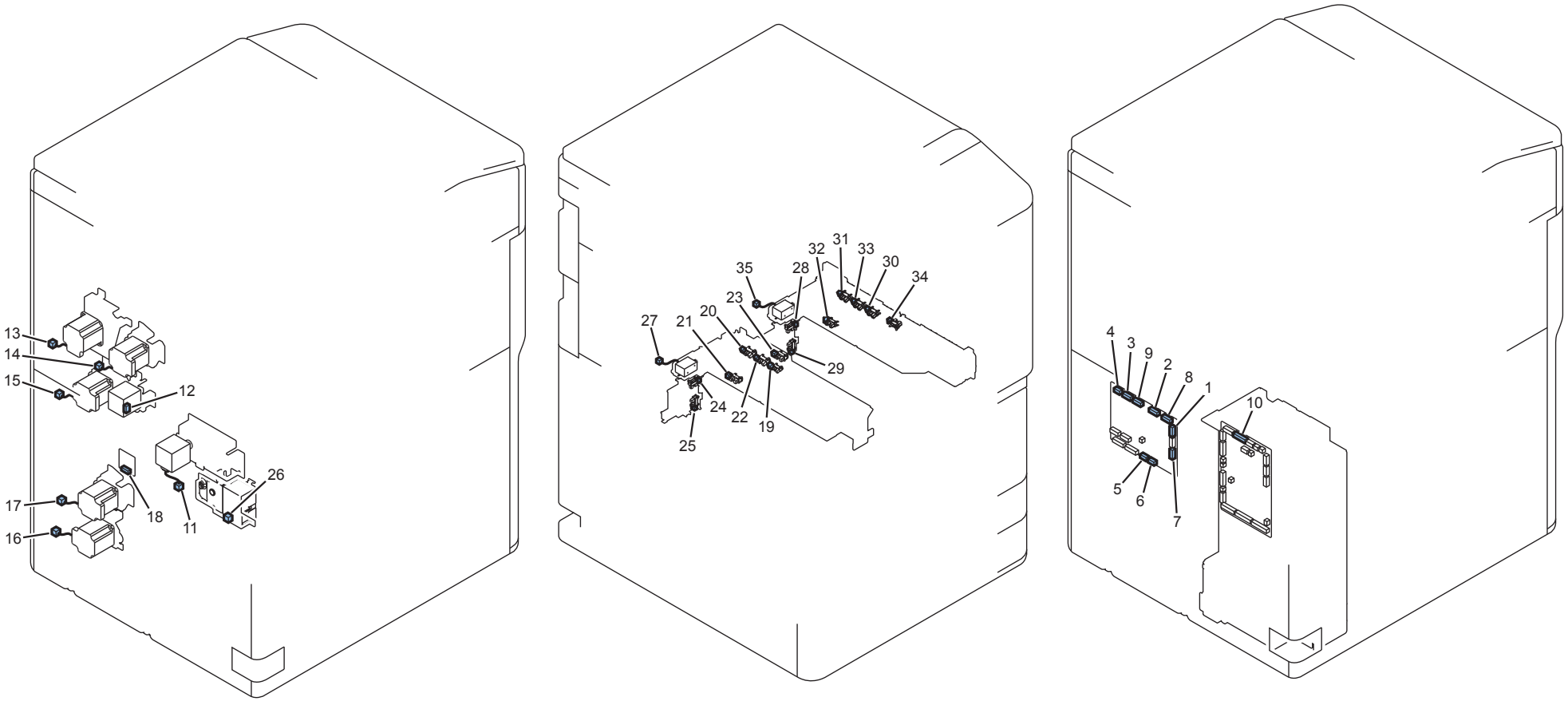
T-4-32


25
28
23
27
26
38
37
24
39
36
20
22
11
12
35
33
34
13
21
15
29
30
16
14
41
18
40
31
17
19
1
2
3
5
4
10
6
7
8
9
32

F-4-33

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J111 | PCB2 | Main Driver PCB | J3097 | | | | | | 14 | J3501 | PCB11 | Primary Charging High Voltage PCB | |
| 2 | J112 | PCB2 | Main Driver PCB | J3098 | | | | | | 15 | J3511 | PCB12 | Develop High Voltage PCB | |
| 2 | J112 | PCB2 | Main Driver PCB | J3098 | | | | | | 16 | J3544 | PCB26 | Pre-transfer Charging PCB | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | | | | | 17 | J2029 | PS94 | Primary Charging Shutter Sensor | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | J3252 | | | | 18 | J2132 | PS3 | Multi-purpose Cover Open/Close Sensor | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | J3047 | | | | 19 | J3048 | THU1 | Environment Sensor | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3055 | | | | | 20 | J3510 | PCB54 | Drum ROM PCB | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | J2133 | | | | - | - | TS1 | Developing Toner Sensor | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | J3168 | | | | 21 | J1 | PCB32 | Voltage Control PCB | |
| 3 | J114 | PCB2 | Main Driver PCB | J3088 | J3089 | | | | | 22 | J151 | PCB23 | Pre-tranfer Charging Contact A PCB | |
| 4 | J115 | PCB2 | Main Driver PCB | J3091 | J3090 | J3106 | | | | 23 | J2034 | PS54 | Toner Exchange Cover Sensor | |
| 4 | J115 | PCB2 | Main Driver PCB | J3091 | J3090 | J3124 | | | | 24 | J2035 | M28 | Toner Feed Motor | |
| 4 | J115 | PCB2 | Main Driver PCB | J3091 | J3090 | J3124 | | | | 25 | J2036 | CL5 | Magnet Roller Clutch | |
| 4 | J115 | PCB2 | Main Driver PCB | J3091 | J3090 | J3124 | | | | 26 | J2038 | TS2 | Toner Excess Supply Sensor | |
| 4 | J115 | PCB2 | Main Driver PCB | J3091 | J3090 | J3124 | | | | 27 | J2039 | TS3 | Buffer Toner Sensor | |
| 5 | J117 | PCB2 | Main Driver PCB | J3063 | J3080 | | | | | 28 | J2037 | M10 | Toner Supply Motor | |
| 6 | J118 | PCB2 | Main Driver PCB | J3016 | | | | | | 29 | J502 | PCB10 | Fixing Power Supply PCB | |
| 7 | J119 | PCB2 | Main Driver PCB | J3112 | | | | | | 30 | J501 | PCB10 | Fixing Power Supply PCB | |
| 7 | J119 | PCB2 | Main Driver PCB | J3112 | | | | | | 31 | J9130 | FM7 | Fixing Power Supply Cooling Fan | |
| 8 | J127 | PCB2 | Main Driver PCB | J3176 | | | | | | 32 | J614 | PCB6,7 | AC Driver PCB | |
| 9 | J129 | PCB2 | Main Driver PCB | J3231 | J3200 | | | | | 33 | J3202 | TP1 | Thermal Switch1 | |
| 9 | J129 | PCB2 | Main Driver PCB | J3231 | J3200 | | | | | 34 | J3203 | TP2 | Thermal Switch2 | |
| 10 | J130 | PCB2 | Main Driver PCB | J3066 | J3067 | J3215 | | | | 35 | J2114 | PS95 | Pre-transfer Charging Shutter Sensor | |
| 10 | J130 | PCB2 | Main Driver PCB | J3066 | J3067 | J3215 | | | | 36 | J2131 | FM2 | Primary Charging Suction Fan | |
| 10 | J130 | PCB2 | Main Driver PCB | J3066 | J3067 | J3215 | | | | 37 | J2170 | FM30 | Developer Lower Cooling Fan | |
| 10 | J130 | PCB2 | Main Driver PCB | J3066 | J3067 | J3215 | | | | 38 | J2171 | FM31 | Developer Upper Cooling Fan | |
| 10 | J130 | PCB2 | Main Driver PCB | J3066 | J3067 | J3215 | | | | 39 | J2177 | FM32 | Pre-transfer Charging Assembly Air Supply Fan | |
| 11 | J152 | PCB23 | Contact A PCB | | | | | | | - | - | PCB24 | Pre-tranfer Charging Contact B PCB | |
| 12 | J153 | PCB24 | Contact B PCB | | | | | | | 40 | J3108 | M7 | Pre-transfer Charging Wire Cleaning Motor | |
| 13 | J3 | PCB32 | Voltage Control PCB | J3169 | J3170 | | | | | 41 | J3172 | PCB15 | Voltage Sensor PCB | |

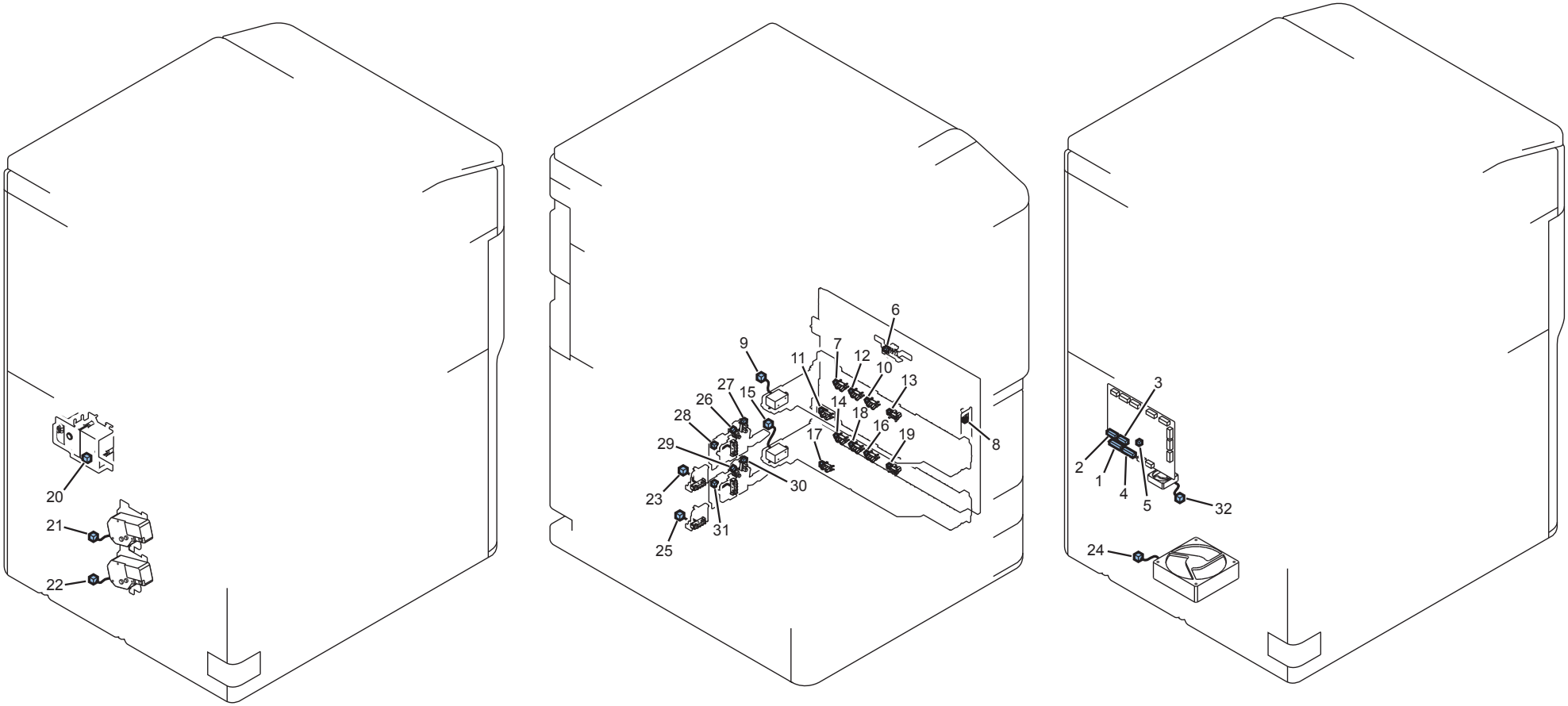
T-4-33


13
14
15
12
17
16
18
11
26
35
28
32
31
33
30
34
23
27
21
20
29
24
22
19
25
4
3
9
2
8
1
10
5
6
7

F-4-34

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J201 | PCB3 | Feed Driver PCB | | | | | | | 10 | J516 | PCB5 | Relay PCB | |
| 2 | J211 | PCB3 | Feed Driver PCB | | | | | | | 11 | J2050 | M24 | Left Deck Pickup Motor | |
| 2 | J211 | PCB3 | Feed Driver PCB | | | | | | | 12 | J2071 | M11 | Right Deck Pickup Motor | |
| 3 | J212 | PCB3 | Feed Driver PCB | | | | | | | 13 | J2146 | M33 | Multi-purposeTray Registration Front Motor | |
| 3 | J212 | PCB3 | Feed Driver PCB | | | | | | | 14 | J2147 | M26 | Vertical Path Upper Motor | |
| 4 | J213 | PCB3 | Feed Driver PCB | | | | | | | 15 | J2076 | M31 | Vertical Path Middle Motor | |
| 5 | J214 | PCB3 | Feed Driver PCB | | | | | | | 16 | J2097 | M12 | Cassette3.4 Pickup Motor | |
| 6 | J215 | PCB3 | Feed Driver PCB | | | | | | | 17 | J2077 | M27 | Vertical Path Lower Motor | |
| 7 | J218 | PCB3 | Feed Driver PCB | | | | | | | 18 | J100 | PCB8 | DC-DC Converter PCB | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 19 | J2042 | PS20 | Left Deck Pickup Sensor 1 | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 20 | J2043 | PS12 | Left Deck Paper Height Sensor | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 21 | J2044 | PS11 | Left Deck Paper Sensor | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 22 | J2045 | PS10 | Left Deck Paper Height Sensor | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 23 | J2046 | PS33 | Left Deck Pull Out Sensor | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3132 | | | | | | 24 | J2048 | PS49 | Left Deck  Paper Level Sensor 1 | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3132 | | | | | | 25 | J2049 | PS50 | Left Deck  Paper Level Sensor 2 | |
| 8 | J221 | PCB3 | Feed Driver PCB | | | | | | | 26 | J2051 | M5 | Left Deck Lifter Motor | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3634 | | | | | | 27 | J2052 | SL7 | Left Deck Pickup Solenoid | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3028 | | | | | | 28 | J2148 | PS47 | Right Deck  Paper Level Sensor 1 | |
| 8 | J221 | PCB3 | Feed Driver PCB | J3028 | | | | | | 29 | J2149 | PS48 | Right Deck  Paper Level Sensor 2 | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 30 | J2060 | PS19 | Right Deck Pickup Sensor 1 | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 31 | J2061 | PS8 | Right Deck Upper Limit Sensor | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 32 | J2062 | PS7 | Right Deck Paper Sensor | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 33 | J2063 | PS6 | Right Deck Paper Height Sensor | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 34 | J2064 | PS32 | Right Deck Pull Out Sensor | |
| 9 | J222 | PCB3 | Feed Driver PCB | J3633 | | | | | | 35 | J2070 | SL6 | Right Deck Pickup Solenoid | |

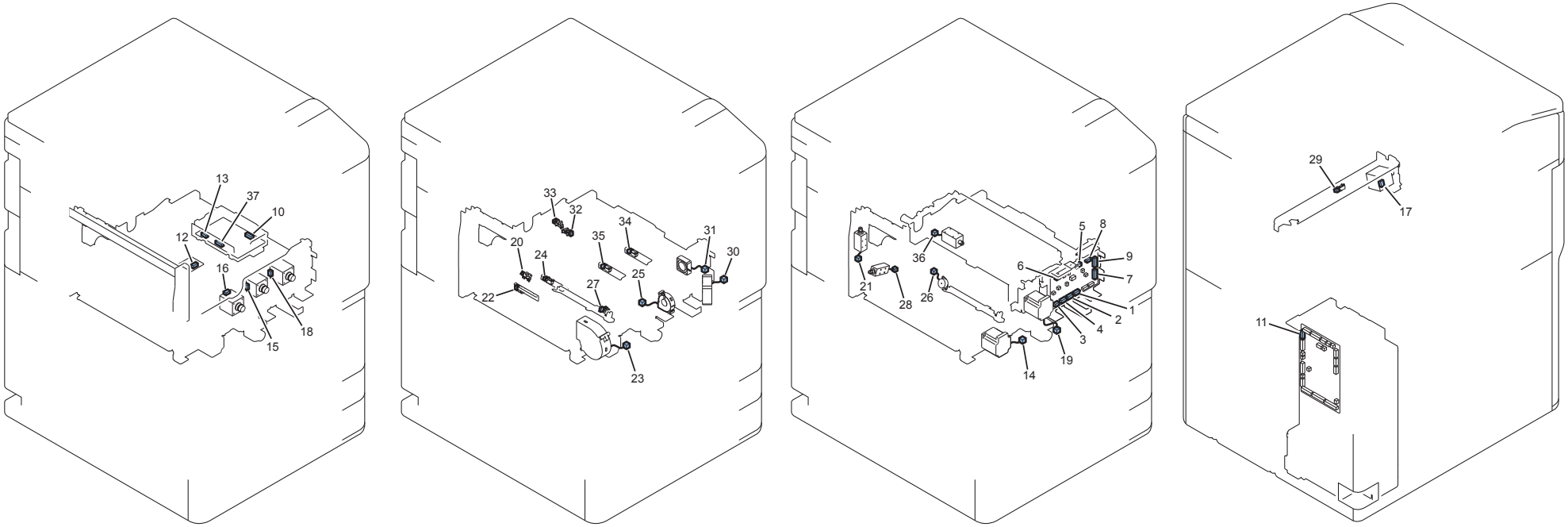
T-4-34


20
21
22
6
9
7
12
11
10
13
27
15
14
26
18
28
16
17
19
8
29
30
23
31
25
3
2
1
4
5
32
24

F-4-35

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J223 | PCB3 | Feed Driver PCB | J3128 | | | | | | | | 6 | J2054 | PS25 | Vertical Path Sensor2 | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 7 | J2055 | PS68 | Cassette 3 Upper Limit Sensor | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3128 | | | | | | | | 8 | J2066 | PS2 | Vertical Path Cover Open/Close Sensor | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 9 | J2073 | SL3 | Cassette 3 Pickup Solenoid | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 10 | J2078 | PS21 | Cassette 3 Pickup Sensor 1 | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 11 | J2079 | PS13 | Cassette 3 Paper Sensor | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 12 | J2080 | PS17 | Cassette 3 Paper Height Sensor | |
| 1 | J223 | PCB3 | Feed Driver PCB | J3635 | | | | | | | | 13 | J2081 | PS26 | Vertical Path Sensor3 | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 14 | J2056 | PS71 | Cassette 4 Upper Limit Sensor | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 15 | J2075 | SL4 | Cassette 4 Pickup Solenoid | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 16 | J2089 | PS22 | Cassette 4 Pickup Sensor 1 | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 17 | J2090 | PS14 | Cassette 4 Paper Sensor | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 18 | J2091 | PS18 | Cassette 4 Paper Height Sensor | |
| 2 | J224 | PCB3 | Feed Driver PCB | J3636 | | | | | | | | 19 | J2092 | PS27 | Vertical Path Sensor4 | |
| 3 | J225 | PCB3 | Feed Driver PCB | | | | | | | | | 20 | J2069 | M4 | Right Deck Lifter Motor | |
| 3 | J225 | PCB3 | Feed Driver PCB | | | | | | | | | 21 | J2072 | M20 | Cassette3 Lifter Motor | |
| 3 | J225 | PCB3 | Feed Driver PCB | | | | | | | | | 22 | J2074 | M21 | Cassette4 Lifter Motor | |
| 3 | J225 | PCB3 | Feed Driver PCB | J3031 | | | | | | | | 23 | J2085 | SW9 | Cassette 3 Paper Length Detection Switch | |
| 3 | J225 | PCB3 | Feed Driver PCB | J3008 | | | | | | | | 24 | J2088 | FM3 | Making Image Exhaust Fan | |
| 3 | J225 | PCB3 | Feed Driver PCB | J3031 | | | | | | | | 25 | J2096 | SW10 | Cassette 4 Paper Length Detection Switch | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3273 | | | | | | | | 26 | J2082 | PS69 | Cassette 3 Paper Level Sensor 1 | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3273 | | | | | | | | 27 | J2083 | PS70 | Cassette 3 Paper Level Sensor 2 | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3273 | | | | | | | | 28 | J2084 | SW7 | Cassette 3 Paper Width Detection Switch | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3033 | | | | | | | | 29 | J2093 | PS72 | Cassette 4 Paper Level Sensor 1 | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3033 | | | | | | | | 30 | J2094 | PS73 | Cassette 4 Paper Level Sensor 2 | |
| 4 | J226 | PCB3 | Feed Driver PCB | J3033 | | | | | | | | 31 | J2095 | SW8 | Cassette 4 Paper Width Detection Switch | |
| 5 | J227 | PCB3 | Feed Driver PCB | | | | | | | | | 32 | J2168 | FM40 | Feed Driver Cooling Fan | |

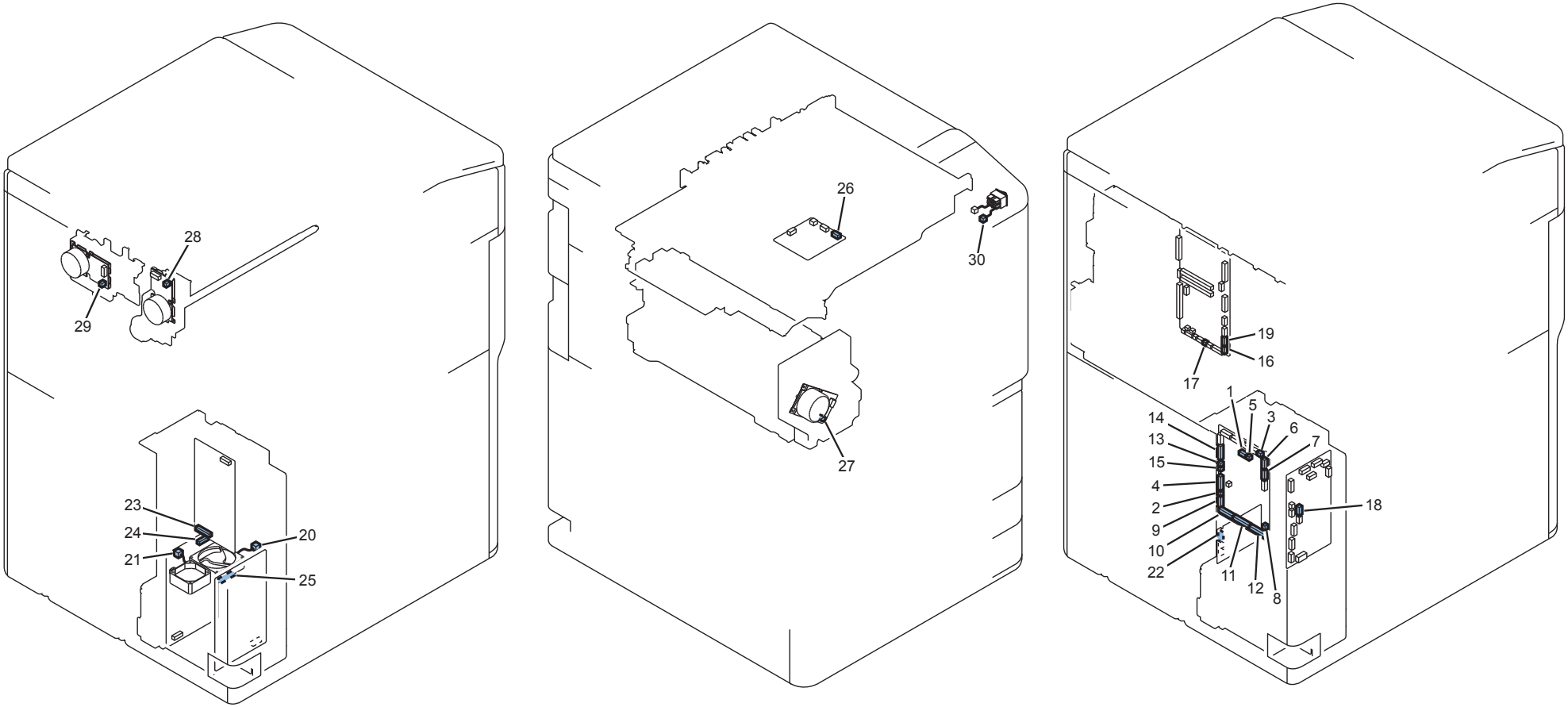
T-4-35


13
37
10
12
16
18
15
33
32
34
35
31
30
20
24
25
27
22
23
36
5
8
9
6
7
21
28
26
1
2
4
3
19
14
29
17
11

F-4-36

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J310 | PCB4 | Duplex Driver PCB | J3233 | J3002 | | | | | 11 | J517 | PCB5 | Relay PCB | |
| 2 | J311 | PCB4 | Duplex Driver PCB | | | | | | | 12 | J100 | PCB9 | DC-DC Converter PCB | |
| 2 | J311 | PCB4 | Duplex Driver PCB | | | | | | | 13 | J3061 | PCB13 | Transfer High Voltage PCB | |
| 3 | J330 | PCB4 | Duplex Driver PCB | | | | | | | 14 | J2167 | M14 | Reverse Motor | |
| 4 | J331 | PCB4 | Duplex Driver PCB | | | | | | | 15 | J2108 | M32 | Duplex Feed Merging Motor | |
| 4 | J331 | PCB4 | Duplex Driver PCB | | | | | | | 16 | J2111 | M19 | Duplex Feed Left Motor | |
| 5 | J332 | PCB4 | Duplex Driver PCB | J3042 | | | | | | 17 | J2098 | M34 | Registration Motor | |
| 5 | J332 | PCB4 | Duplex Driver PCB | | | | | | | 18 | J2109 | M18 | Duplex Feed Right Motor | |
| 6 | J333 | PCB4 | Duplex Driver PCB | | | | | | | 19 | J2107 | M43 | ETB Motor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | 3236 | J3243 | | | | | 20 | J2113 | PS35 | Inner Delivery Sensor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | | | | | | | 21 | J2115 | SL5 | Reverse Upper Flapper Solenoid | |
| 7 | J340 | PCB4 | Duplex Driver PCB | J3236 | | | | | | 22 | J2117 | PS65 | Reverse Vertical Path Sensor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | | | | | | | 23 | J2118 | FM5 | Paper Cooling Fan | |
| 7 | J340 | PCB4 | Duplex Driver PCB | | | | | | | 24 | J2120 | PS66 | Duplex Left Sensor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | J2121 | J3020 | J3021 | | | | 25 | J2121 | FM8 | Transfer Cleaner Cooling Fan | |
| 7 | J340 | PCB4 | Duplex Driver PCB | J3242 | | | | | | 26 | J2124 | M16 | Side Registration Motor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | J3242 | | | | | | 27 | J2125 | PS31 | Side Registration Sensor | |
| 7 | J340 | PCB4 | Duplex Driver PCB | | | | | | | 28 | J2176 | SL12 | Reverse Detachment Solenoid | |
| 8 | J342 | PCB4 | Duplex Driver PCB | J3263 | | | | | | 29 | J2116 | PS29 | Registration Sensor | |
| 8 | J342 | PCB4 | Duplex Driver PCB | | | | | | | 30 | J2144 | FM41 | Duplex Driver Cooling Fan | |
| 8 | J342 | PCB4 | Duplex Driver PCB | | | | | | | 31 | J2145 | FM42 | Registration Motor/Duplex Motor Cooling Fan | |
| 9 | J343 | PCB4 | Duplex Driver PCB | J3270 | | | | | | 32 | J2100 | PS55 | ETB Engage Sensor | |
| 9 | J343 | PCB4 | Duplex Driver PCB | J3270 | | | | | | 33 | J2101 | PS56 | ETB Disengage Sensor | |
| 9 | J343 | PCB4 | Duplex Driver PCB | J3265 | | | | | | 34 | J2104 | PS64 | Duplex Outlet Sensor | |
| 9 | J343 | PCB4 | Duplex Driver PCB | J3269 | | | | | | 35 | J2105 | PS67 | Duplex Merging Sensor | |
| 9 | J343 | PCB4 | Duplex Driver PCB | J3270 | | | | | | 36 | J2106 | SL11 | Left Deck Merging Solenoid | |
| 9 | J343 | PCB4 | Duplex Driver PCB | | | | | | | 37 | J3062 | PCB13 | Transfer High Voltage PCB | |
| 10 | J3063 | PCB13 | Transfer High Voltage PCB | J3306 | | | | | | - | - | PCB34 | Transfer High Voltage Resistance PCB | |

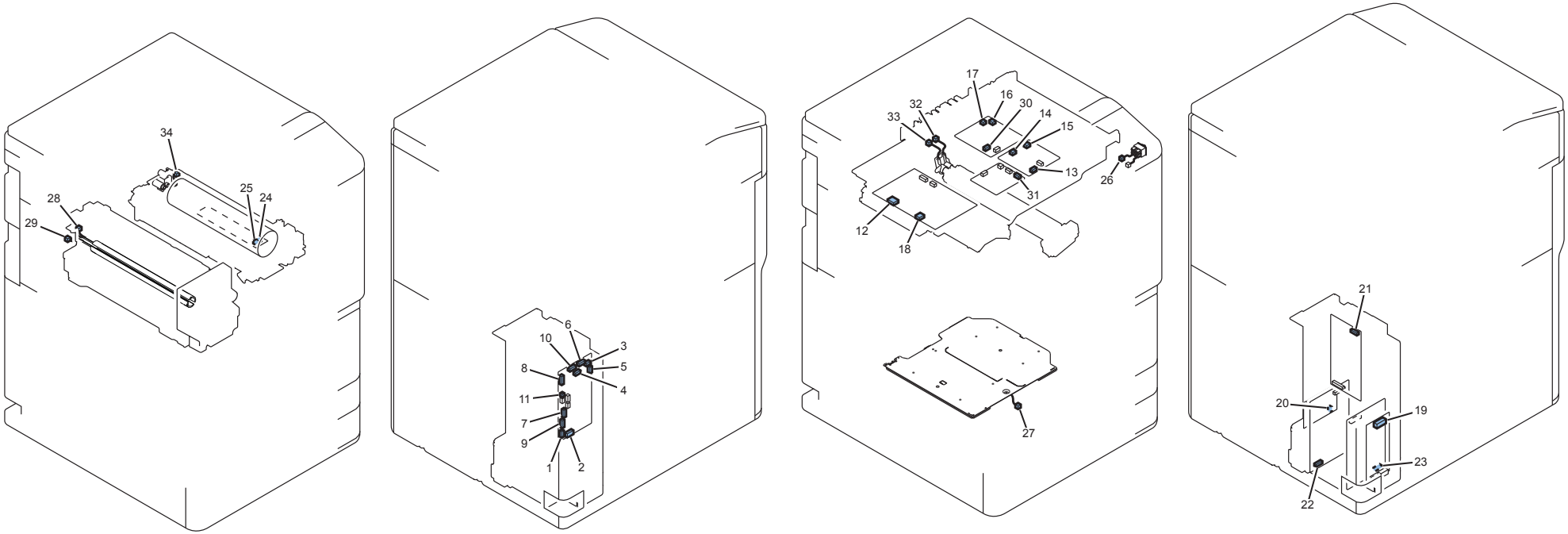
T-4-36


28
29
23
24
21
20
25
26
30
27
19
16
17
1
5
3
6
7
14
13
15
4
2
9
10
22
18
11
12
8

F-4-37

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J501 | PCB5 | Relay PCB | | | | | | | 16 | J5 | PCB51 | Main Controller PCB 2 | |
| 2 | J502 | PCB5 | Relay PCB | 3237 | J9040 | | | | | - | - | - | DECK LATTICE | |
| 3 | J503 | PCB5 | Relay PCB | 709 | | | | | | - | - | - | USB Device Port-A1 | |
| 4 | J505 | PCB5 | Relay PCB | 3118 | J9024 | | | | | - | - | - | READER LATTICE | |
| 4 | J505 | PCB5 | Relay PCB | 3238 | J9043 | | | | | - | - | - | FINISHER LATTICE | |
| 5 | J506 | PCB5 | Relay PCB | | | | | | | 17 | J23 | PCB51 | Main Controller PCB 2 | |
| 6 | J507 | PCB5 | Relay PCB | | | | | | | 18 | J611 | PCB6,7 | AC Driver PCB | |
| 7 | J508 | PCB5 | Relay PCB | | | | | | | 19 | J4 | PCB51 | Main Controller PCB 2 | |
| 8 | J509 | PCB5 | Relay PCB | 3224 | | | | | | 20 | J2134 | FM14 | Power Supply Cooling Fan 1 | |
| 8 | J509 | PCB5 | Relay PCB | | | | | | | 21 | J2154 | FM15 | Power Supply Cooling Fan 2 | |
| 9 | J510 | PCB5 | Relay PCB | | | | | | | 22 | J691 | PCB33 | All-night Power Supply PCB | |
| 10 | J511 | PCB5 | Relay PCB | | | | | | | 23 | J201 | PCB29 | DC Power Supply PCB | |
| 11 | J512 | PCB5 | Relay PCB | | | | | | | 24 | J202 | PCB30 | DC Power Supply PCB | |
| 12 | J513 | PCB5 | Relay PCB | | | | | | | 25 | J202 | PCB31 | DC Power Supply PCB | |
| 13 | J519 | PCB5 | Relay PCB | J3099 | | | | | | 26 | J3545 | PCB26 | Pre-transfer Charging PCB | |
| 14 | J520 | PCB5 | Relay PCB | J3218 | J3200 | J3212 | J3213 | | | 27 | J2 | M3 | Fixing Motor | |
| 14 | J520 | PCB5 | Relay PCB | J3102 | | | | | | 28 | J2151 | M1 | Drum Motor | |
| 14 | J520 | PCB5 | Relay PCB | J3102 | | | | | | 29 | J2152 | M2 | Developing Motor | |
| 15 | J523 | PCB5 | Relay PCB | | | | | | | 30 | J3637 | SW1 | Power ON Switch | |

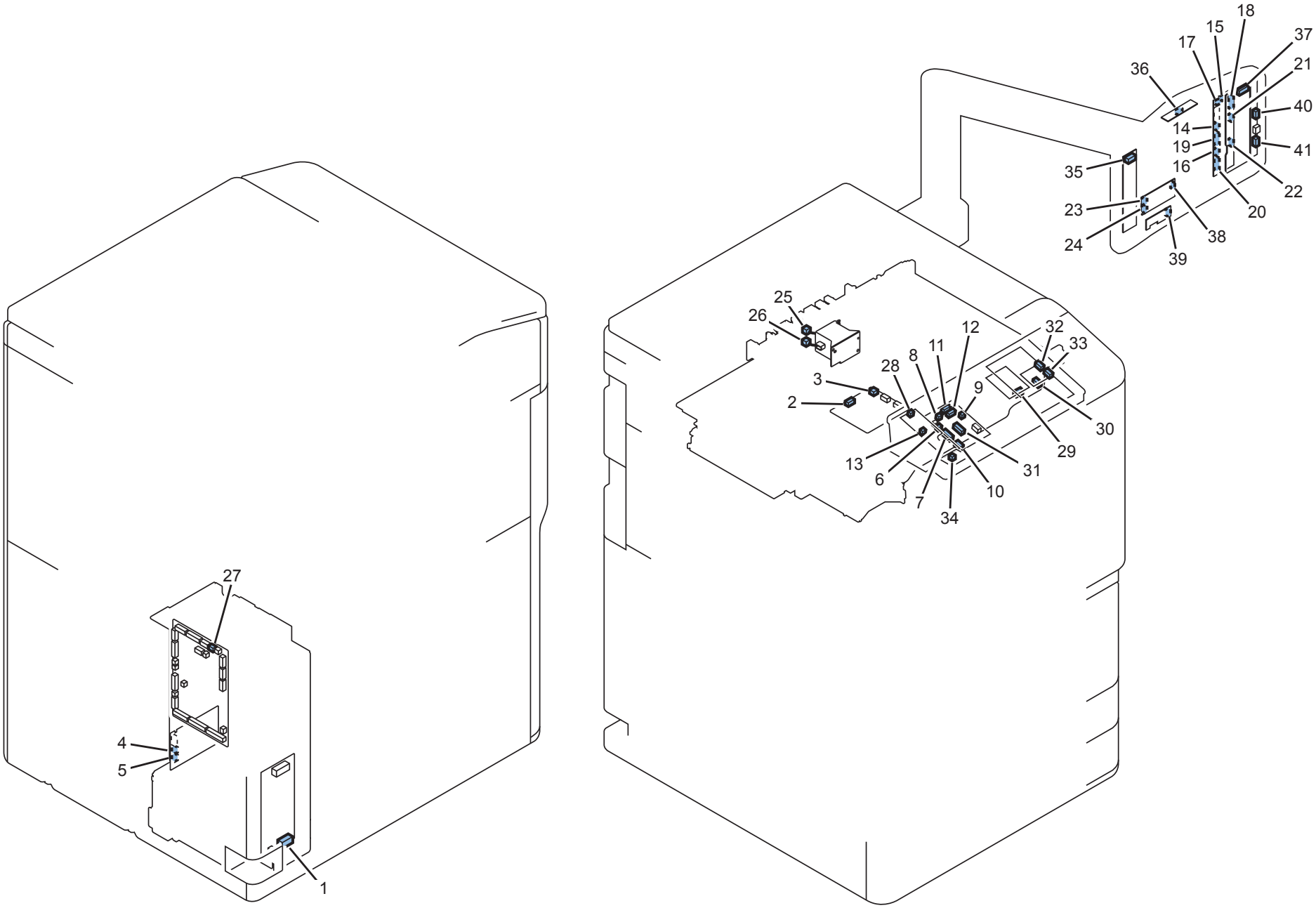
T-4-37


34
28
29
25
24
6
10
3
8
5
4
11
7
9
1
2
17
16
32
30
33
14
15
13
26
31
12
18
27
21
20
19
23
22

F-4-38

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J601 | PCB6,7 | AC Driver PCB | J3639 | | | | | | 18 | J500 | PCB10 | Fixing Power Supply PCB | |
| 2 | J602 | PCB6,7 | AC Driver PCB | | | | | | | 19 | J802 | PCB17,18 | Noise Filter | |
| 3 | J603 | PCB6,7 | AC Driver PCB | | | | | | | 20 | J681 | PCB33 | All-night Power Supply PCB | |
| 4 | J604 | PCB6,7 | AC Driver PCB | 9020 | | | | | | - | - | - | POD Deck Lite-A1 | |
| 4 | J604 | PCB6,7 | AC Driver PCB | 9020 | | | | | | - | - | - | Paper Deck Unit-C1 | |
| 5 | J605 | PCB6,7 | AC Driver PCB | | | | | | | 21 | J101 | PCB29 | DC Power Supply PCB | |
| 6 | J606 | PCB6,7 | AC Driver PCB | | | | | | | 22 | J102 | PCB30 | DC Power Supply PCB | |
| 6 | J606 | PCB6,7 | AC Driver PCB | | | | | | | 23 | J102 | PCB31 | DC Power Supply PCB | |
| 7 | J607 | PCB6,7 | AC Driver PCB | | | | | | | - | - | SW3 | Environment Switch | |
| 7 | J607 | PCB6,7 | AC Driver PCB | | | | | | | - | - | SW4 | Cassette Heater Switch | |
| 8 | J608 | PCB6,7 | AC Driver PCB | J3173 | J3119 | J9024 | | | | - | - | - | READER LATTICE | |
| 8 | J608 | PCB6,7 | AC Driver PCB | J3173 | J3115 | J3116 | J3060 | | | 24 | J2001 | PCB27,28 | Drum Heater Driver PCB | |
| 8 | J608 | PCB6,7 | AC Driver PCB | J3173 | J3115 | J3116 | J3060 | | | 25 | J2002 | PCB27,28 | Drum Heater Driver PCB | |
| 9 | J609 | PCB6,7 | AC Driver PCB | J3549 | | | | | | 26 | J3273 | SW1 | Power ON Switch | |
| 10 | J610 | PCB6,7 | AC Driver PCB | J9019 | | | | | | 27 | J220 | H2 | Multi Cassette Heater | |
| 11 | J613 | PCB6,7 | AC Driver PCB | J3174 | J3638 | J9043 | | | | - | - | - | FINISHER LATTICE | |
| 12 | J510 | PCB10 | Fixing Power Supply PCB | | | | | | | 28 | J9071 | H3 | Fixing Heater | |
| 12 | J510 | PCB10 | Fixing Power Supply PCB | | | | | | | 29 | J9072 | H4 | Fixing Heater | |
| 13 | J3500 | PCB11 | Primary Charging High Voltage PCB | | | | | | | 30 | J3510 | PCB12 | Develop High Voltage PCB | |
| 13 | J3500 | PCB11 | Primary Charging High Voltage PCB | | | | | | | 31 | J3545 | PCB26 | Pre-transfer Charging PCB | |
| 14 | J3502 | PCB11 | Primary Charging High Voltage PCB | | | | | | | 32 | J3214 | - | High Voltage Connector | |
| 15 | J3503 | PCB11 | Primary Charging High Voltage PCB | | | | | | | 33 | J3003 | - | High Voltage Connector | |
| 16 | J3512 | PCB12 | Develop High Voltage PCB | J3221 | | | | | | - | - | - | - | |
| 16 | J3512 | PCB12 | Develop High Voltage PCB | J3222 | | | | | | - | - | - | - | |
| 17 | J3513 | PCB12 | Develop High Voltage PCB | | | | | | | 34 | J3217 | - | High Voltage Connector | |

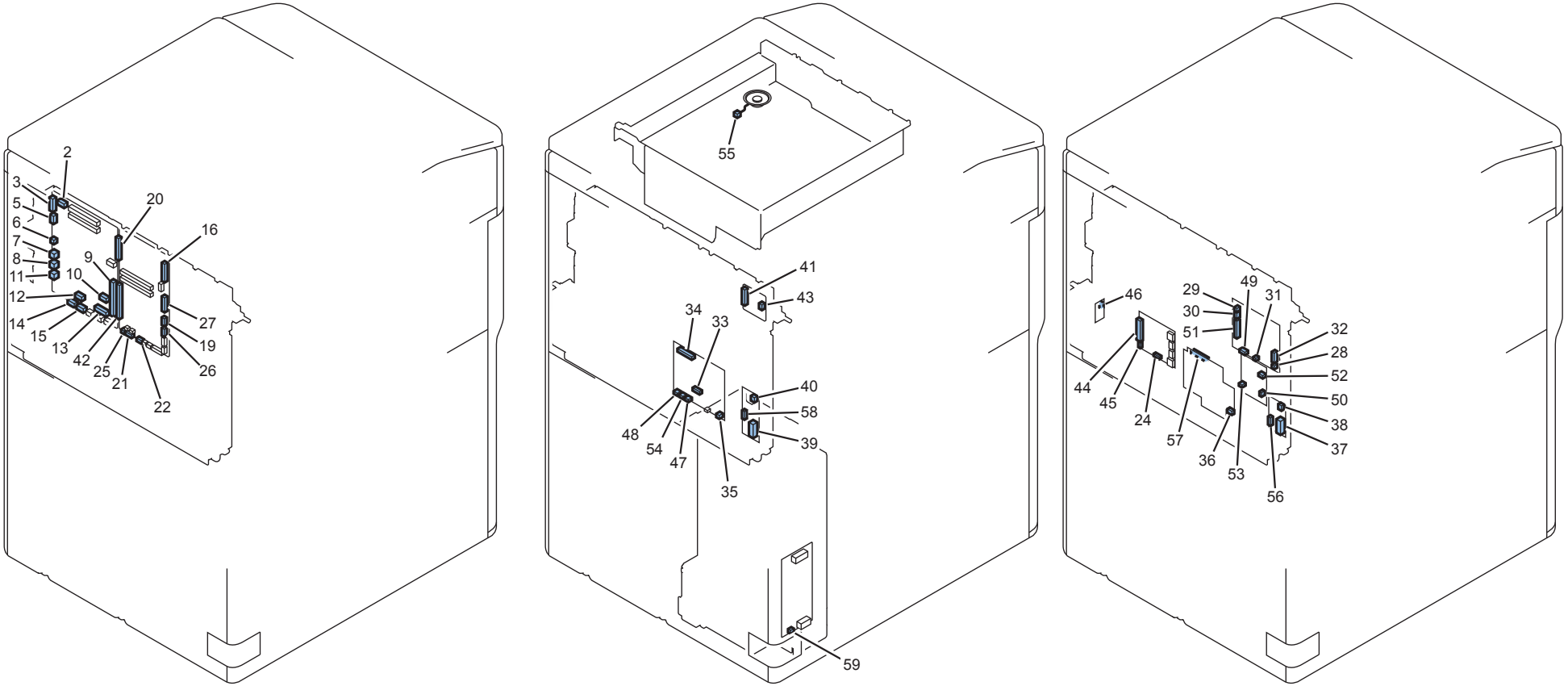
T-4-38


18
15
17
37
21
36
40
14
41
19
16
35
22
23
20
24
38
39
25
26
12
32
33
11
8
28
3
9
2
30
29
13
31
6
10
7
34
27
4
5
1

F-4-39

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J801 | PCB17,18 | Noise Filter | | | | | | | - | - | CB1001 | Leakage Breaker | |
| 1 | J801 | PCB17,18 | Noise Filter | | | | | | | - | - | CB1002 | Leakage Breaker | |
| 1 | J801 | PCB17,18 | Noise Filter | | | | | | | - | - | CB1003 | Leakage Breaker | |
| 1 | J801 | PCB17,18 | Noise Filter | | | | | | | - | - | CB1004 | Leakage Breaker | |
| 2 | J3547 | PCB26 | Pre-transfer Charging PCB | J3004 | J3129 | | | | | 25 | J9001 | UN75 | Post Charging Trance | |
| 3 | J3548 | PCB26 | Pre-transfer Charging PCB | | | | | | | 26 | J3005 | UN75 | Post Charging Trance | |
| 4 | J692 | PCB33 | All-night Power Supply PCB | | | | | | | - | - | - | - | |
| 5 | J693 | PCB33 | All-night Power Supply PCB | | | | | | | - | - | - | - | |
| 6 | J776 | UN111 | CPU PCB | 3225 | | | | | | 27 | J504 | PCB5 | Relay PCB | |
| 7 | J1003 | UN111 | CPU PCB | | | | | | | 28 | J4001 | UN112 | Sub Key PCB | |
| 7 | J1003 | UN111 | CPU PCB | | | | | | | 29 | J6001 | UN114 | Inverter PCB | |
| 8 | J1005 | UN111 | CPU PCB | | | | | | | - | - | - | Transparent touch panel | |
| 9 | J1006 | UN111 | CPU PCB | | | | | | | 30 | J2002 | UN109 | Hub PCB | |
| 10 | J1007 | UN111 | CPU PCB | | | | | | | 31 | J1 | - | LCD | |
| 11 | J1008 | UN111 | CPU PCB | | | | | | | 32 | J3002 | UN110 | Ten Key PCB | |
| 12 | J1009 | UN111 | CPU PCB | | | | | | | 33 | J3001 | UN110 | Ten Key PCB | |
| 13 | J4002 | UN112 | Sub Key PCB | | | | | | | 34 | J5001 | UN113 | Volume PCB | |
| 14 | J1 | UN117 | CPU PCB | J3225 | | | | | | 27 | J504 | PCB5 | Relay PCB | |
| 15 | J2 | UN117 | CPU PCB | | | | | | | 35 | J1 | UN118 | Sub Key PCB | |
| 15 | J2 | UN117 | CPU PCB | | | | | | | 36 | J1 | UN121 | TALLY PCB | |
| 16 | J3 | UN117 | CPU PCB | | | | | | | - | - | - | Transparent touch panel | |
| 17 | J4 | UN117 | CPU PCB | | | | | | | - | - | - | - | |
| 18 | J5 | UN117 | CPU PCB | | | | | | | 37 | J1 | UN116 | Ten Key PCB | |
| 19 | J7 | UN117 | CPU PCB | | | | | | | - | - | - | Transparent touch panel | |
| 20 | J8 | UN117 | CPU PCB | | | | | | | 38 | J1 | UN120 | Inverter PCB | |
| 20 | J8 | UN117 | CPU PCB | | | | | | | 39 | J1 | UN119 | Volume PCB | |
| 21 | J9 | UN117 | CPU PCB | | | | | | | 40 | J1 | UN115 | Hub PCB | |
| 22 | J10 | UN117 | CPU PCB | | | | | | | 41 | J2 | UN115 | Hub PCB | |
| 23 | J2 | UN120 | Inverter PCB | | | | | | | - | - | - | Transparent touch panel | |
| 24 | J3 | UN120 | Inverter PCB | | | | | | | - | - | - | Transparent touch panel | |

T-4-39


2
3
5
6
7
8
11
12
14
15
13
42
25
21
22
20
16
9
10
27
19
26
55
41
43
34
33
40
58
39
48
54
47
35
59
46
29
30
51
49
31
32
28
52
50
38
37
44
45
24
57
36
53
56

F-4-40

| KeyNo. | J No. | Symbol | Parts Name | Intermediate Connector | | | | | | KeyNo. | J No. | Symbol | Parts Name | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | J13 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Voice Guidance Kit-F2 | |
| 3 | J6 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | USB Device Port-A2 | |
| 5 | J4 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Control panel | |
| 6 | J15 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | FM4 | Main Controller Cooling Fan | |
| 7 | J7 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | LAN | |
| 8 | J3 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | USB(D) | |
| 9 | J17 | PCB50 | Main Controller PCB 1 | | | | | | | 42 | J2 | PCB51 | Main Controller PCB 2 | |
| 10 | J11 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Flash PCB | |
| 11 | J5 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | USB(H) | |
| 12 | J8 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | TPM PCB | |
| 13 | J1025 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Not used | |
| 14 | J21 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Copy Control Interface Kit-A1 | |
| 15 | J20 | PCB50 | Main Controller PCB 1 | | | | | | | - | - | - | Card reader or Serial interface kit or Coin manager | |
| 16 | J1 | PCB51 | Main Controller PCB 2 | | | | | | | 43 | J1 | PCB52 | Channel Link PCB | |
| 19 | J14 | PCB51 | Main Controller PCB 2 | | | | | | | - | - | - | Memory PCB | |
| 20 | J2017 | PCB51 | Main Controller PCB 2 | | | | | | | - | - | - | Image Data Analyzer Board-B1 | |
| 21 | J12 | PCB51 | Main Controller PCB 2 | | | | | | | 44 | J1 | - | HDD Mirroring Kit-G1 or<br>HDD Data Encryption & MirroringKit-C5 | |
| 22 | J2024 | PCB51 | Main Controller PCB 2 | | | | | | | 44 | J1 | - | HDD Mirroring Kit-G1 or<br>HDD Data Encryption & MirroringKit-C5 | |
| 24 | J6 | - | HDD Mirroring Kit-G1 or<br>HDD Data Encryption & MirroringKit-C5 | | | | | | | 46 | J2 | - | LED PCB | |
| 25 | J19 | PCB51 | Main Controller PCB 2 | | | | | | | 47 | J403 | - | Super G3 2nd Line Fax Board-AL1 | |
| 26 | J20 | PCB51 | Main Controller PCB 2 | | | | | | | 48 | J5 | - | Super G3 2nd Line Fax Board-AL1 | |
| 26 | J20 | PCB51 | Main Controller PCB 2 | | | | | | | 49 | J2 | - | Super G3 FAX Board-AL1 | |
| 26 | J20 | PCB51 | Main Controller PCB 2 | | | | | | | 50 | J2 | - | Pseudo CI PCB/Off-hook Power Supply PCB | |
| 27 | J2083 | PCB51 | Main Controller PCB 2 | | | | | | | 51 | J1 | - | Super G3 FAX Board-AL1 | |
| 28 | J4 | - | Super G3 FAX Board-AL1 | | | | | | | 52 | J3 | - | Pseudo CI PCB/Off-hook Power Supply PCB | |
| 29 | J5 | - | Super G3 FAX Board-AL1 | | | | | | | 53 | J1 | - | Pseudo CI PCB/Off-hook Power Supply PCB | |
| 30 | J6 | - | Super G3 FAX Board-AL1 | | | | | | | 54 | J8 | - | Super G3 2nd Line Fax Board-AL1 | |
| 31 | J7 | - | Super G3 FAX Board-AL1 | J3141 | J3140 | | | | | 55 | J751 | - | Speaker | |
| 32 | J3 | - | Super G3 FAX Board-AL1 | | | | | | | 56 | J4 | - | Modular PCB (1 line) | |
| 33 | J1 | - | Super G3 2nd Line Fax Board-AL1 | | | | | | | - | - | - | - | |
| 34 | J3 | - | Super G3 2nd Line Fax Board-AL1 | | | | | | | 57 | J1 | - | Super G3 3rd/4th Line Fax Board-AL1 | |
| 35 | J4 | - | Super G3 2nd Line Fax Board-AL1 | | | | | | | 58 | J4 | - | Modular PCB (2 to 4 lines) | |
| 36 | J2 | - | Super G3 3rd/4th Line Fax Board-AL1 | | | | | | | 58 | J4 | - | Modular PCB (2 to 4 lines) | |
| 37 | J1 | - | Modular PCB (1 line) | | | | | | | - | - | - | - | |
| 38 | J7 | - | Modular PCB (1 line) | J3012 | | | | | | 59 | J803 | PCB17,18 | Noise Filter | |
| 39 | J1 | - | Modular PCB (2 to 4 lines) | | | | | | | - | - | - | - | |
| 40 | J2 | - | Modular PCB (2 to 4 lines) | J3012 | | | | | | 59 | J803 | PCB17,18 | Noise Filter | |

T-4-40

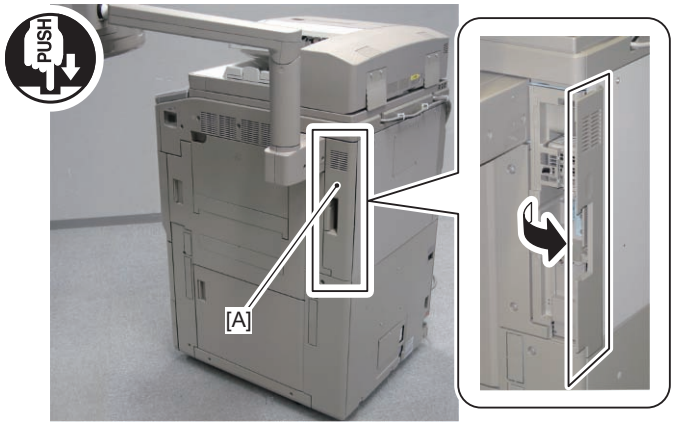
# Main Controller

## Removing Main Controller PCB 1

<Preparation>

1. Remove the Box Cover (Right).

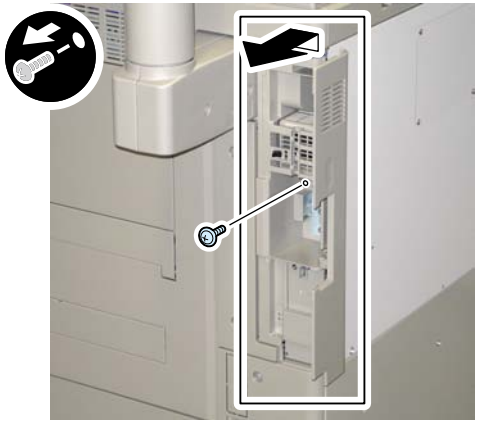
1-1) Push [A] part to open the HDD Cover.




F-4-41

1-2) Remove the Main Controller Right Cover Unit.

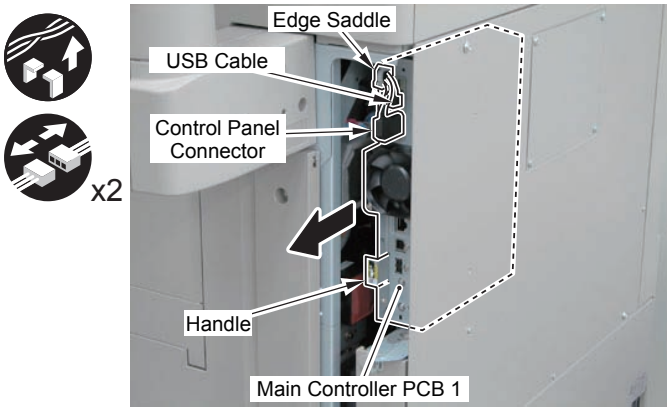
- 1 Screw



F-4-42

<Procedure>

1) Route the removed cable to the open space and remove the Main Controller PCB 1.



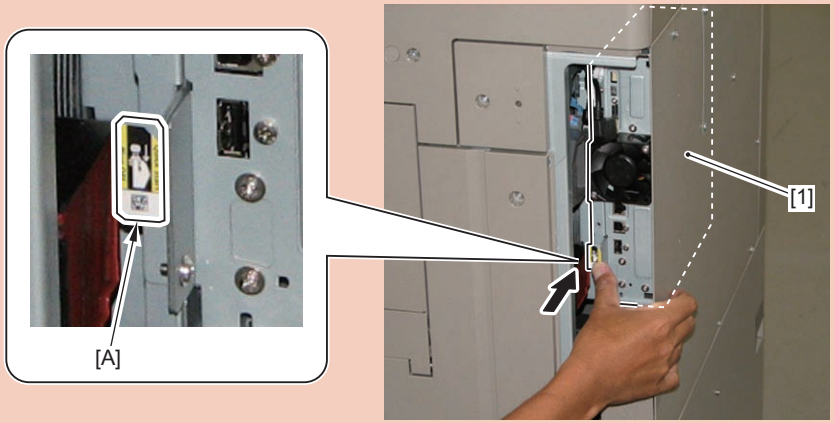

F-4-43

CAUTION:

Points to Note when Inserting the Main Controller PCB 1

Be sure to push the handle in horizontally.

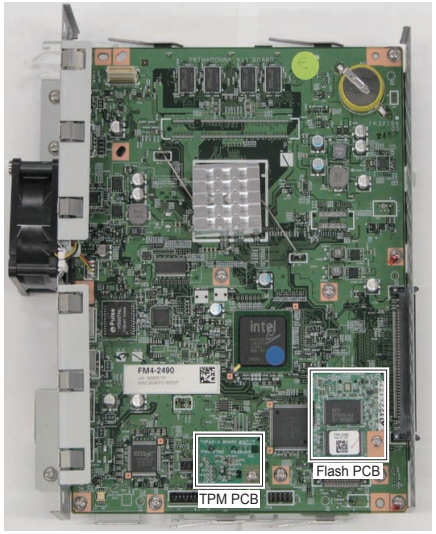
If pushing any part other than the handle, the Main Controller PCB 1 may not be inserted horizontally. In such case, note that connector connection error (or damage of connector) or deformation of plate may occur.




F-4-44

3) Remove the Flash PCB and the TPM PCB.

- 2 Screws




F-4-45

<Actions after Parts Replacement>

1. Install the following parts removed from the old PCB to the new PCB.

- Flash PCB
- TPM PCB

NOTE:
It is not necessary to reconfigure/register the data after replacing the Main Controller PCB 1.

# Removing Main Controller PCB 2

<Processing before replacing the parts>

Be sure to gain agreement from the user in advance to execute the following work.

1) Backup the Settings/Registration data

Data in SRAM on the Main Controller PCB 2 can be backed up to a USB memory device or an HDD from download mode.

* However, if the HDD Encryption Board is installed, backup to an HDD is not possible. It is therefore recommended to perform backup to an USB memory device.

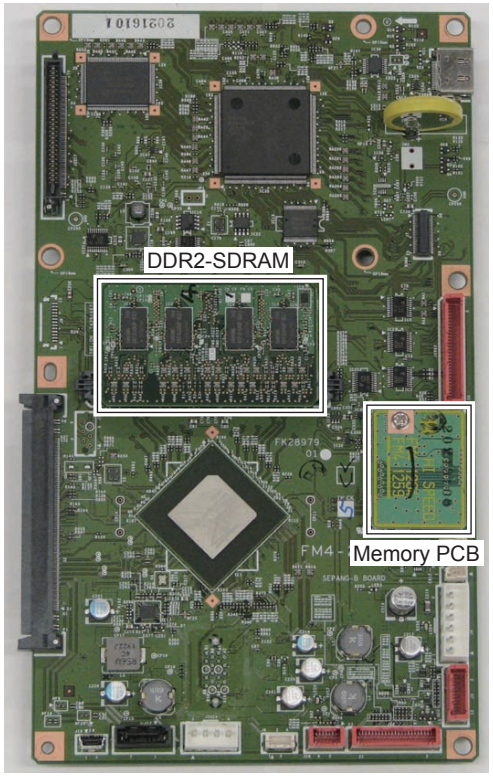
Operation method:
COPIER > FUNCTION > SYSTEM > DOWNLOAD
then,
Download Menu > Backup > SRAM(HDD/USB)

Note:
Download Menu is not intended for the "Settings/Registration > Paper Type Management Settings".
You need back up from:
Remote UI
Settings/Registration > Management Settings > Data Management > Export

<Processing when replacing the parts>

1) Replace the part from the old PCB to the new PCB.

- DDR2-SDRAM (when the option DDR2-SDRAM is installed)
- Memory PCB




F-4-46

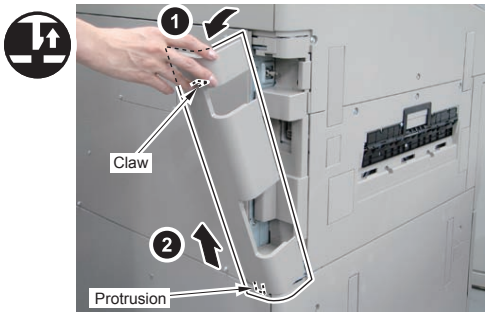
Prohibited Operation:

Do not transfer the following parts to another model (which has a different serial number).If you fail to do so, the Main Body does not activate normally and this might cause to fail the restoration.

- Main Controller PCB 1
- Main Controller PCB 2 (with Memory PCB installed)
- Memory PCB

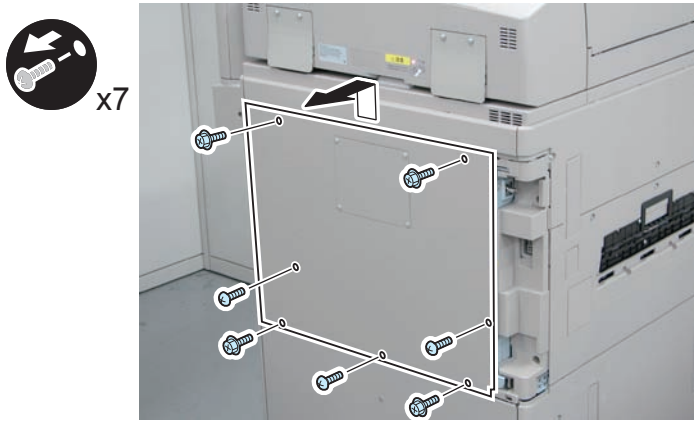
<Preparation>

1. Remove the Box Cover (Right). (Refer to "Removing Main Controller PCB 1")
2. Remove the Main Controller PCB 1. (Refer to page 4-80)
3. Remove the Box Cover (Left).
- 1 Claw
- 1 Protrusion




F-4-47

4. Remove the Rear Cover.

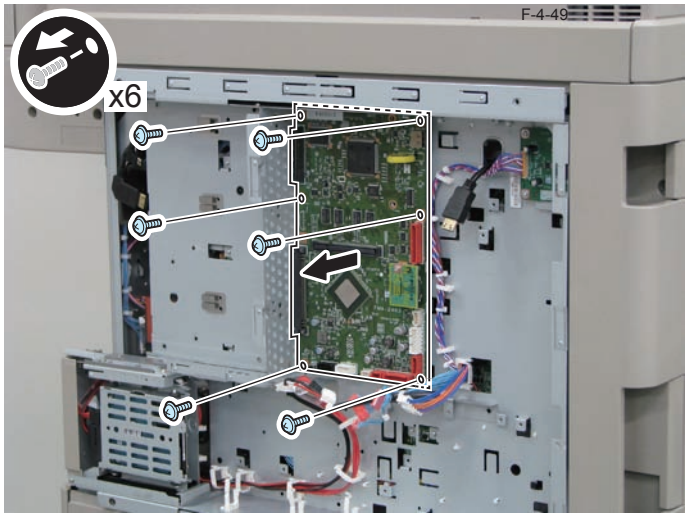



F-4-48

<Procedure>

12) Remove the Main Controller PCB 2.
- 7 Connectors
- 6 Screws

F-4-49




F-4-50

<Actions after Parts Replacement>

1. Specify and register the data again of the Main Controller PCB 2.

1) While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch.

2) The restore of backup data:

When Download Menu is displayed, connect USB memory to the main body.

Download Menu 2 > Restore

3) Specify and register the data again.

Import from:

Remote UI

Settings/Registration > Management Settings > Data Management > Import

4) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute reinstallation.

# Laser Exposure System

## Removing the Laser Scanner Unit

<Preparation>

1. Removing the Right Upper Cover.

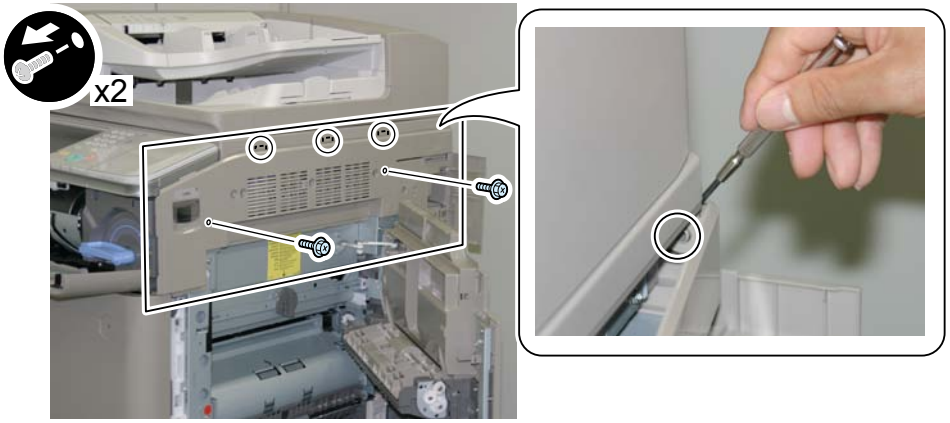
1-1) Open the Toner Exchange Cover.

1-2) Open the Right Cover.

1-3) Open the Right Rear Cover1

1-4) Remove the Right Upper Cover.

- 2 Screws
- 1 Boss
- 3 Protrusions



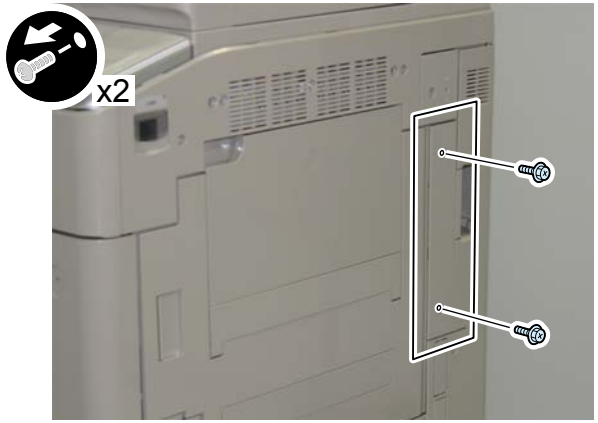

F-4-51

2. Removing the Right Cover.

NOTE:
Laser Scanner Unit can be removed without removing the Right Cover.
Howerver, removing the Right Cover is recommended here for better operability.

2-1) Remove the Right Rear Cover2.

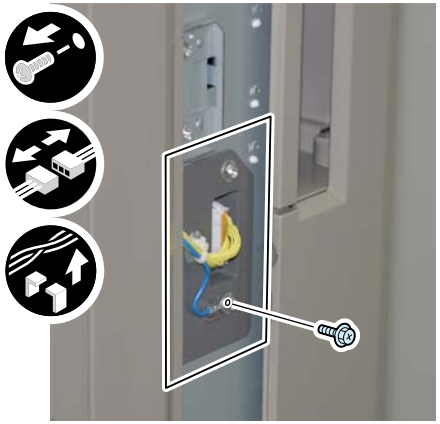
- 2 Screws




F-4-52

2-2) Disconnect the Connector and remove the Grounding Wire and the Reuse Band.

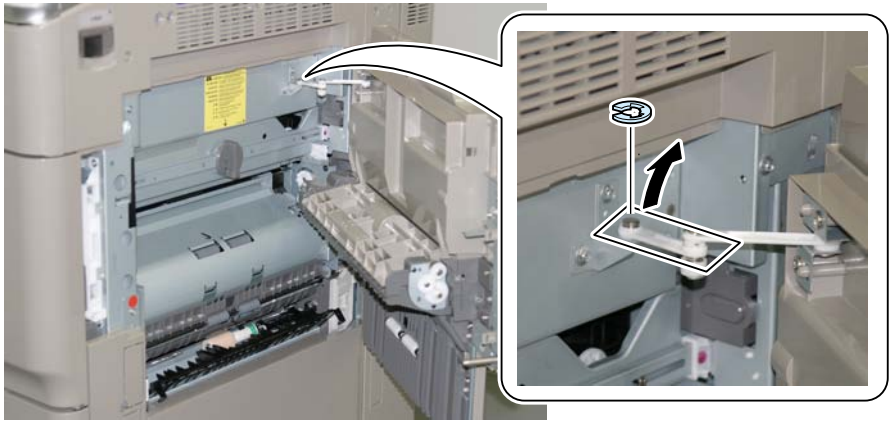
- 1 Screw



F-4-53

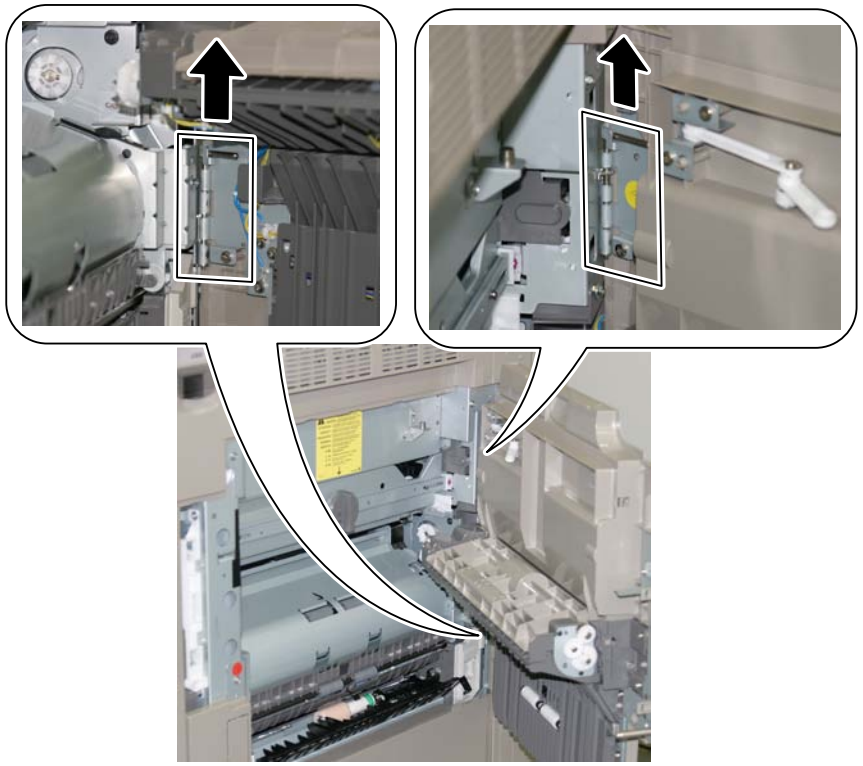
2-3) Open the Right Cover.

2-4) Remove the E-ring to remove the Door Link.



F-4-54

2-5) Remove the 2 Hinge Pins to remove the Right Cover.



F-4-55

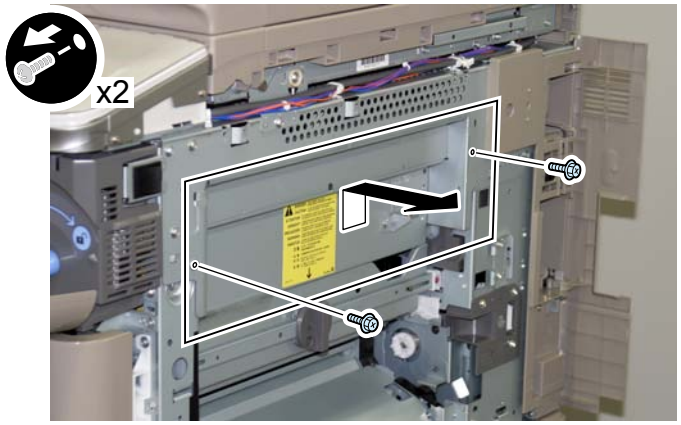
CAUTION:

To prevent falling of Right Cover, hold the Right Cover to remove the Hinge Pins.

<Procedure>

1) Lift the Plate to remove.

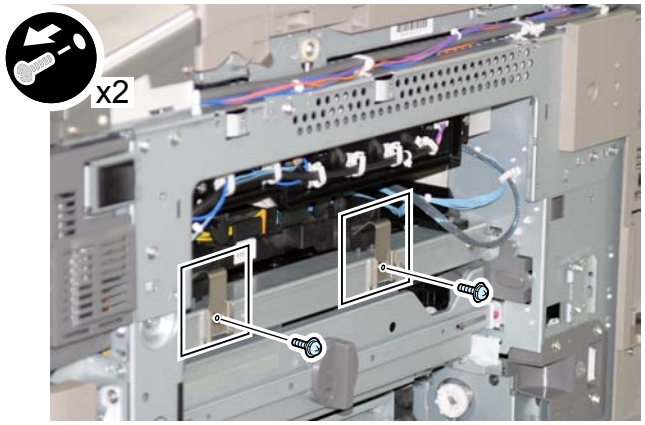
- 2 Screws




F-4-56

2) Remove the 2 Retainer Fixtures.

- 2 Screws



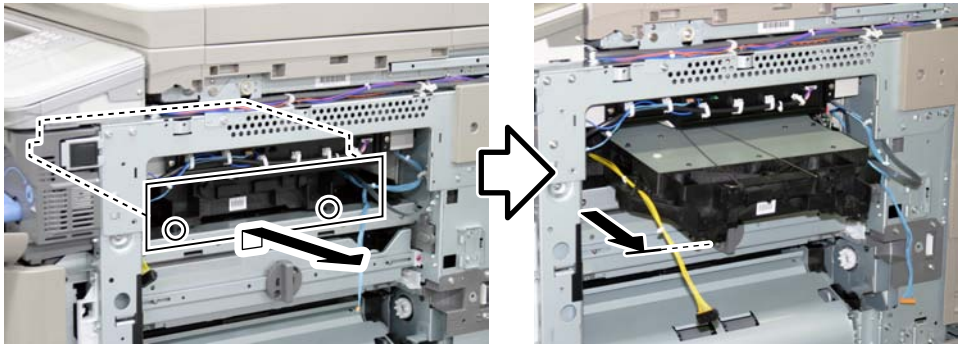

F-4-57

3) Free the Harness from the Harness Guide and Disconnect the Connector.

F-4-58

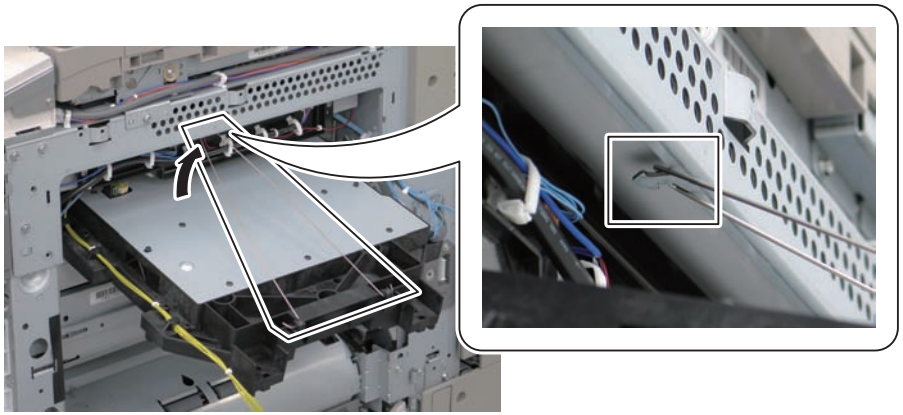
4) Pull out the Laser Scanner Unit halfway.

- 2 Bosses



F-4-59

5) Hook the wire of the Laser Scanner Unit to the hook of the main body.

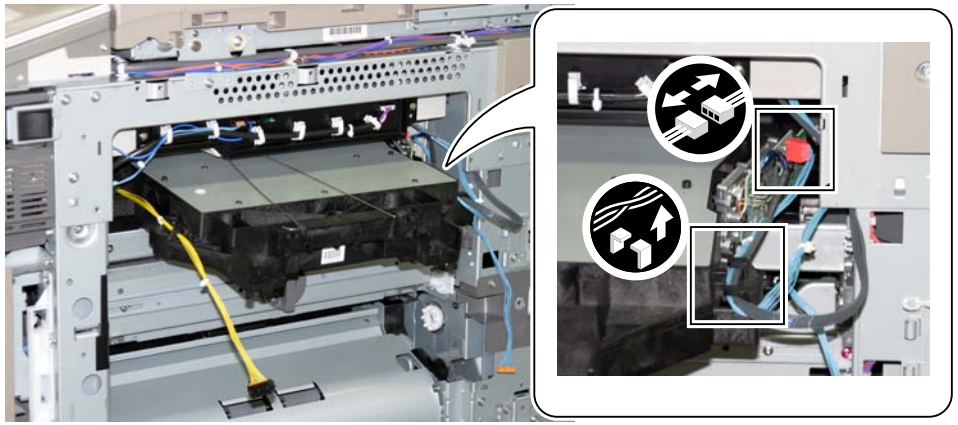


F-4-60

CAUTION:

Do not use the wire when the Right Cover is not removed.

6) Free the Harness from the Harness Guide and Disconnect the Connector.

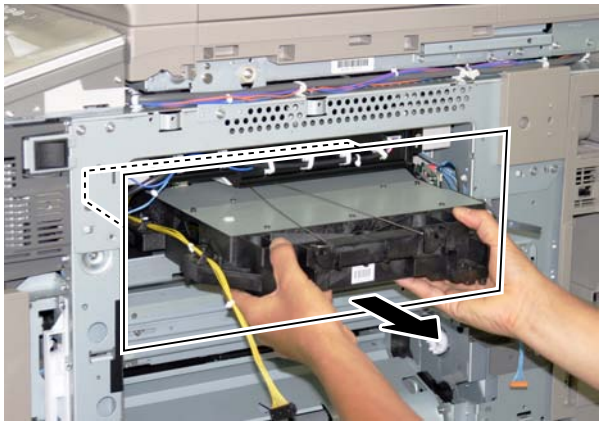


F-4-61

7) Remove the Laser Scanner Unit.

CAUTION:

Before removing the Laser Scanner Unit, check that the hooking wire of the unit is not hooked to the frame of the main body.



F-4-62

CAUTION:

When installing the Laser Scanner Unit, be sure to check that the bosses are fitted into the holes.

F-4-63

## Cleaning the Dust Collecting Glass

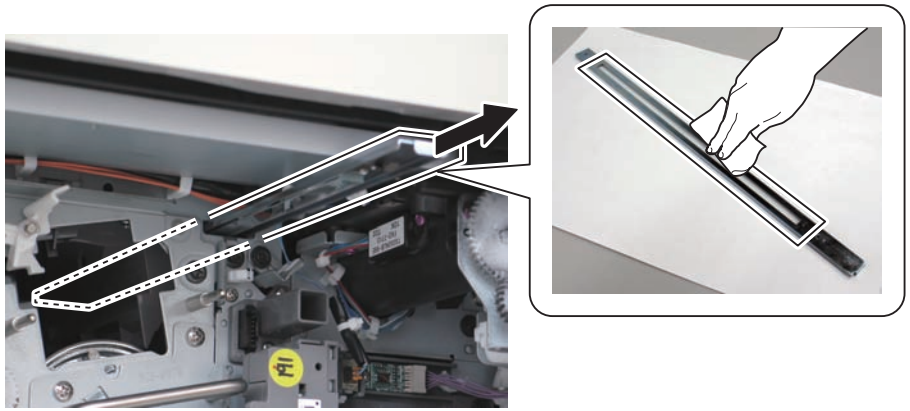
<Preparation>

1) Open the Front Cover.
2) Remove the Primary Charging Assembly. (Refer to page 4-89)

<Procedure>

Removing the Dustproof Glass

1) Pull out the Dustproof Glass and clean it with lint-free paper.



F-4-64

# Image Formation System

## Removing the Primary Charging Assembly

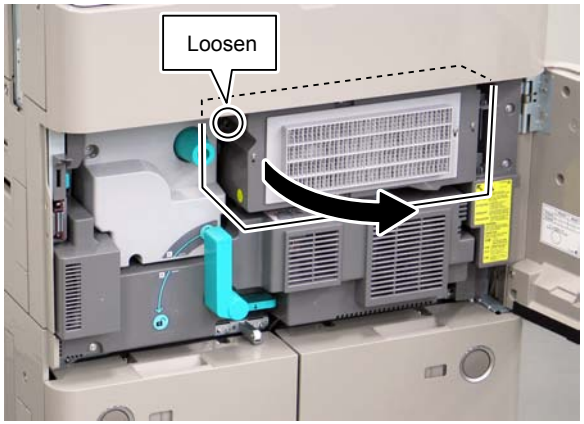
<Preparation>

1. Open the Inner Cover.

1-1) Open the Front Cover.

1-2) Open the Inner Cover.

- 1 Screw (to loosen)




F-4-65

<Procedure>

CAUTION:

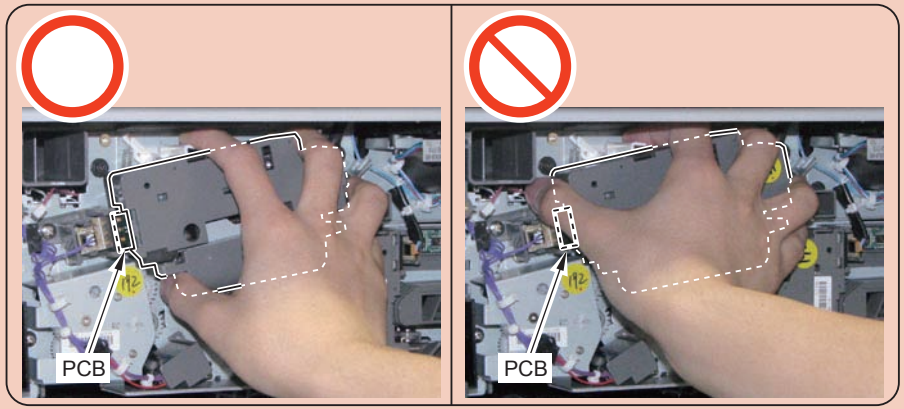
- When removing the Primary Charging Assembly and the Pre-transfer Charging Assembly, go through the following procedure while the Charging Shutter is open.
- At sleep mode, press the Power Switch on the Control Panel, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.
- In the case that the condition of the Charging Shutter (open/close) is unknown while the power of the host machine is OFF, turn ON the power, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.

If the above operations are not performed, it may be possible to remove the assembly while the Charging Shutter is closed, which may damage the drum or the shutter.

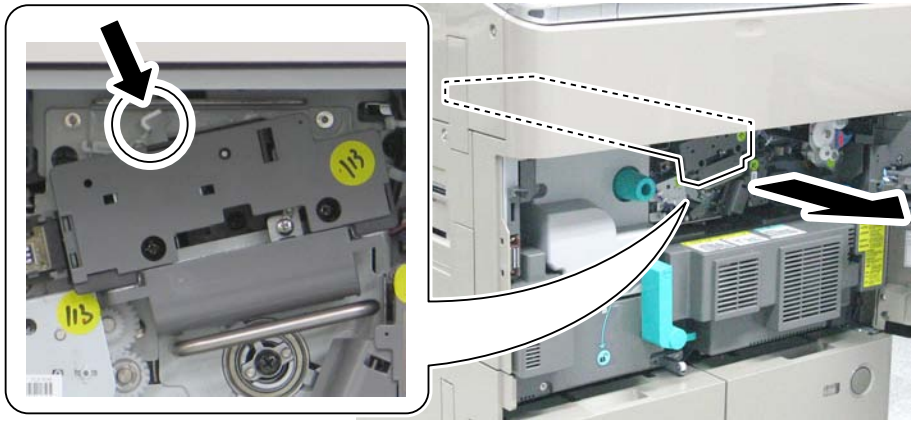
1) While pushing the Release Lever in the direction of the arrow, pull out the Primary Charging Assembly.

CAUTION:

When removing the Primary Charging Assembly, be careful not to hold the PCB of the Primary Charging Assembly.




F-4-66



F-4-67

<Processing after replacing the parts>

1) Clear the parts counter for the Primary Charging Assembly.
2) Output halftone image in service mode.
   TEST > PG > TYPE: 5 halftone test print
3) Output HT to check density difference between the front and the rear. (Refer to page 5-7)
4) In the case of density difference: Execute adjustment with the Wire Height Adjustment Spring.
5) Execute cleaning of the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)
6) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
7) Execute the potential control (COPIER>FUNCTION>DPC>DPC). Turn OFF and then ON the main power. (The potential control is executed at startup.)

## Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/Left)

<Preparation>

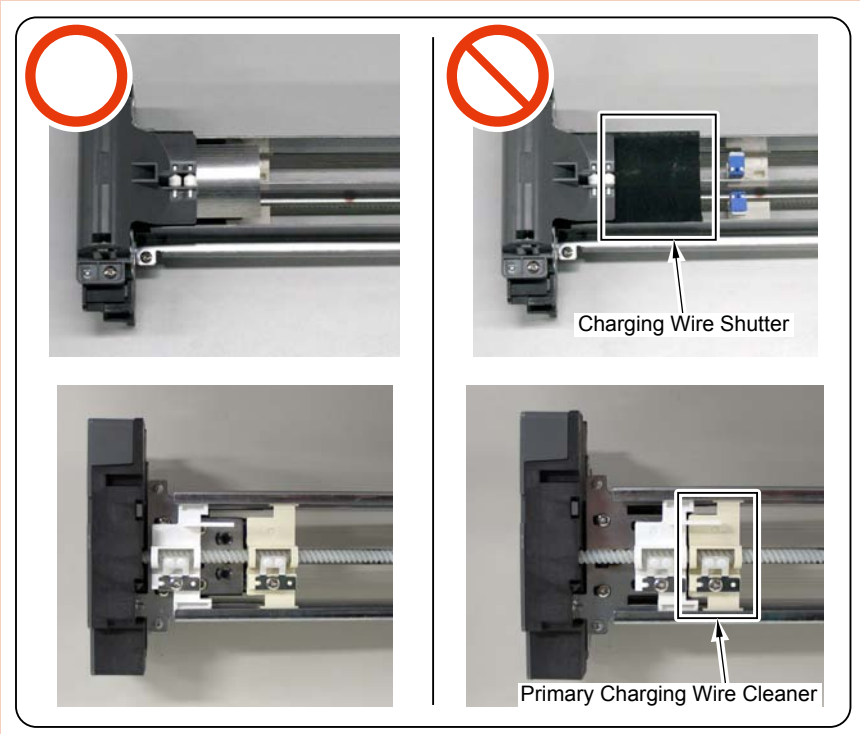
NOTE:
Replacement procedure is the same between the Primary Charging Wire Cleaner/Cleaner Holder (Left) and the Primary Charging Wire Cleaner/Cleaner Holder (Right). The following explains the procedure of the Primary Charging Wire Cleaner (Right) and Cleaner Holder (Right).

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)

<Procedure>

CAUTION:

Do not move the Charging Wire Shutter; otherwise, the shutter can be damaged when installing the Charging Assembly. When the Charging Wire Shutter is moved by chance, be sure to move the Shutter until it is invisible.



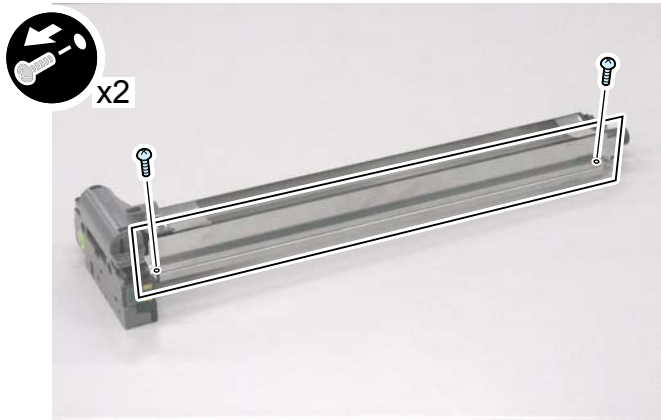

F-4-68

CAUTION:

Do not remove both Shield Plates (Right and Left) of the Primary Charging Assembly at the same time. Be sure to work on one Shield Plate at a time (otherwise, the Frame of the Primary Charging Assembly can be deformed).

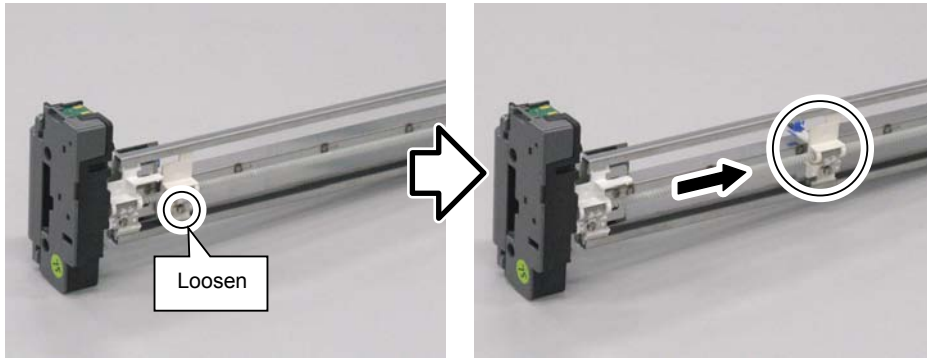
1) Remove the Shield Plate (Right). When removing the Primary Charging Wire Cleaner Holder (Left), remove the Shield Plate (Left).

- 2 Screws




F-4-69

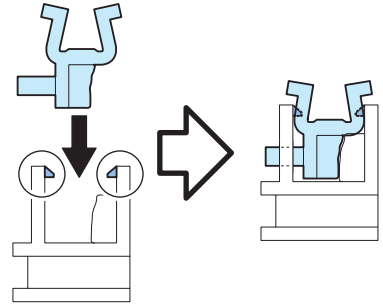
2) Loosen the screw to move the Primary Charging Assembly Cleaner to the center.




F-4-70

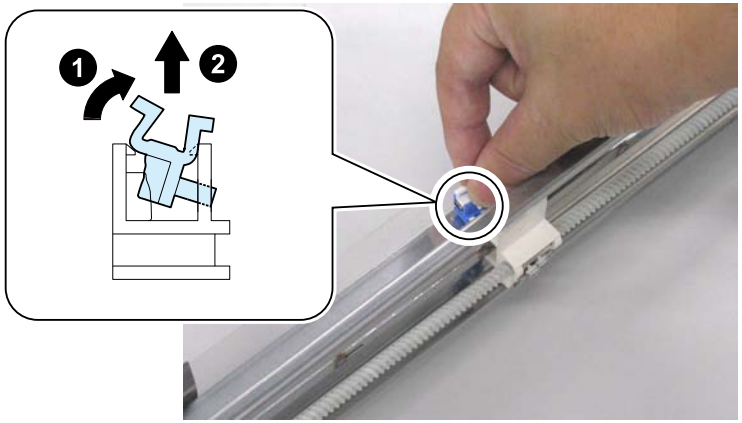
CAUTION:Points to Caution when Installing the Primary Charging Wire Cleaner Holder

Be sure to push in the Primary Charging Wire Cleaner Holder until it is secured with the Claw.



F-4-71

3) Bring up the Primary Charging Assembly and pinch the Hook to remove the Primary Charging Assembly Cleaner Holder (Right) in the direction of the arrow.

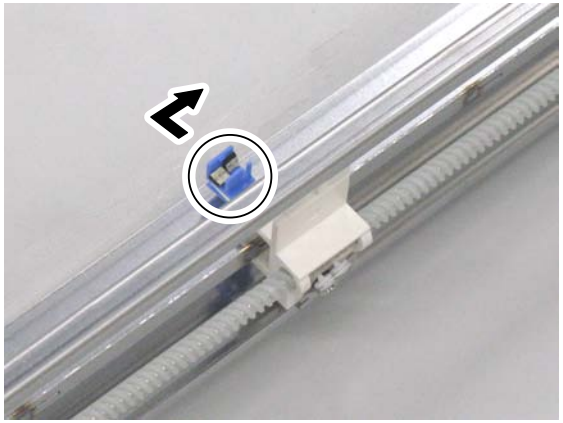



F-4-72

4) Remove the Primary Charging Wire Cleaner (Right) in the direction of the arrow.

CAUTION:

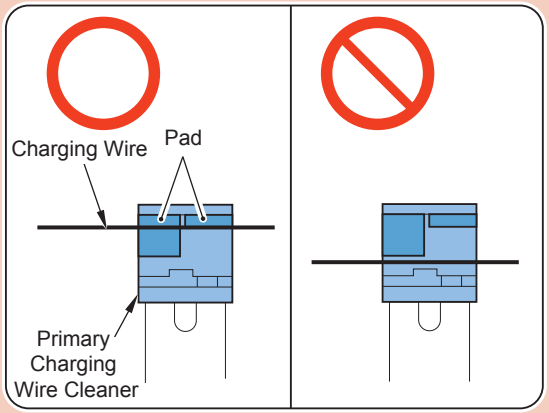
Be careful not to damage the Primary Charging Wire and the Grid Wire when removing the Primary Charging Wire Cleaner (Right).



F-4-73

CAUTION:Points to Caution at Installation

Be sure to push the Charging Wire against the 2 pads of the Primary Charging Wire Cleaner to install.




F-4-74

# Replacing the Primary Charging Assembly Grid Wire

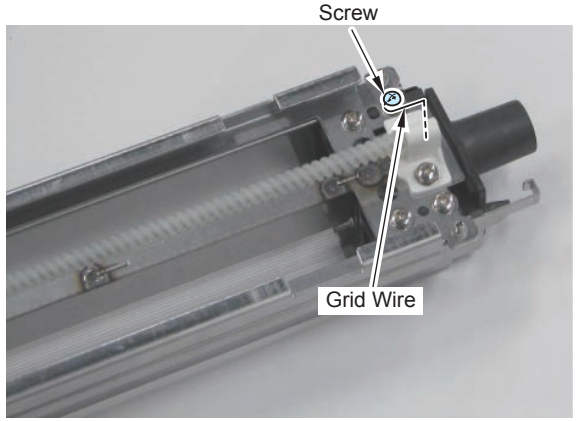
<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
3. Remove the Primary Charging Assembly. (Refer to page 4-89)
4. Removing the Primary Charging Shutter Unit (Refer to page 4-137)

<Procedure>

1) Remove the Primary Charging Assembly Grid Wire

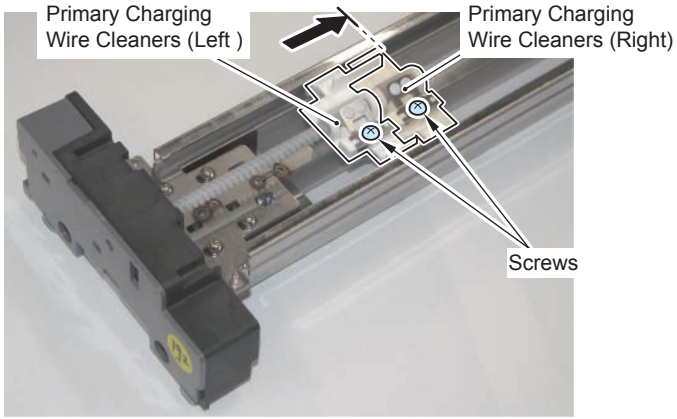
- 1 Screw




F-4-75

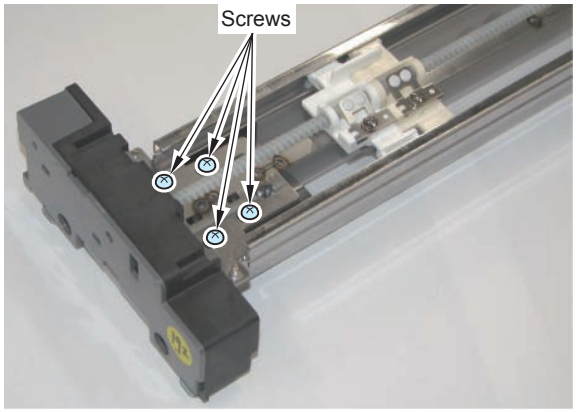
2) Shift the Primary Charging Wire Cleaners (Left and Right).

- 2 Screws (to loosen)




F-4-76

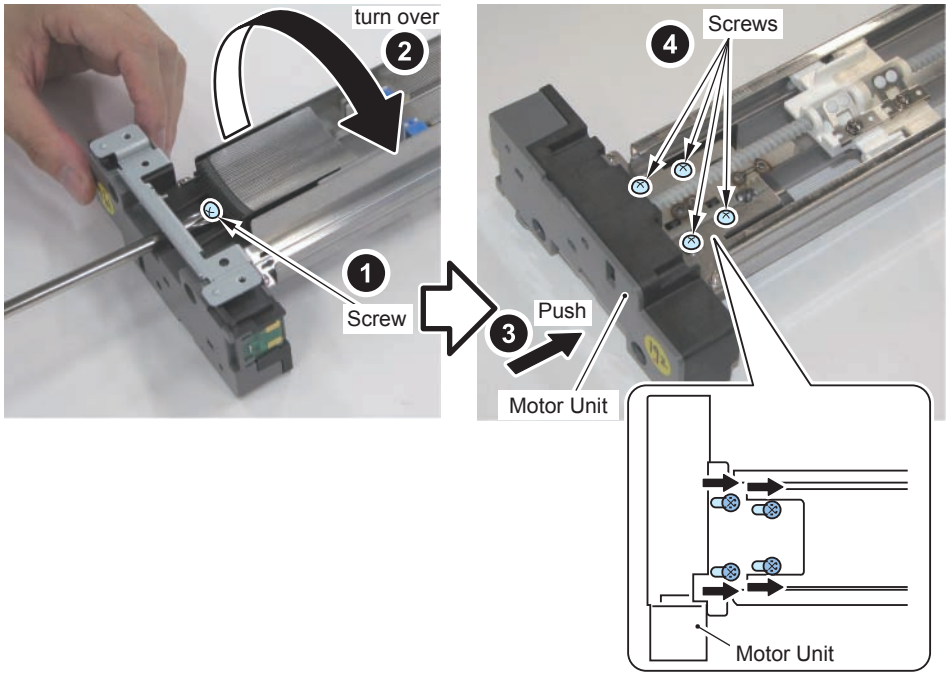
3) Loosen the 4 screws fixing the Motor Unit in the front.




F-4-77

4) Loosen the screw and turn over the Primary Charging Assembly.

5) Push the front Motor Unit in the direction of the arrow and tighten the 4 screws.




F-4-78

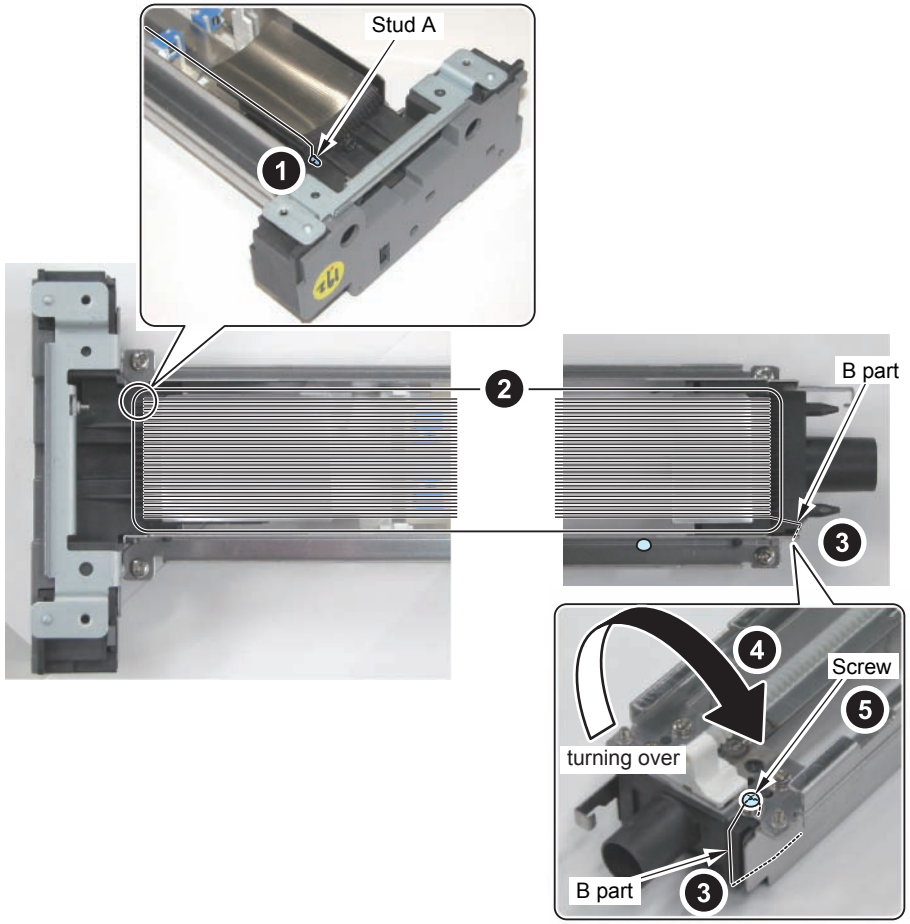
6) Untie approx. 5cm of the Charging Wire from the 0.1mm (wire-diameter) Charging Wire Reel to make a 2mm-diameter ring at the edge.

NOTE:
The ring can be easily made by the following procedure: Wrap the Charging Wire around the Hex Key to make a full round, and then turn the Hex Key for 3 to 4 times to twist the Charging Wire.

7) Cut the twisted Charging Wire (extra length) with nippers.

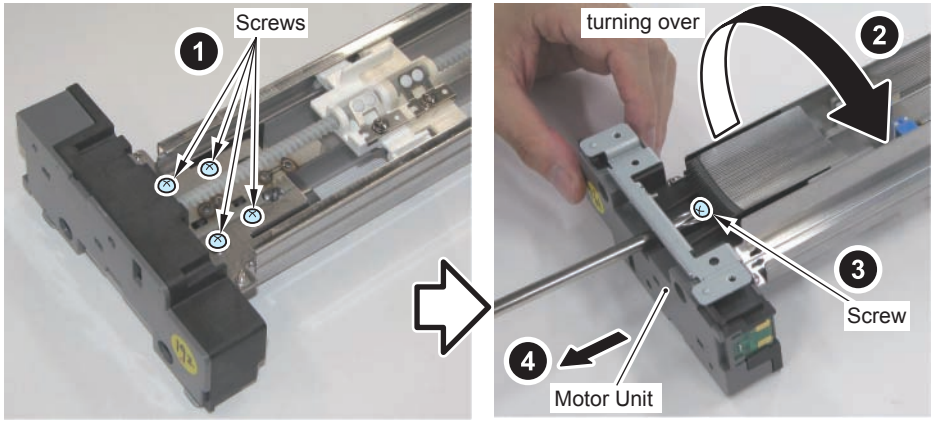
8) Hook the ring to the Stud A as shown in the figure.

9) After setting the wire 35 times around, pass through B part. After turning over the Primary Charging Assembly, pass the wire between the washer and the Motor Unit, wrap around the screw clockwise to make a full round and secure with the screw.



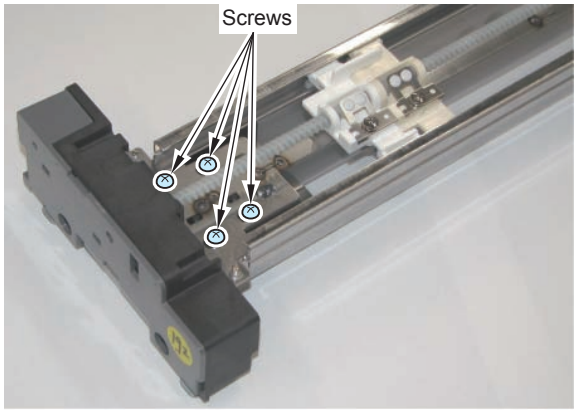

F-4-79

10) Cut the extra length of the Charging Wire with nippers.
11) Loosen the 4 screws and tighten the screw until the tension of the Grid Wire is uniformed. Be careful not to deform (bend) the Charging Assembly.




F-4-80

12) Tighten the loosened 4 screws.




F-4-81

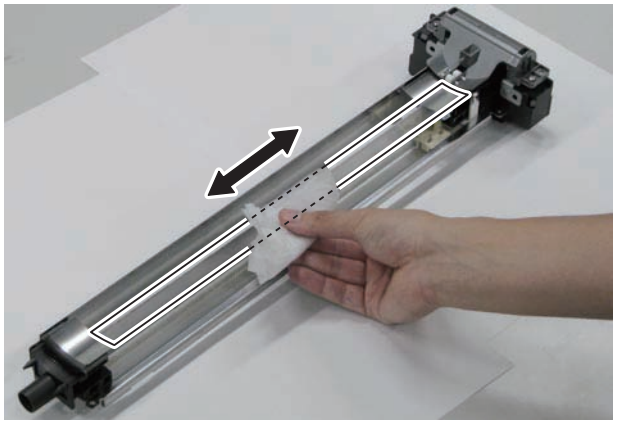
Be sure to check the following items.

- No bend or twist is found with the Grid Wire.
- The wire is set evenly spaced apart. (The Grid Wire is fitted into the groove of the Block.)

13) Remove the Shield Plate (Left) and pinch the Grid Wire from the left side to clean it on the left side with lint-free paper moistened with water.

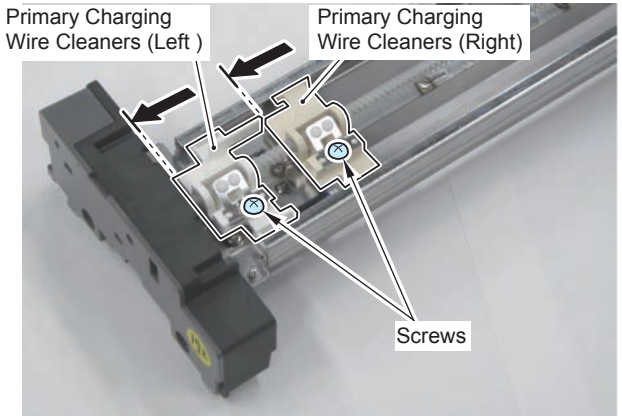
CAUTION:

- The frame of the Primary Charging Assembly may be distorted, so be careful not to remove both Left and Right Shield Plates simultaneously.



F-4-82

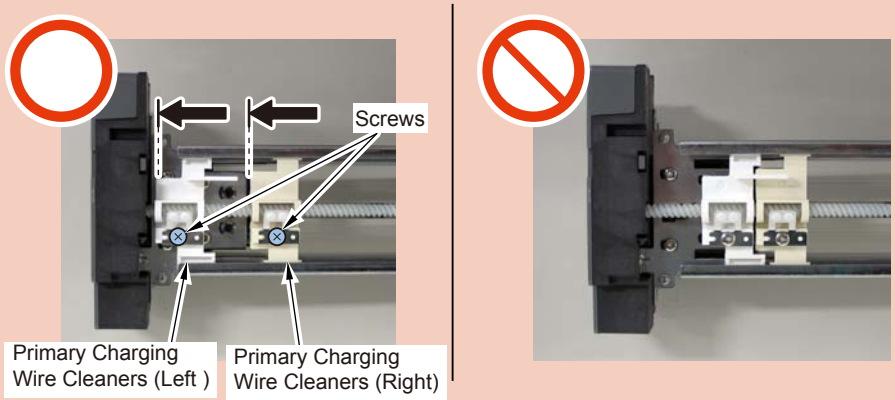
14) Shift the Primary Charging Wire Cleaners (Left and Right).
15) Tighten the 2 screws.




F-4-83

CAUTION:

Be sure to move the Primary Charging Wire Cleaners (Left and Right) until they stop and tighten the screws.




F-4-84

16) Install the Primary Charging Shutter Unit.(Refer to page 4-137)

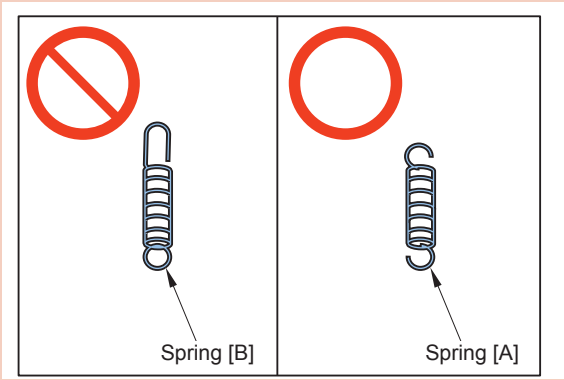
## Replacing the Primary Charging Wire

NOTE:
Replacement procedure is the same between the Primary Charging Wire (Left) and the Primary Charging Wire (Right).
The following explains the procedure of the Primary Charging Wire (Right).

NOTE:
The Primary Charging Wire with spring is set as a service part.

CAUTION:

In the case of replacing the Charging Wire on a Charging Wire basis, be sure to use the dedicated Charging Wire Tension Spring (97-5527) [A]. Do not use the Spring [B] attached to the Charging Wire.




F-4-85

<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
3. Remove the Primary Charging Assembly. (Refer to page 4-89)
4. Remove the Primary Charging Wire Cleaner Holder (Right). (Refer to "Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/Left)")
5. Remove the Primary Charging Wire Cleaner (Right). (Refer to page 4-90)

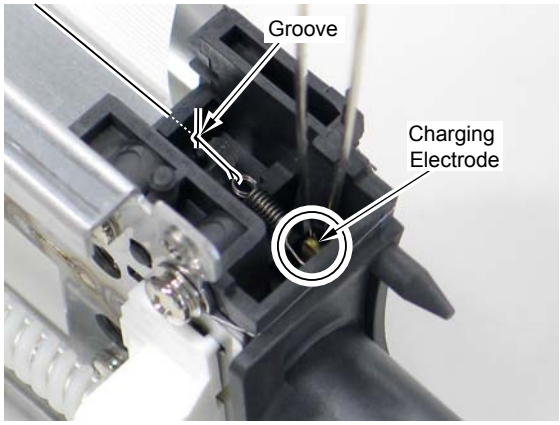
<Procedure>

<Removing the Charging Wire>

1) Remove the Sheet.

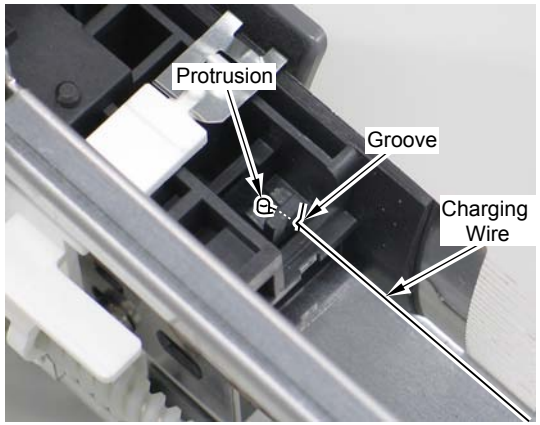
F-4-86

2) Use tweezers to hold the tip of the Spring at the rear side to remove the Spring from the charging electrode and remove the Charging Wire from the groove of the Positioning Block.




F-4-87

3) Remove the Charging Wire from the protrusion and the groove of the Positioning Block at the front side.




F-4-88

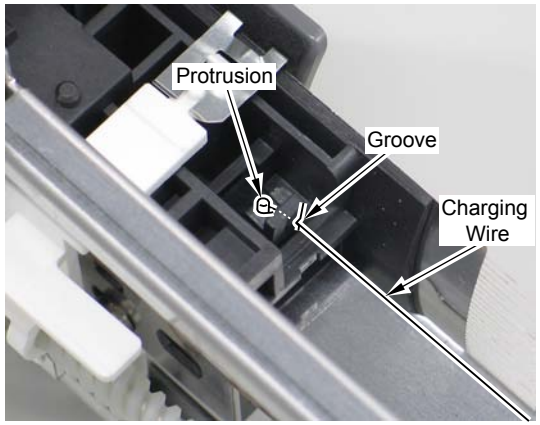
<Installing the Charging Wire>

NOTE:
When installing the Charging Wire set as a service part, steps 4, 5, 7, and 8 are not required.

4) Untie approx. 5cm of the Charging Wire from the 0.06mm (wire-diameter) Charging Wire Reel to make a 2mm-diameter ring at the edge.

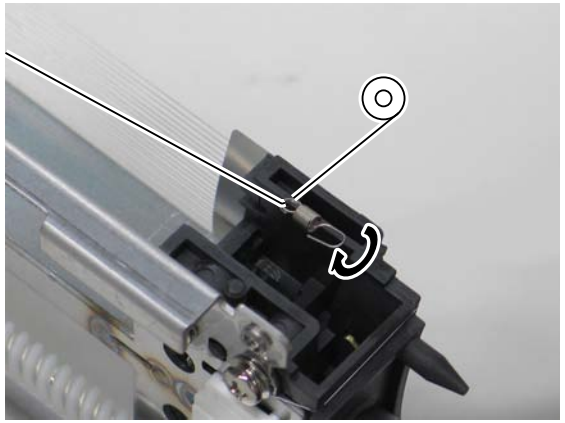
NOTE:
The ring can be easily made by the following procedure: Wrap the Charging Wire around the Hex Key to make a full round, and then turn it for 3 to 4 times to twist the Charging Wire.

5) Cut the edge of the twisted Charging Wire with nippers.
6) Hook the ring to the front protrusion of the Positioning Block to hook the Charging Wire to the groove.




F-4-89

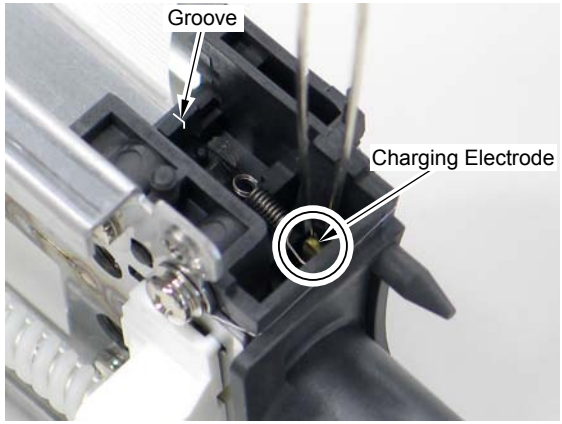
7) Hook the Charging Wire Tension Spring to the Charging Wire to twist with it.



F-4-90

8) Cut extra length of the Charging Wire with nippers.

9) Hook the Charging Wire to the rear groove of the Charging Wire Positioning Block and hold the edge of the Charging Wire Tension Spring with tweezers to hook it to the charging electrode.




F-4-91

CAUTION:
Be sure to keep the following in mind after installation.
- No bend or twist is found with the Charging Wire.
- The Charging Wire is fitted into the groove of the Charging Wire Positioning Block.

10) Clean the Charging Wire with lint-free paper moistened with alcohol.
11) Install the Primary Charging Wire Cleaner (Right).
12) Install the Primary Charging Wire Cleaner Holder (Right).
13) Install the Shield Plate (Right).

<Processing when replacing the parts>
1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PRM-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)
3) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
4) Execute the potential control (COPIER>FUNCTION>DPC>DPC). Turn OFF and then ON the main power. (The potential control is executed at startup.)

# Cleaning the Primary Charging Assembly Grid Wire

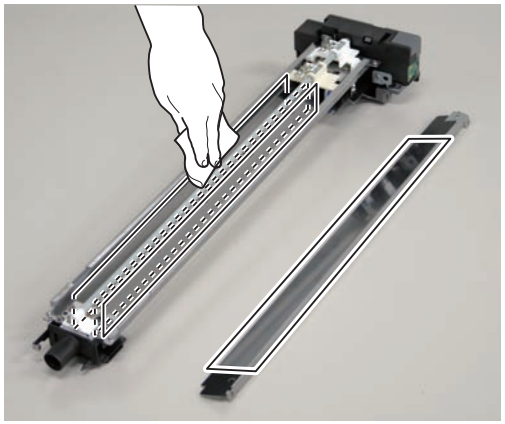
<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Primary Charging Wire Cleaner Holder. (Refer to “Removing the Primary Charging Wire Cleaner, Cleaner Holder (Right/Left)”)
4. Remove the Primary Charging Wire. (Refer to page 4-90)

NOTE:
With this machine, discharge products tend to be accumulated inside the Charging Assembly. To remove the discharge products efficiently, clean with lint-free paper moistened with water. (If there is toner stain, clean with lint-free paper moistened with alcohol.)

<Procedure>

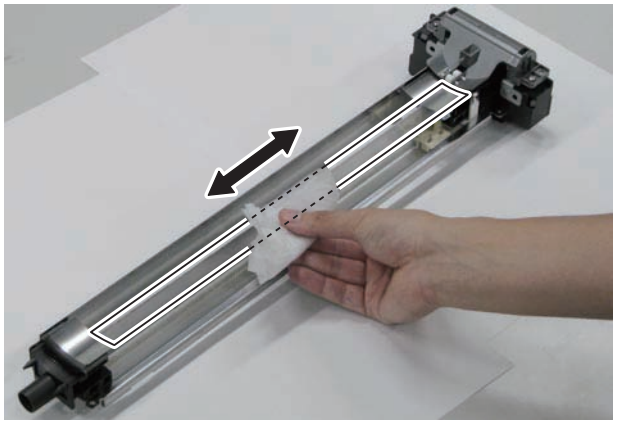
1) Clean the inside of Shield Plate (Right) and Inner Shield Plate (Left) removed from the Primary Charging Assembly with lint-free paper moistened with water.
2) Clean both sides of the Inner Shield Plate (Middle) of the Primary Charging Assembly with lint-free paper moistened with water.



F-4-92

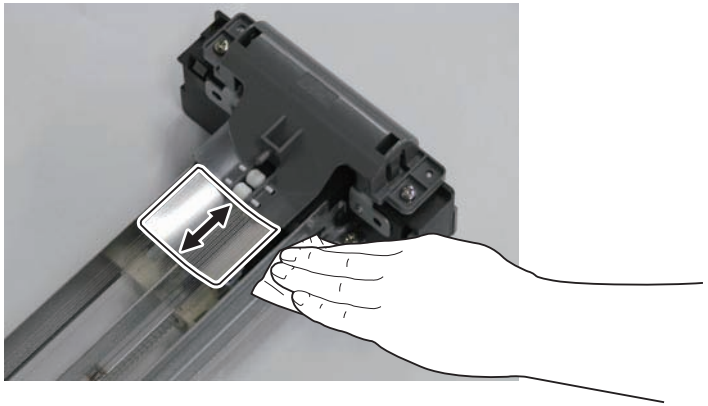
3) Remove the Shield Plate (Left) and pinch the Grid Wire from the left side to clean it on the left side with lint-free paper moistened with water.

CAUTION:
- The frame of the Primary Charging Assembly may be distorted, so be careful not to remove both Left and Right Shield Plates simultaneously.



F-4-93

4) Remove the Shield Plate (Right) and pinch the Grid Wire to clean it on the right side with lint-free paper moistened with water.



F-4-94

# Removing the Pre-transfer Charging Assembly

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")

<Procedure>

CAUTION:

When removing the Primary Charging Assembly and the Pre-transfer Charging Assembly, go through the following procedure while the Charging Shutter is open.

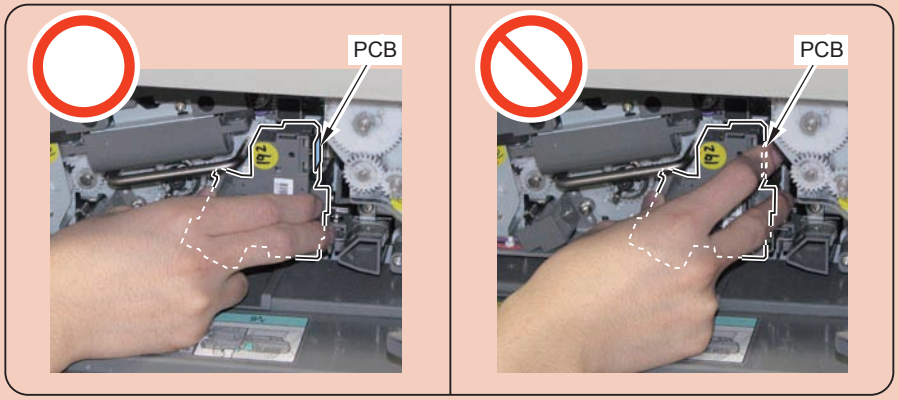
- At sleep mode, press the Power Switch on the Control Panel, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.
- In the case that the condition of the Charging Shutter (open/close) is unknown while the power of the host machine is OFF, turn ON the power, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.

If the above operations are not performed, it may be possible to remove the assembly while the Charging Shutter is closed, which may damage the drum or the shutter.

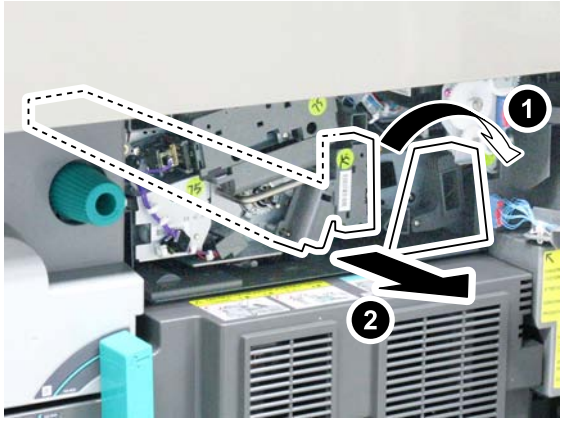
1) Turn the Lock Lever in the direction of the arrow to pull out the Pre-transfer Charging Assembly.

CAUTION:

When removing the Pre-transfer Charging Assembly, be careful not to hold the PCB of the Pre-transfer Charging Assembly.



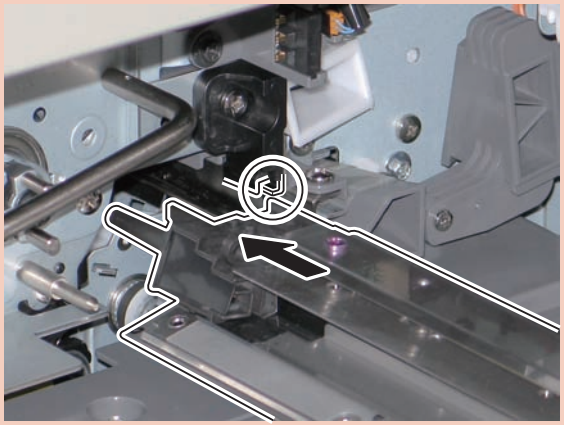

F-4-95




F-4-96

CAUTION:Points to Caution at Installation

Be sure to fit the Transfer Charging Assembly to the groove on the host machine and install it horizontally.



F-4-97

<Processing when replacing the parts>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>PO-UNIT)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-EX)

## Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder

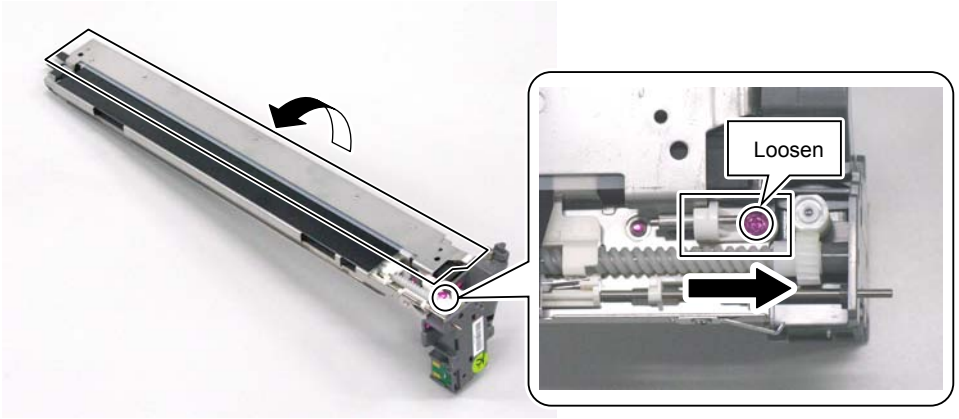
<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)

<Procedure>

1) Displace the Shield Plate Retainer Block to open the Shield Plate in the direction of the arrow.

- 1 Screw (to loosen)

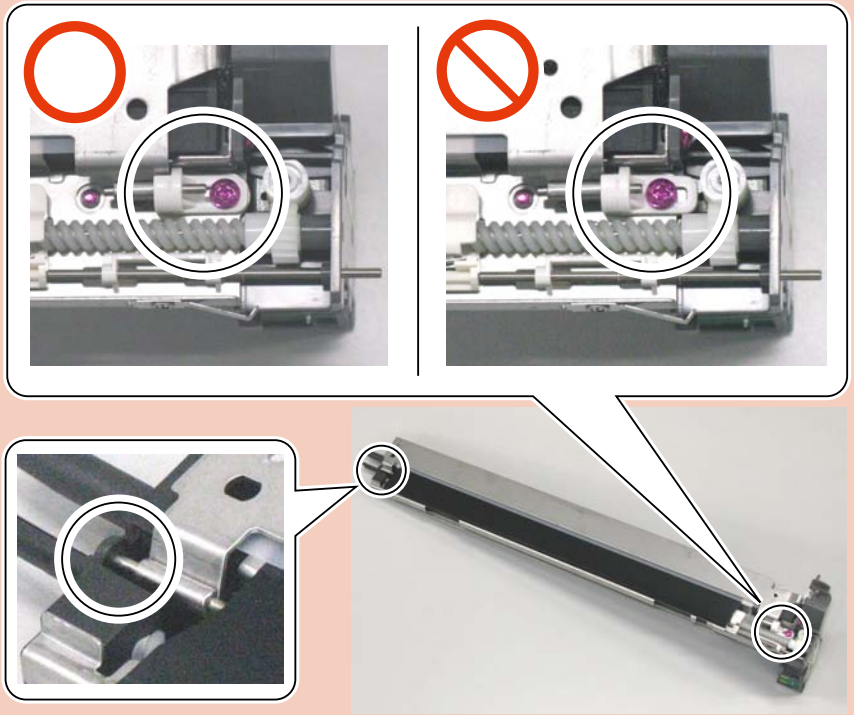



F-4-98

CAUTION:Points to Caution when Securing the Shield Plate

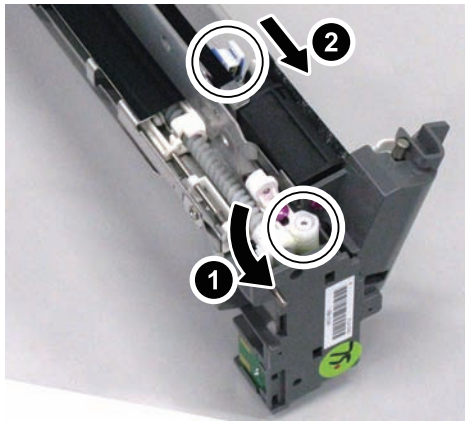
Move the Shield Plate Retainer Block fully to the inside to secure with the screw.

Check that the rear Pin is fitted into the Frame hole, and then move the Shield Plate back and forth to check that the Shield Plate is secured.



F-4-99

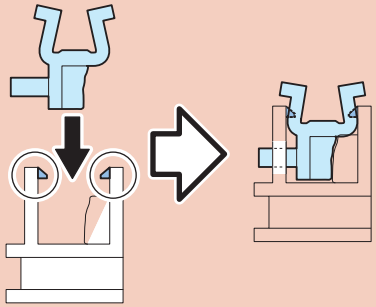
2) Turn the Gear by hand to move the Cleaning Pad Arm to the front.




F-4-100

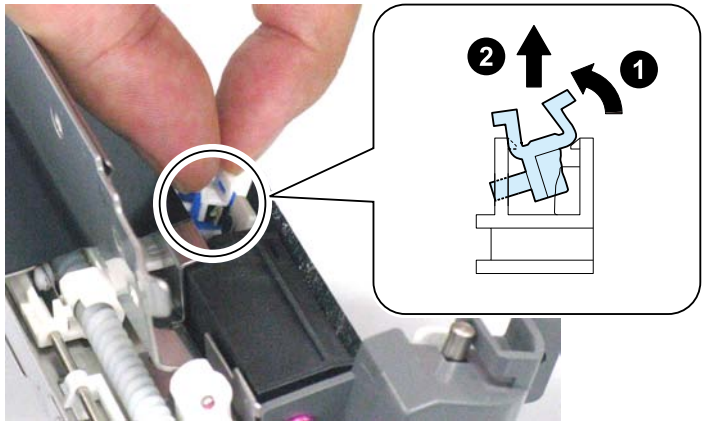
CAUTION:Points to Caution when Installing the Pre-transfer Charging Wire Cleaner Holder

Push in the Pre-transfer Charging Wire Cleaner Holder until it is secured with the Claw.



F-4-101

3) Pinch the Hook and turn it in the direction of the arrow to remove the Pre-transfer Charging Assembly Cleaner Holder.

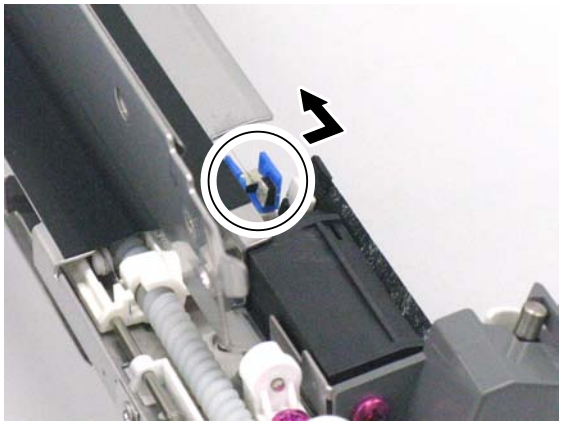



F-4-102

4) Remove the Pre-transfer Charging Wire Cleaner in the direction of the arrow.

CAUTION:

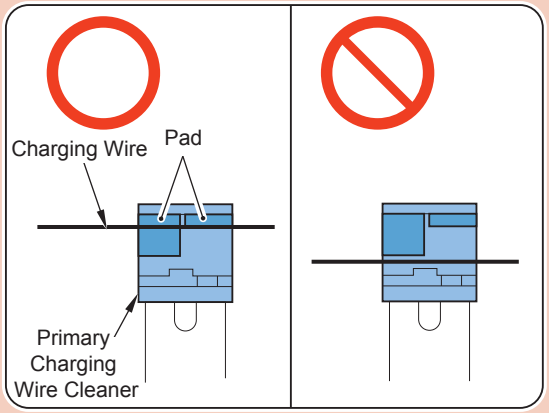
Be careful not to damage the Pre-transfer Charging Wire when removing the Pre-transfer Charging Wire Cleaner.



F-4-103

CAUTION:Points to Caution at Installation

Be sure to push the Charging Wire against the 2 pads of the Pre-transfer Charging Wire Cleaner to install.




F-4-104

# Replacing the Pre-transfer Charging Wire

NOTE:
The Primary Charging Wire with spring is set as a service part.

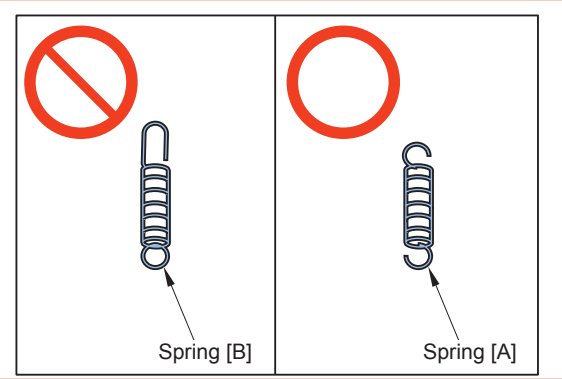
<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Pre-transfer Charging Wire Cleaner Holder. (Refer to "Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder")
5. Remove the Pre-transfer Charging Wire Cleaner. (Refer to page 4-101)

<Procedure>

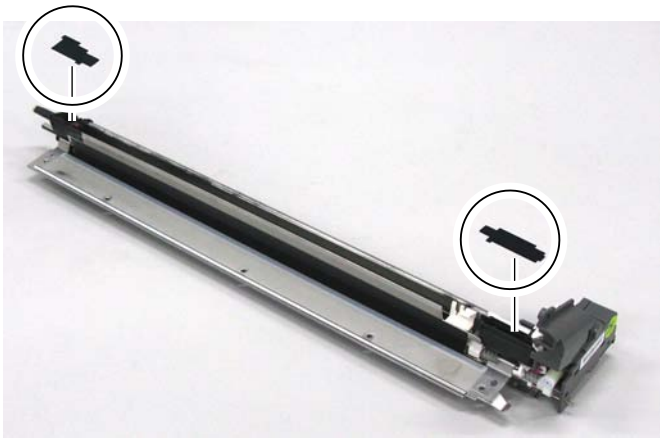
CAUTION:

In the case of replacing the Charging Wire on a Charging Wire basis, be sure to use the dedicated Charging Wire Tension Spring (97-5527) [A]. Do not use the Spring [B] attached to the Charging Wire.



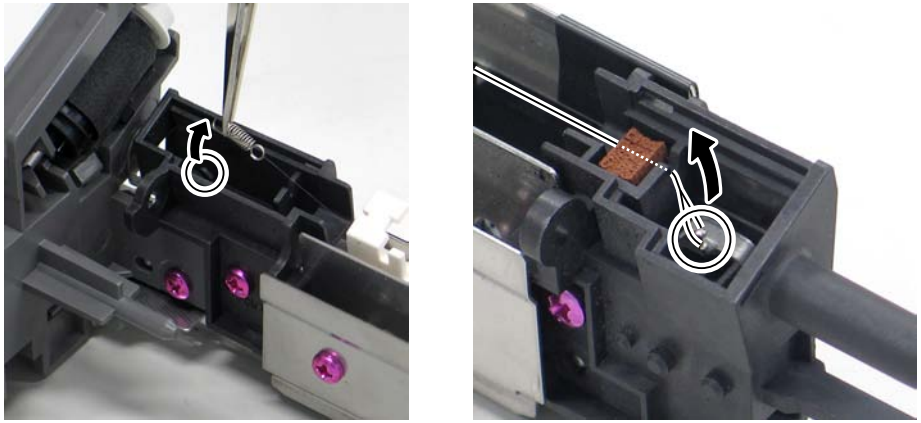

F-4-105

1) Remove the Pre-transfer Charging Assembly Covers (Front and Rear).



F-4-106

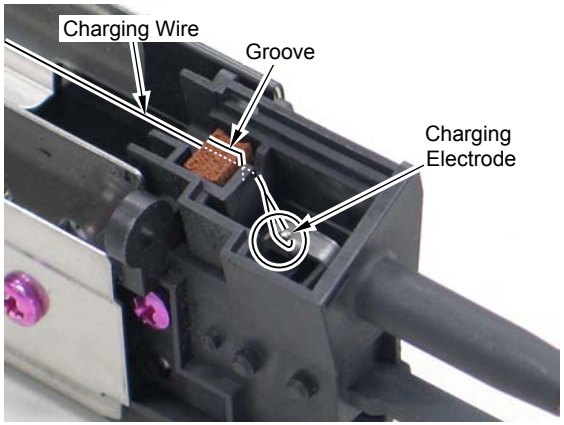
2) Use tweezers to remove the front Spring from the Hook and then remove the Charging Wire from the rear charging electrode.



F-4-107

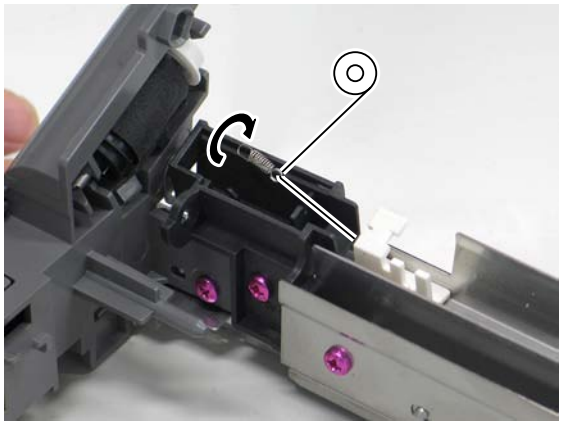
3) Untie approx. 5cm of the Charging Wire from the 0.06mm (wire-diameter) Charging Wire Reel to make a 2mm-diameter ring at the edge.
4) Cut the edge of the twisted Charging Wire with nippers.

5) Hook the ring to the rear charging electrode of the Pre-charging Assembly and put the ring through the rear groove and the sponge groove.




F-4-108

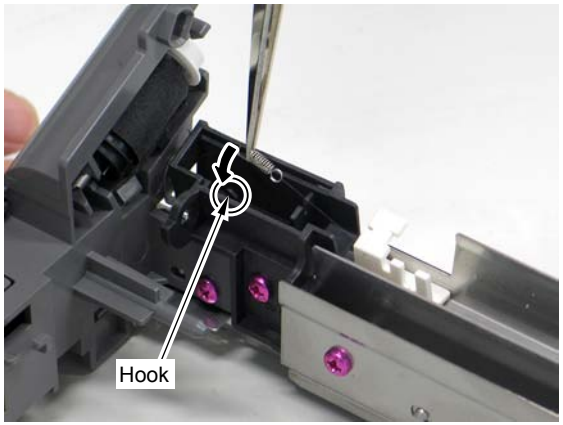
6) On the front side of the Pre-charging Assembly, hook the Charging Wire Tension Spring to the Charging Wire to twist with it.



F-4-109

7) Cut extra length of the Charging Wire with nippers.

8) Hold the tip of the Spring with tweezers and hook the Charging Wire to the groove to hook the Spring to the Hook.




F-4-110

9) Clean the Charging Wire with lint-free paper moistened with alcohol.
10) Install the Pre-transfer Charging Assembly Covers (Front and Rear).
11) Install the Pre-transfer Charging Assembly Cleaner and the Pre-transfer Charging Assembly Cleaner Holder.

<Processing when replacing the parts>

1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PO-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-EX)

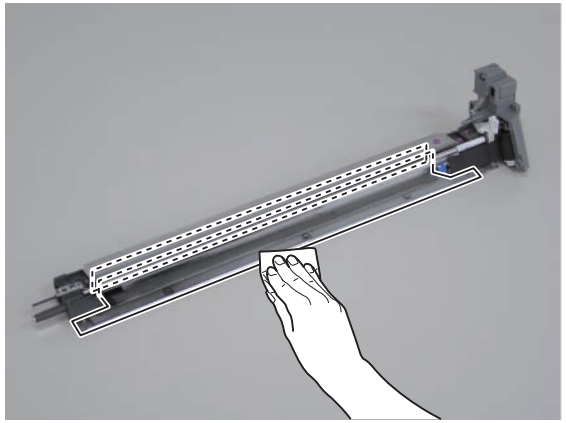
# Cleaning the Pre-transfer Charging Wire

<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Pre-transfer Charging Wire Cleaner Holder. (Refer to “Removing the Pre-transfer Charging Wire Cleaner, Cleaner Holder”)
5. Remove the Pre-transfer Charging Wire Cleaner. (Refer to page 4-101)
6. Remove the Pre-transfer Charging Wire. (Refer to page 4-104)

<Procedure>

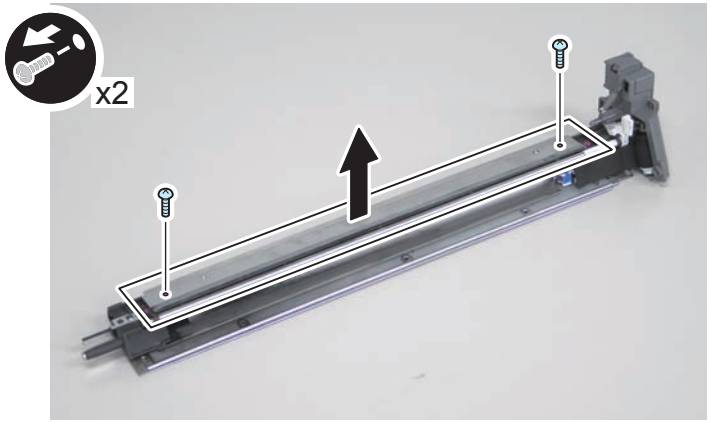
1) Clean the Shield Plate with lint-free paper moistened with alcohol.



F-4-111

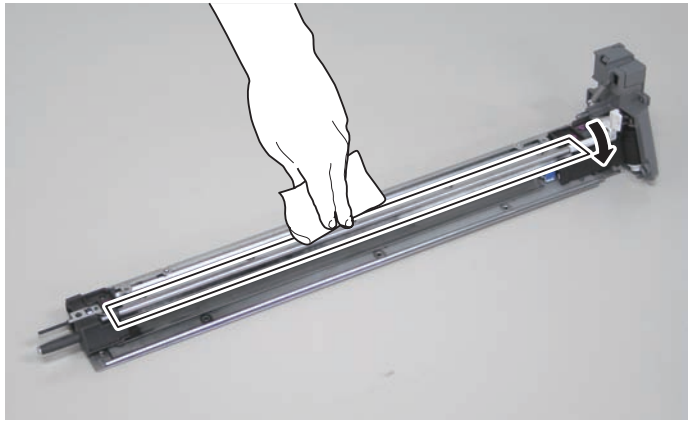
2) Remove the Plate.

- 2 Screws




F-4-112

3) While rotating the Dust Collecting Roller, clean it with lint-free paper.

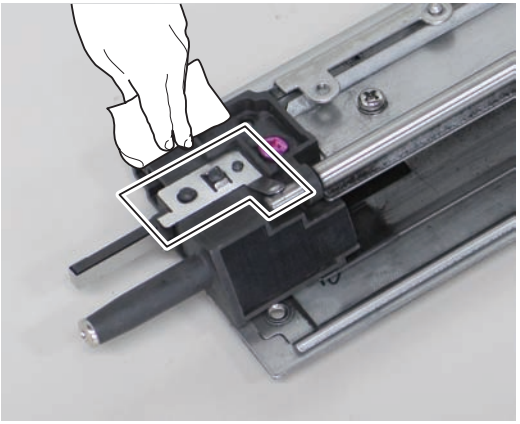


F-4-113

4) Remove toner in the toner collection area.

F-4-114

5) While rotating the Dust Collecting Roller, clean the electrode area with lint-free paper.



F-4-115

## Removing the Process Unit

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)

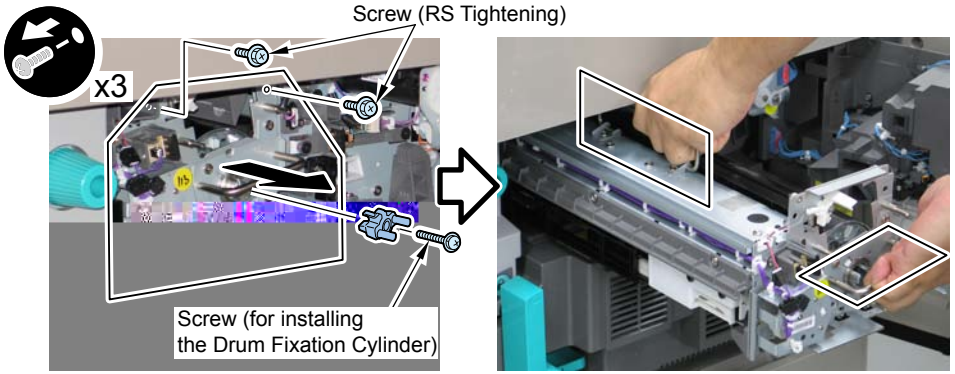
<Procedure>

CAUTION:
Do not touch the surface of the Photosensitive Drum.

1) Remove the Drum Fixation Cylinder to remove the Process Unit.

- 2 Screws
- 1 Screw (for installing the Drum Fixation Cylinder)

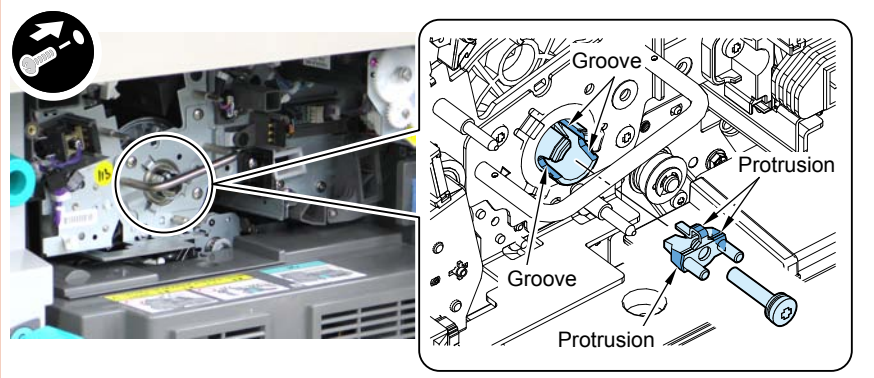
NOTE:
When removing the Process Unit, hold both the upper and front Handles to pull out the Process Unit.




F-4-116

CAUTION:Points to Caution at Installation

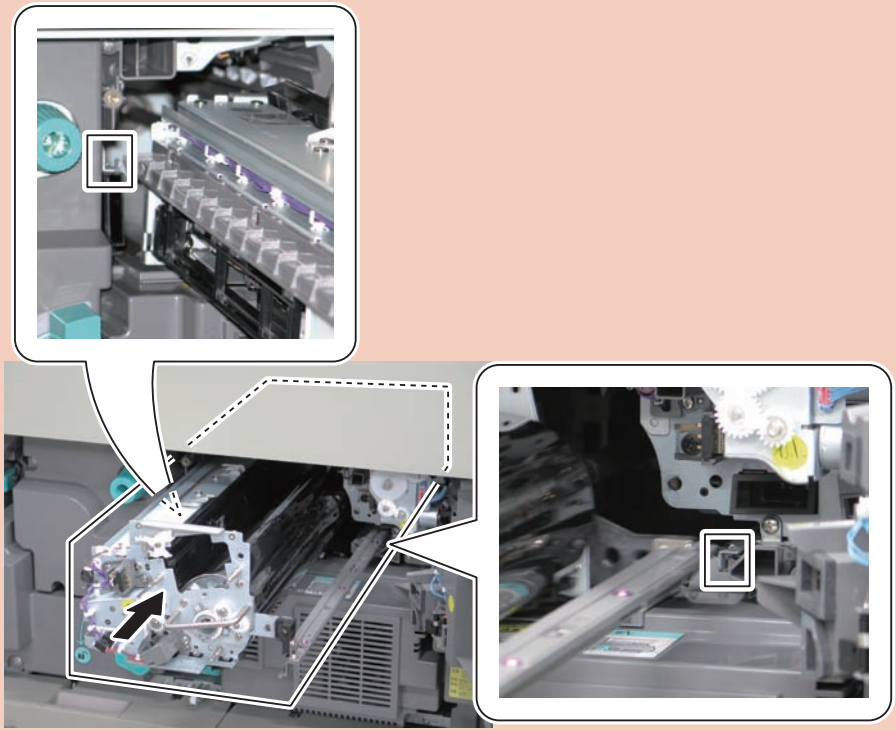
When installing the Process Unit, fit the 3 grooves at the edge of the Drum Shaft with the 3 protrusions of the Drum Fixation Cylinder to install the Drum Shaft Fixing Screw.




F-4-117

CAUTION:Points to Caution at Installation

Be sure to fit the Drum Cleaning Unit to the rail on the host machine and install it horizontally.



F-4-118

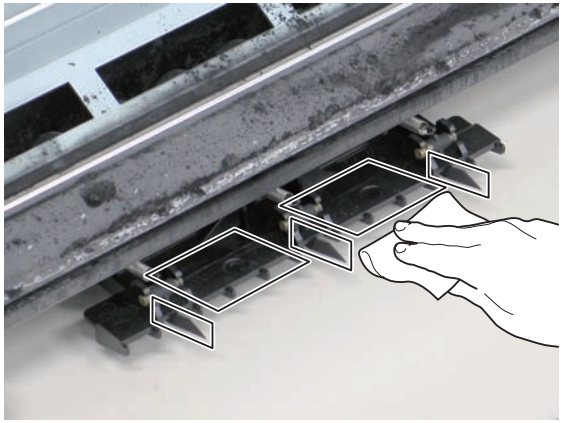
# Cleaning the Process Unit

<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Unit. (Refer to “Removing the Drum Cleaning Blade”)
6. Remove the Drum Unit. (Refer to page 4-115)

<Procedure>

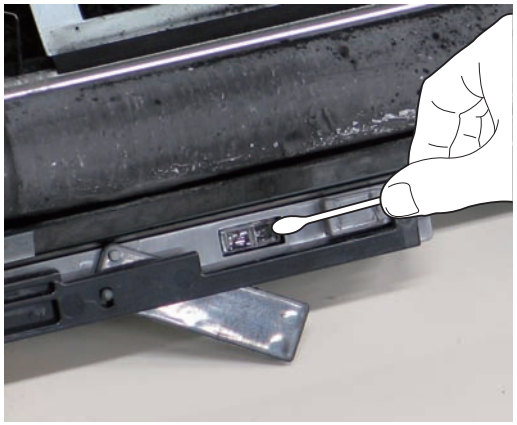
1) Clean the Separation Claw Mounting Base and Separation Claw with lint-free paper moistened with alcohol.



F-4-119

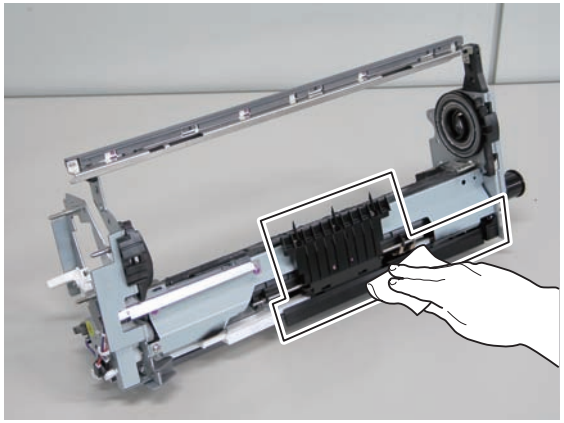
2) Clean the Patch Sensor with a wet and tightly-wrung cotton swab.

CAUTION:
Clean the Patch Sensor in the single direction, so that it is cleaned evenly.



F-4-120

3) Clean the rear side of the Process Unit with lint-free paper moistened with alcohol.



F-4-121

# Removing the Drum Cleaning Unit

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)

<Procedure>

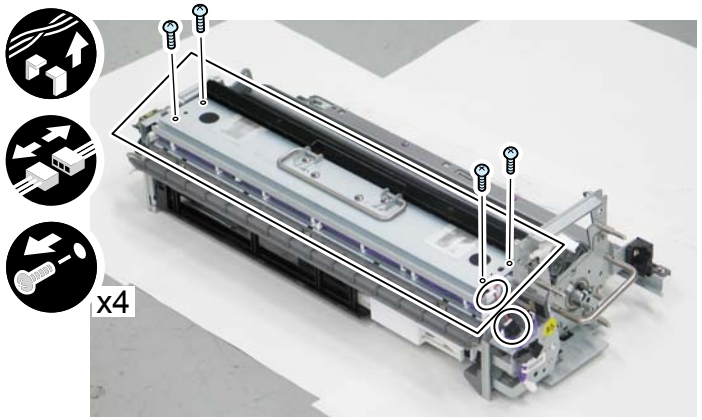
CAUTION:

Do not touch the surface of the Photosensitive Drum.

After removing the Drum Cleaning Unit, place paper over the Photosensitive Drum to block light.

1) Remove the Drum Cleaning Unit.

- Edge Saddle
- 1 Connector
- 4 Screws

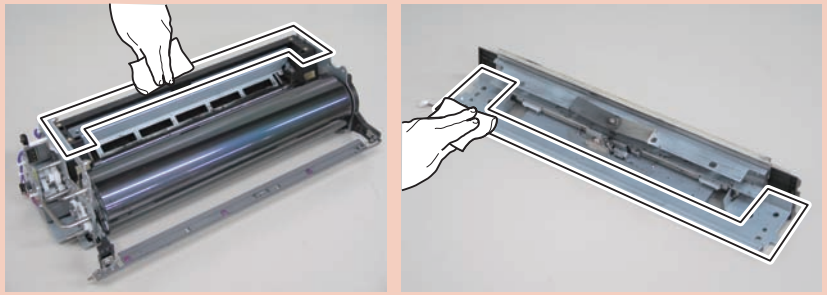



F-4-122

CAUTION:

When installing the Drum Cleaning Unit, clean the area shown with lint-free paper moistened with alcohol.

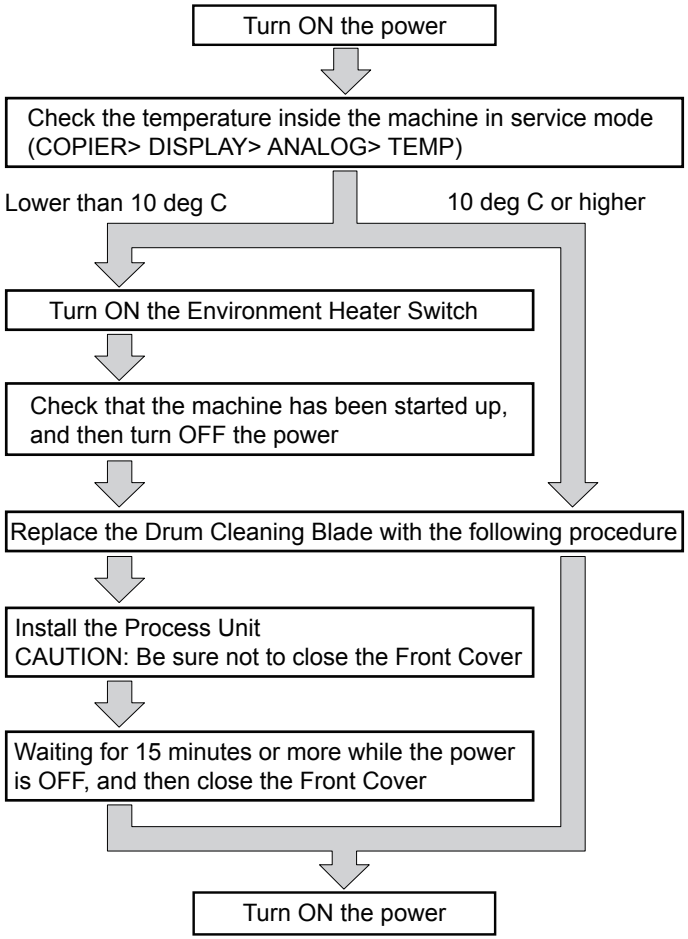
If the Drum Cleaning Unit is installed without removing toner, it cannot be installed in the correct position, causing the cleaning error.



F-4-123

# Removing the Drum Cleaning Blade

Procedure differs according to the temperature inside the machine. Be sure to perform the work by following the flow indicated below.




F-4-124

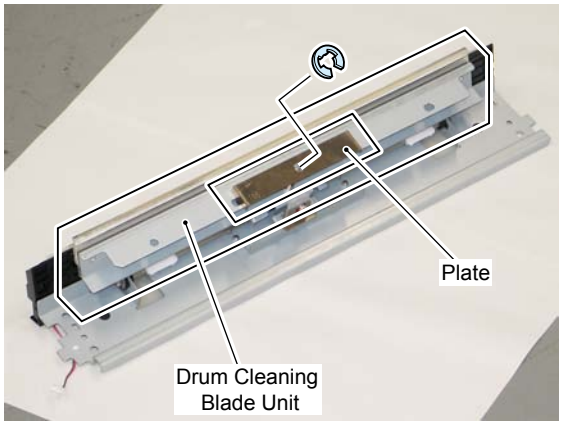
<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Unit. (Refer to page 4-111)

<Procedure>

1) Turn over the Drum Cleaning Unit to remove the Drum Cleaning Blade Unit.

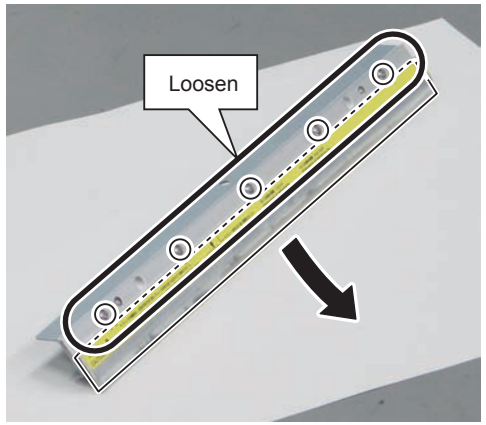
- 1 E-ring
- 1 Plate




F-4-125

2) Remove the Drum Cleaning Blade.

- 5 Screws (to loosen)



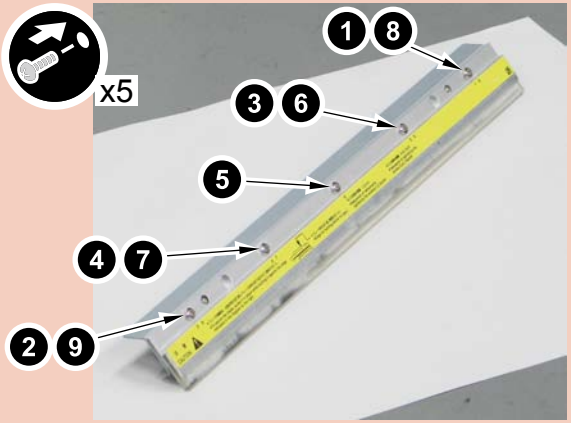

F-4-126

CAUTION:Points to Caution when Installing the Drum Cleaning Blade

Be sure to apply toner on the contact area (edge) on the Drum of the Drum Cleaning Blade. In particular, be sure to apply toner on both edges of the Blade.

CAUTION:Points to Caution when Installing the Drum Cleaning Blade Unit

1. Wipe out the toner on both edges of the Drum Cleaning Unit before installation.
2. Be sure to fit in the center position, and then temporarily tighten the screws following the numeric order (from 1 to 4) and also securely tighten the screws (from 5 to 9).




F-4-127

# Cleaning the Drum Cleaning Unit

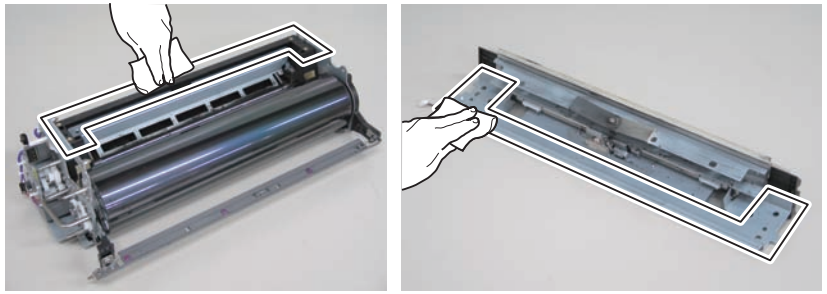
<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Unit. (Refer to “Removing the Drum Cleaning Blade”)

<Procedure>

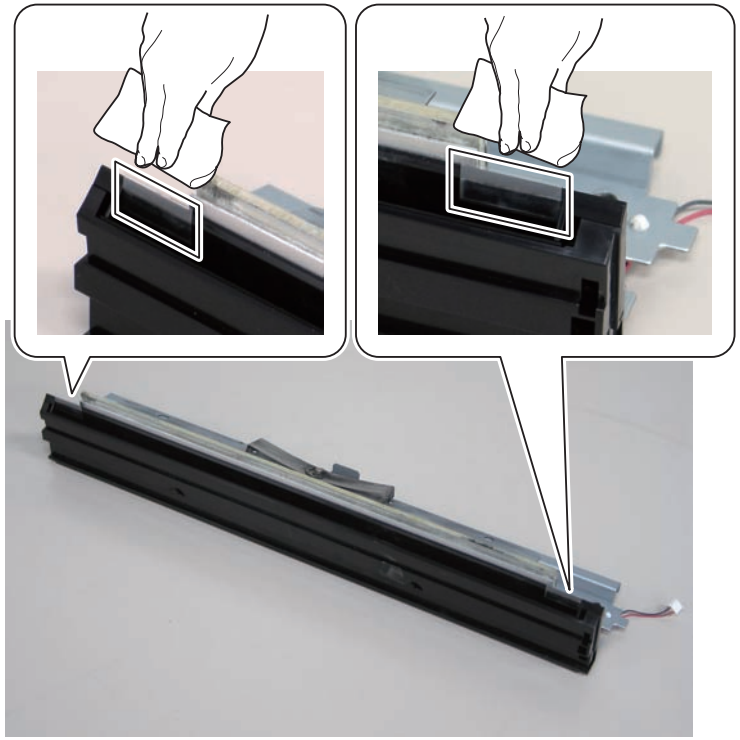
CAUTION:
Do not touch the surface of the Photosensitive Drum.

1) Clean the Drum Cleaning Unit Plate with lint-free paper moistened with alcohol.



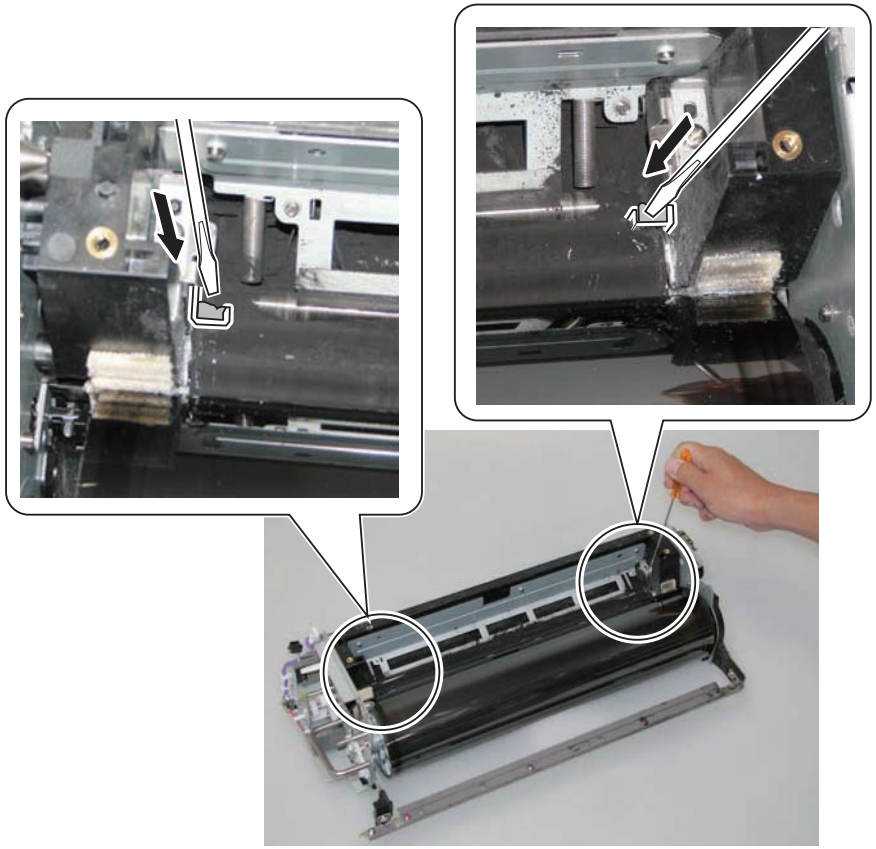
F-4-128

2) Clean the 2 Pre-exposure Plastic Films of the Drum Cleaning Blade Unit with lint-free paper.



F-4-129

3) Crumb toner clusters in the toner collection area and then clean it.



F-4-130

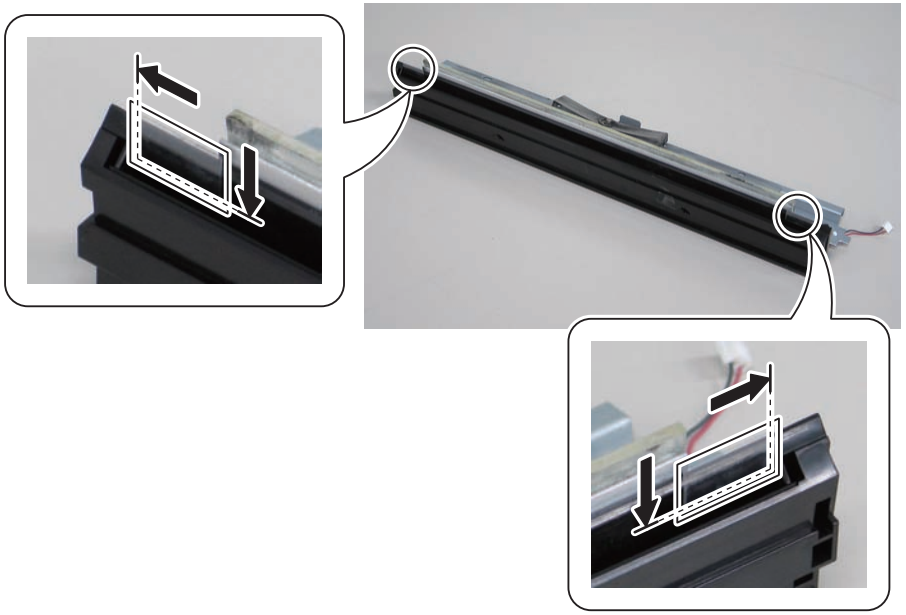
## Replacing the Pre-exposure Plastic Film

<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Unit. (Refer to “Removing the Drum Cleaning Blade”)

<Procedure>

1) Remove the Pre-exposure Plastic Film.
2) Fit the Pre-exposure Plastic Film to the edge and lower grooves of the Drum Cleaning Unit.



F-4-131

# Removing the Drum Unit

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Put paper on the Photosensitive Drum, so that it is not exposed to direct sunlight.
6. Remove the Drum Cleaning Blade. (Refer to page 4-111)

<Procedure>

CAUTION:

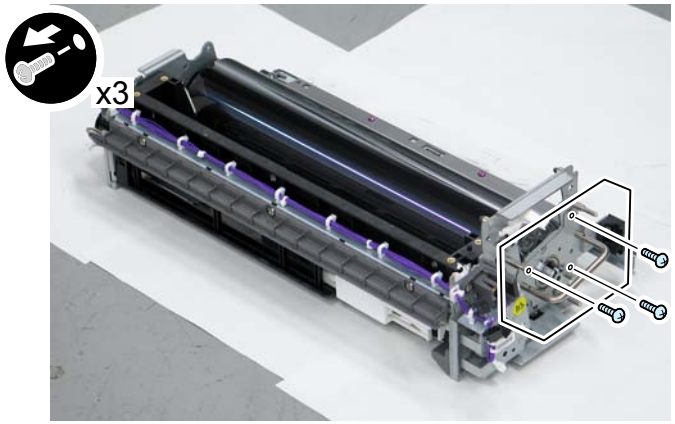
When handling the Process Unit and Photosensitive Drum, be sure to follow the following points to note.

1. When removing the Process Unit, be sure to block light to the Photosensitive Drum. Cover with the Photosensitive Drum Protection Sheet or wrap 5 or more papers around the drum to block light.
2. Do not place the Process Unit and Photosensitive Drum in a location where is exposed to direct rays of the sun (e.g. near the window).
3. Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
4. Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

When installing a new Photosensitive Drum, be sure to remove the Lightproof Sheet after installing the drum to the main body. In addition, be sure to rotate the drum counterclockwise at removal of the Lightproof Sheet. If the drum is rotated clockwise, the Drum Cleaner Blade may be everted.

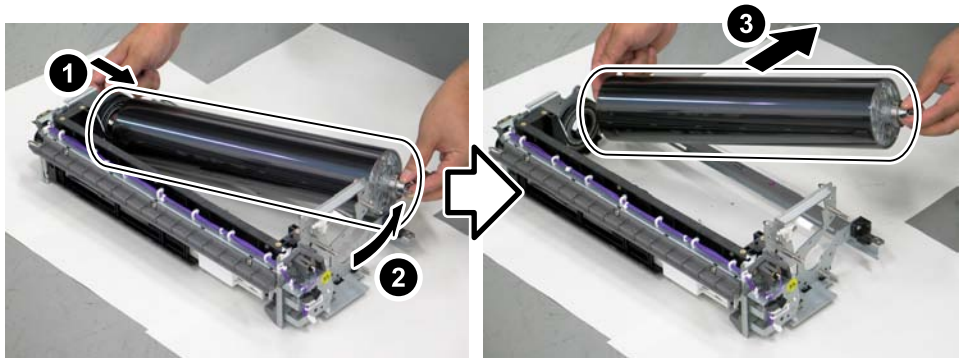
1) Remove the Drum Retainer Plate (tentative name).

- 3 Screws




F-4-132

2) Push to move the rear side of the Photosensitive Drum with your fingers and pull out the Drum Unit to the front to remove.




F-4-133

# Removing the Photosensitive Drum

<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Put paper on the Photosensitive Drum, so that it is not exposed to direct sunlight.
6. Remove the Drum Cleaning Blade. (Refer to page 4-111)
7. Remove the Drum Retainer Plate.
8. Remove the Drum Unit. (Refer to page 4-115)

<Procedure>

CAUTION:

When handling the Process Unit and Photosensitive Drum, be sure to follow the following points to note.

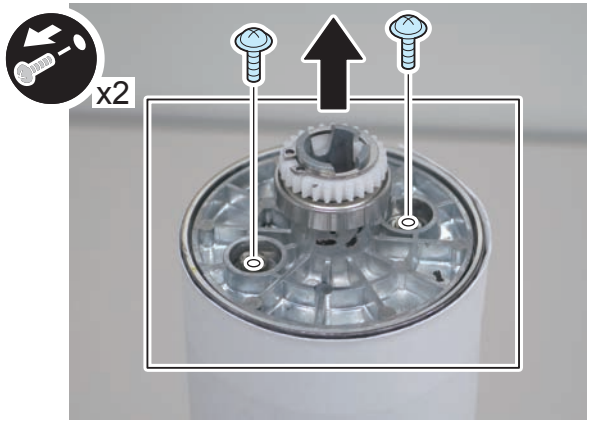
1. When removing the Process Unit, be sure to block light to the Photosensitive Drum. Cover with the Photosensitive Drum Protection Sheet or wrap 5 or more papers around the drum to block light.
2. Do not place the Process Unit and Photosensitive Drum in a location where is exposed to direct rays of the sun (e.g. near the window).
3. Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
4. Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

When installing a new Photosensitive Drum, be sure to remove the Lightproof Sheet after installing the drum to the main body. In addition, be sure to rotate the drum counterclockwise at removal of the Lightproof Sheet. If the drum is rotated clockwise, the Drum Cleaning Blade may be everted.

1) Wrap paper around the Drum Unit to block light.

F-4-134

2) Remove the 2 screws and the Flange.




F-4-135

3) Disconnect the connector and remove the Drum Heater.

F-4-136

4) Remove the Heater Control PCB Unit.

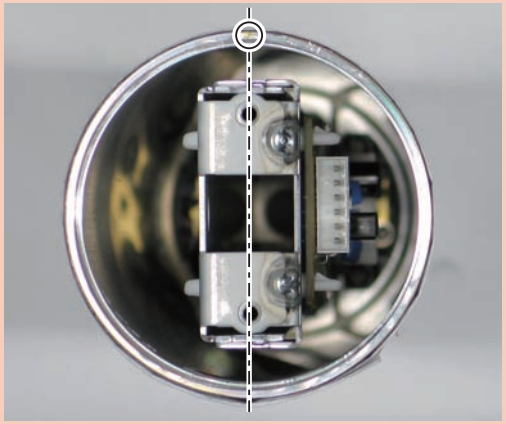
F-4-137

NOTE:
Serial ID of the drum is written on the seal inside the drum.

F-4-138

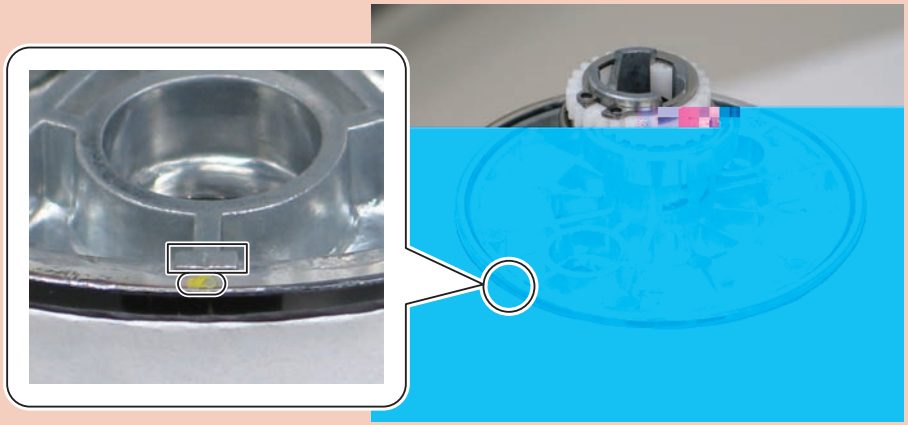
CAUTION:

- Align the yellow marker of the drum with the hole position of the unit when installing the Heater Control PCB Unit to the drum.



F-4-139

- When securing the Flange, align the protrusion of the Flange with the yellow marker to install.



F-4-140

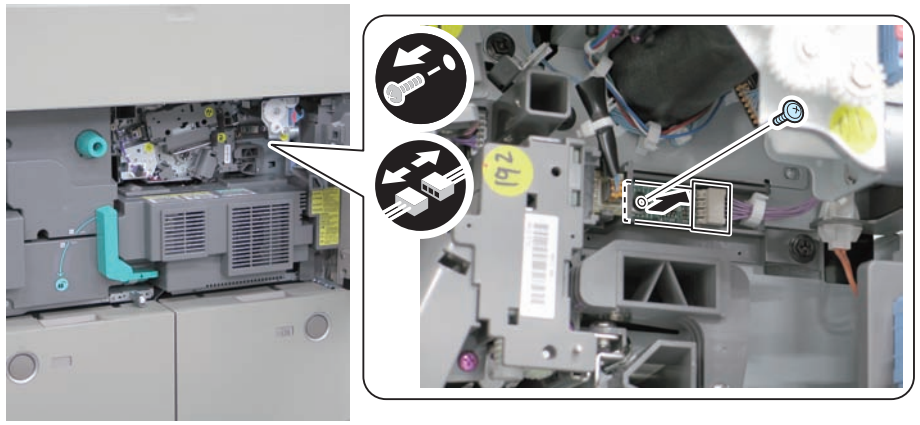
NOTE:
If the yellow marker is not aligned with the protrusion, the following control cannot be executed properly.
1. 2D shading
2. D-MAX control
3. D-half control

<Processing when reaplacing the parts>

<Procedure of adjustment>

1)Remove the EEPROM.

- 1 Screw
- 1 Connector



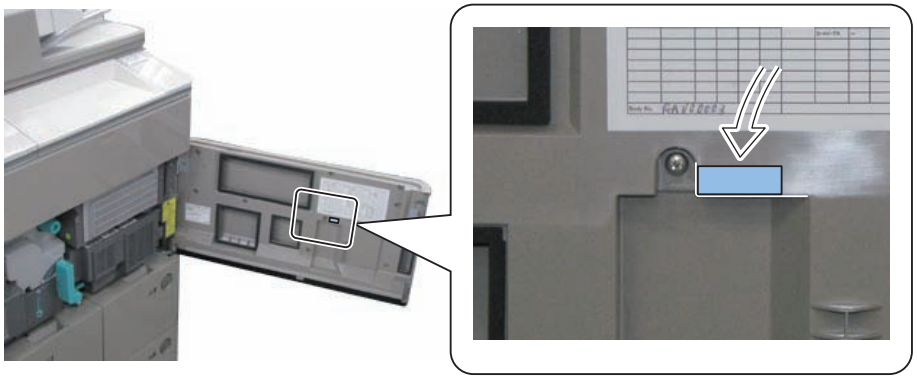
F-4-141

3)Replace with the ROM packaged with the Drum.

CAUTION:

If the ROM is not replaced, the replaced drum and the drum-unique data stored in the ROM are not matched. As a result, the 2D shading is not functioned normally.

4) Affix the ID Label included in the drum to the inside of the Front Cover.

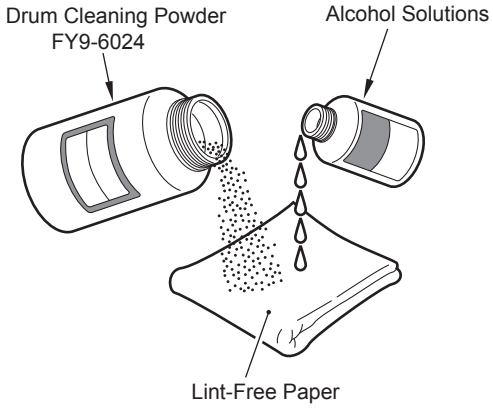


F-4-142

5) Activate the drum replacement mode. (COPIER>FUNCTION>INSTALL>DRM-INIT)
6) Check the 2-dimensional shading ROM. (COPIER>FUNCTION>2D-SHADE>2D-READ)
6) Execute Auto Adjust Gradation.

## Cleaning Photosensitive Drum

1) Moisten lint-free paper with 5 to 10 cc of alcohol solutions ; then, pour 0.2 to 0.3 g of the drum cleaning powder (FY9-6024) on the lint-free paper.
2) While butting the lint-free paper relatively strongly against the photosensitive drum, wipe the surface of the drum from the front to the rear and from the rear to the front.

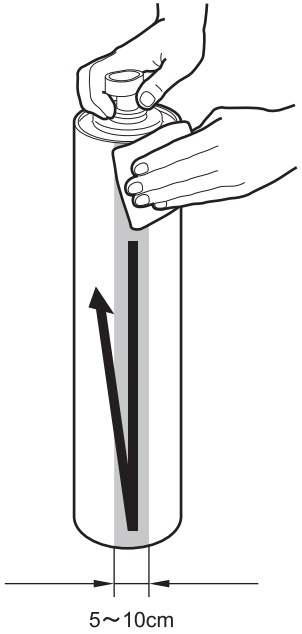



F-4-143

CAUTION:
- Keep the widths of cleaning to 5 to 10 cm in the peripheral direction of the drum.
- Move the lint-free paper back and forth 15 to 20 times over a single area. Forcing the lint-free paper will not affect the life of the drum.

3) After the alcohol has evaporated, dry wipe the surface with the lint-free paper. If the area is uneven, go back to the step 1, and increase the back-and-forth movements.

4) Rotate the drum for the width (5 to 10 cm), and repeat the step 1 through 3 until the entire area of the surface has been cleaned.




F-4-144

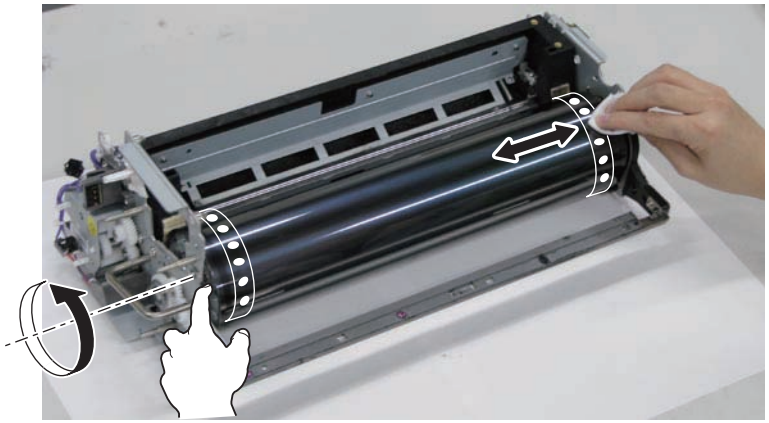
## Cleaning the Drum edges

<Preparation>

1. Open the Inner Cover. (Refer to “Removing the Primary Charging Assembly”)
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Put paper on the Photosensitive Drum, so that it is not exposed to direct sunlight.
6. Remove the Drum Cleaning Blade. (Refer to page 4-111)
7. Remove the Drum Retainer Plate.
8. Remove the Drum Unit. (Refer to page 4-115)

<Procedure>

1) Rotate the Drum and dry wipe the soiling on the surface of the Drum edges with lint-free paper.



F-4-145

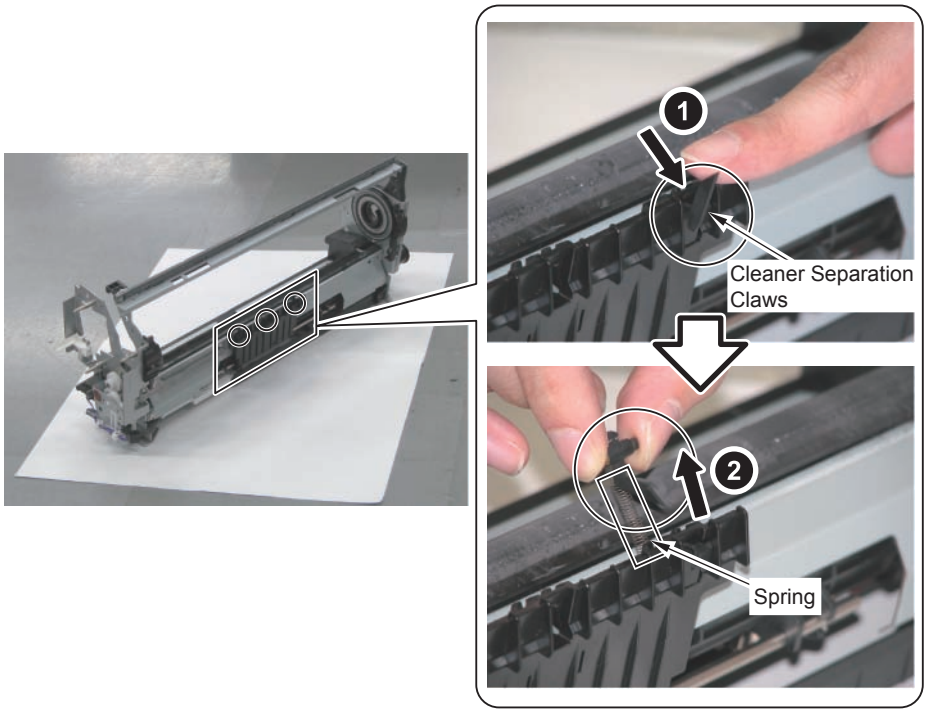
## Removing the Cleaner Separation Claw

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Blade. (Refer to page 4-111)
6. Remove the Drum Unit. (Refer to page 4-115)

<Procedure>

1) Put the Process Unit Frame perpendicularly.
2) Remove the 3 Cleaner Separation Claws.
- 1 Spring each




F-4-146

## Removing the Side Seal

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Blade. (Refer to page 4-111)
6. Remove the Drum Unit. (Refer to page 4-115)

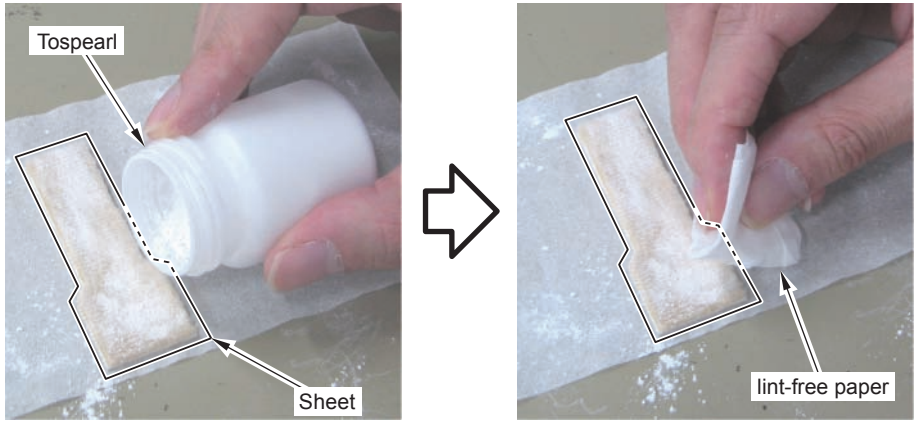
<Procedure>

1) Remove the Side Seals (Front and Rear).

F-4-147

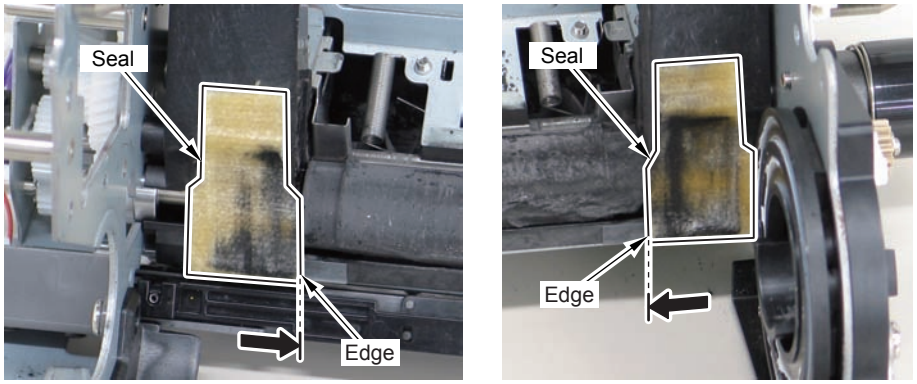
2) Apply Tospearl on the surfaces of the new Drum Side Seals (Front and Rear) and adhere it uniformly with lint-free paper.

NOTE:
In order to reduce adhesion of toner at both ends of the Photosensitive Drum




F-4-148

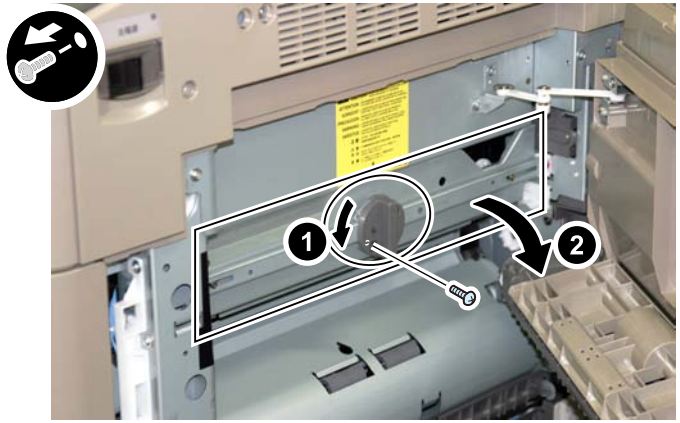
3) Align the Drum Side Seals (Front and Rear) with the edges of the sheets and affix them.




F-4-149

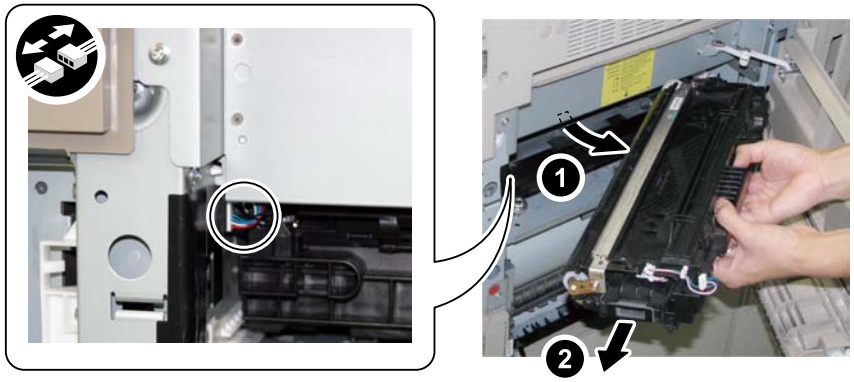
## Removing the Developing Assembly

1) Place paper underneath the Developing Assembly.
2) Open the Right Cover.
3) Turn the Tab to open the Plate Cover.
- 1 Screw




F-4-150

4) Remove the Developing Assembly by following the Rail.
- 1 Connector

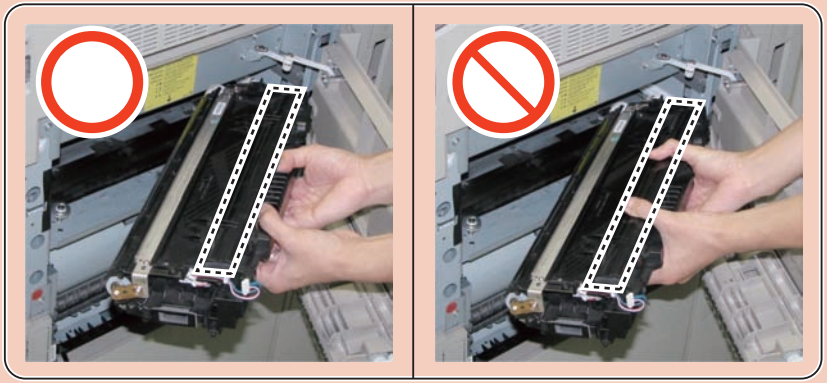



F-4-151

CAUTION:How to Hold the Developing Assembly

When holding the Developing Assembly, be sure to hold the handle of the Developing Assembly as shown in the figure.

Do not touch the shutter area of the Developing Assembly. The shutter area is slippery, so it may cause a fall of the assembly.

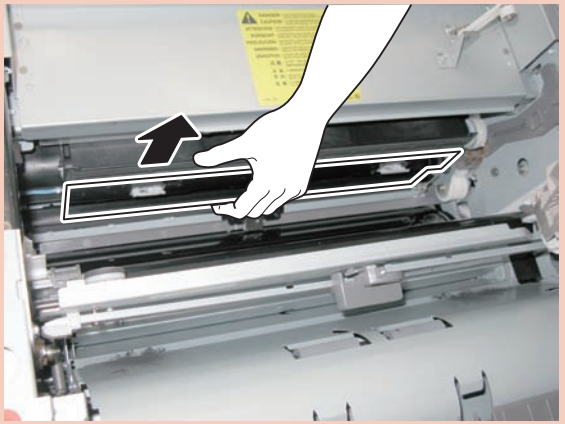


F-4-152

CAUTION:Points to Caution when Installing the Developing Assembly

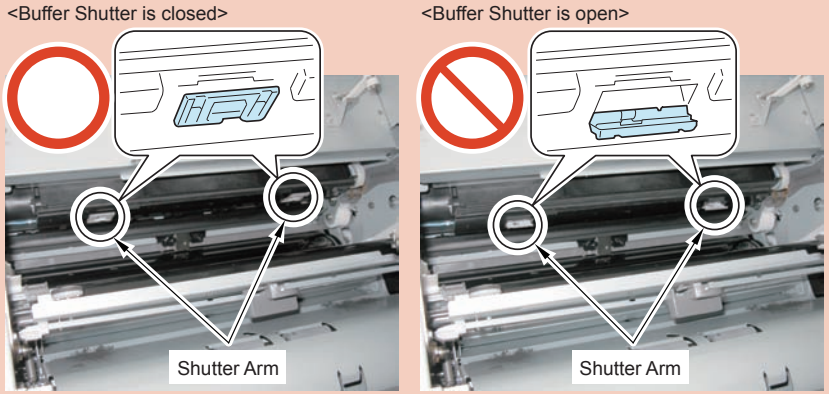
Before installing the Developing Assembly, check that the Buffer Shutter is not open.

If the Developing Assembly is forcibly installed while the Buffer Shutter is open, the shutter may get damage. When the Buffer Shutter is open, pull out the shutter to the front and then close it.



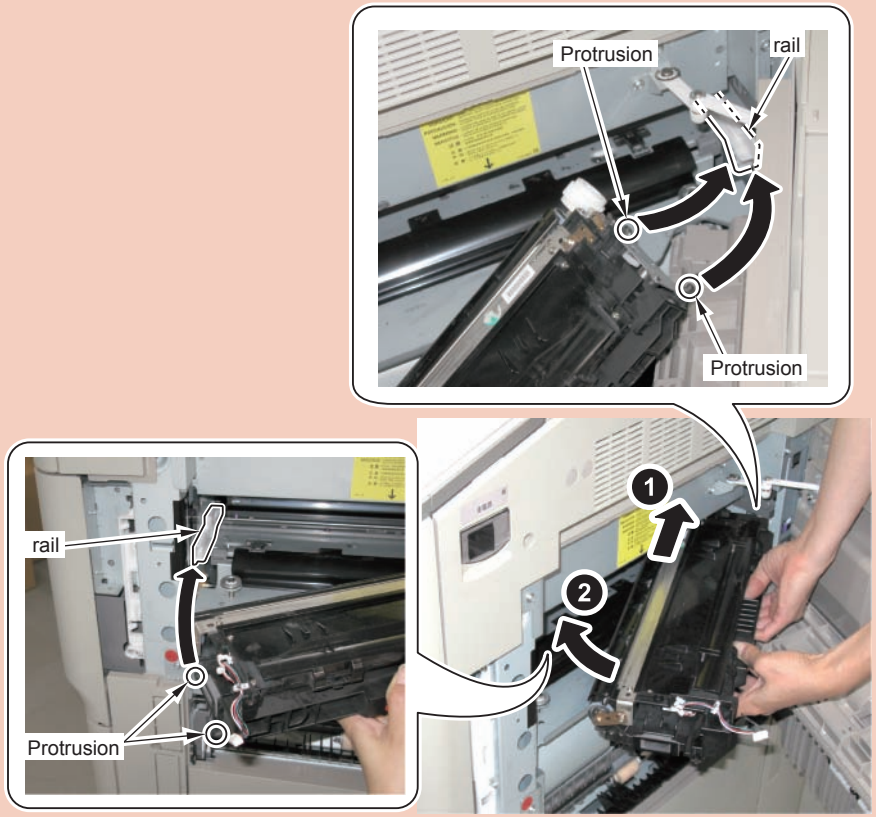
F-4-153

Whether the shutter is open or not can be checked with the Shutter Arm.



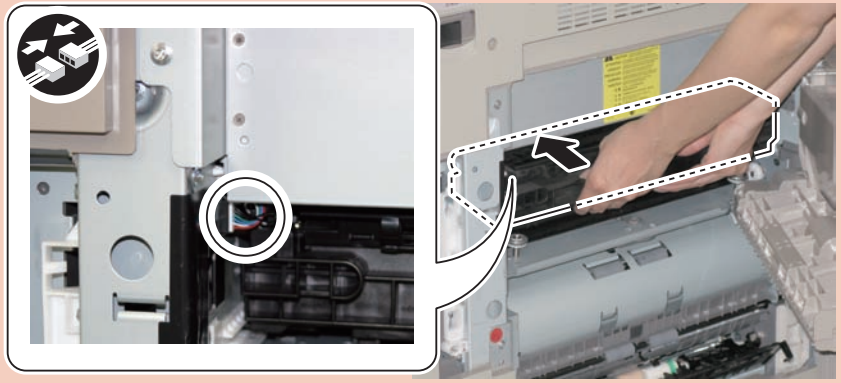

F-4-154

- As shown in the figure, hold the Developing Assembly and fit the protrusions at right and left sides of the Developing Assembly to the rail of the host machine.



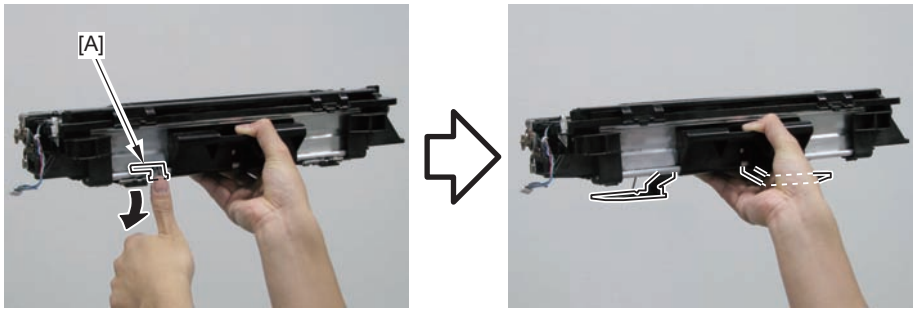

F-4-155

- Install the Developing Assembly horizontally by following the rail.



F-4-156

5) Push the [A] part of the Developing Assembly and extend the legs from the assembly.




F-4-157

CAUTION:

If the Developing Assembly is placed without extending the legs, it may cause the developing error due to scratches on the assembly.

6) Place the Developing Assembly.

F-4-158

NOTE:
When the Developing Assembly is put on the floor or the desk, be sure to place paper underneath to work on the Developing Assembly.

<Processing when replacing the parts>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>DVG-CYL)
2) Supplying Developing Assembly toner (COPIER>FUNCTION>INSTALL>TONER-S)

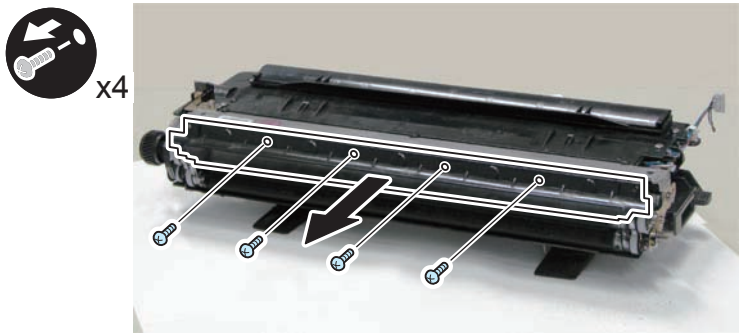
## Cleaning the Developing Assembly

<Preparation>

1. Remove the Developing Assembly. (Refer to page 4-122)

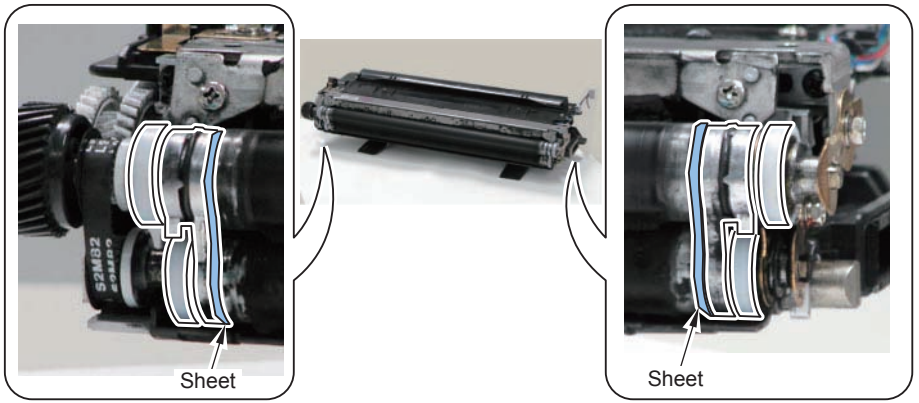
<Procedure>

1) Remove the Developing Sleeve Cover.
- 4 Screws




F-4-159

2) Clean the 4 Developing Rollers with lint-free paper moistened with alcohol while rotating them.
3) Clean the area outside of the sheet on the 2 Developing Sleeve Holders with lint-free paper moistened with alcohol.




F-4-160

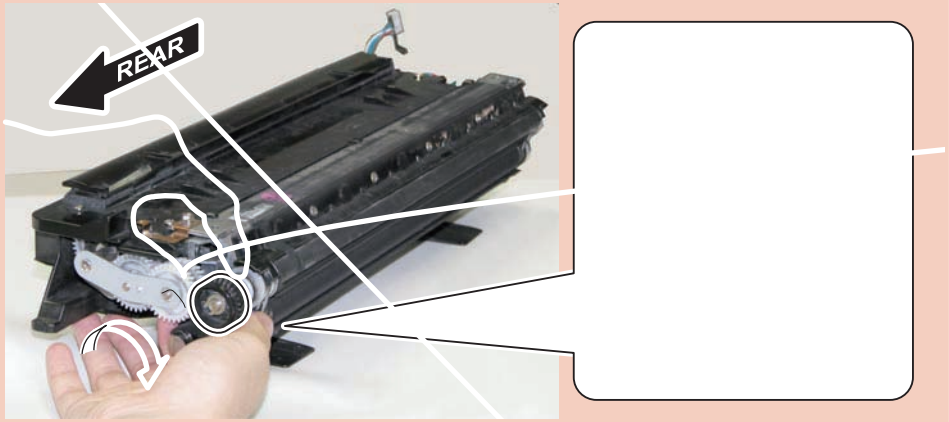
4) Install the removed Developing Sleeve Cover.

- 4 Screws

CAUTION: How to Check Scratches or Foreign Particles on the Developing Sleeve

While engaging the Developing Lower Sleeve with the inside of the Developing Assembly by pushing the Developing Roller at lower side, rotate the gear a full turn or more clockwise by viewing it from front side and check whether there are any scratches or foreign particles in the Developing Sleeve.

- When pushing the Developing Roller, be sure to hold the Developing Roller at lower side and [A] part of the Developing Assembly.
- Be sure to rotate the gear clockwise, and be careful not to rotate it counterclockwise.
- If rotating the gear without pushing the Developing Roller, toner will be accumulated between the Developing Lower Sleeve and the seal (Toner clusters). If pushing the Developing Assembly against the drum in this condition, the Developing Lower Sleeve does not move to the appropriate position because of the toner clusters. As a result, the gap between the Developing Upper Sleeve and the drum (SD gap) will be widened. It causes low density at rear or deterioration of developer because it becomes hard to deposit toner onto the drum.[A]



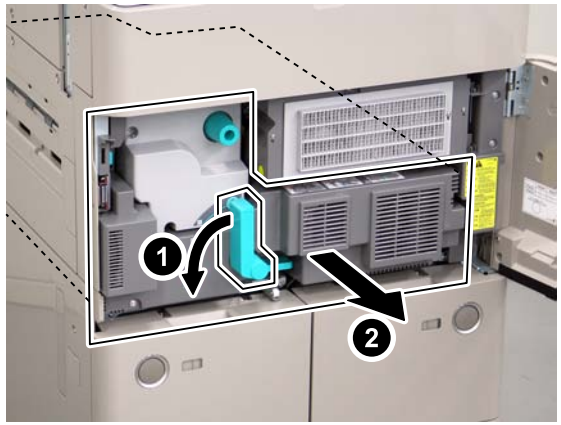
# Removing the ETB Unit

<Preparation>

1. Pull out the Fixing Feed Unit.

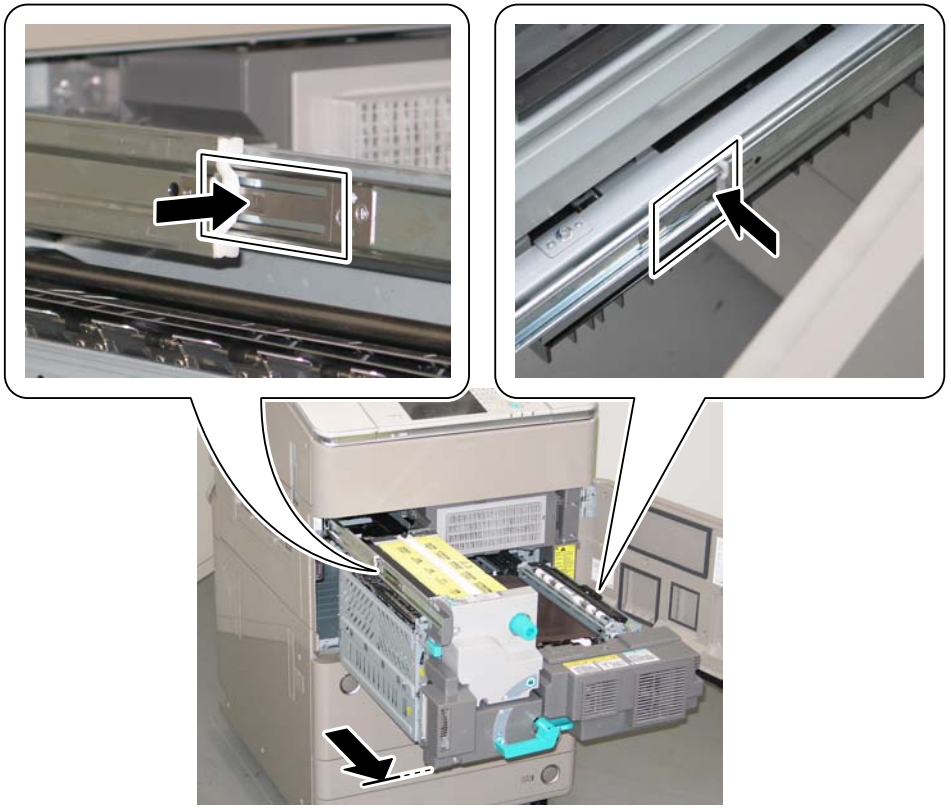
1-1) Open the Front Cover.

1-2) Turn the Fixing Feed Unit Pressure Release Lever in the direction of the arrow to pull out the Fixing Feed Unit.




F-4-164

1-3) Push to release the Release Springs at both sides of the Rail, and then further pull out the Fixing Feed Unit until it stops.



F-4-165

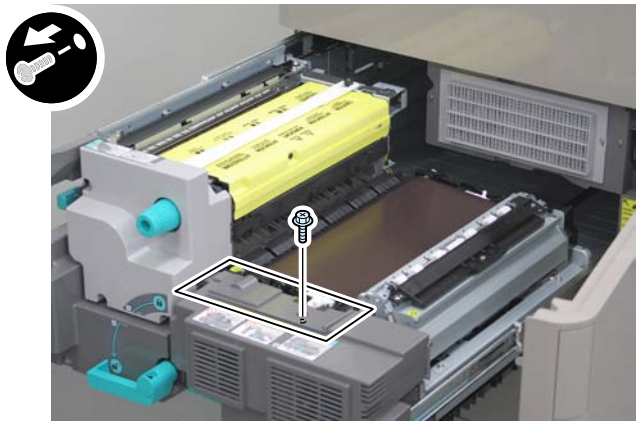
CAUTION:

Do not touch the surface of the ETB when handling the ETB Unit.

<Procedure>

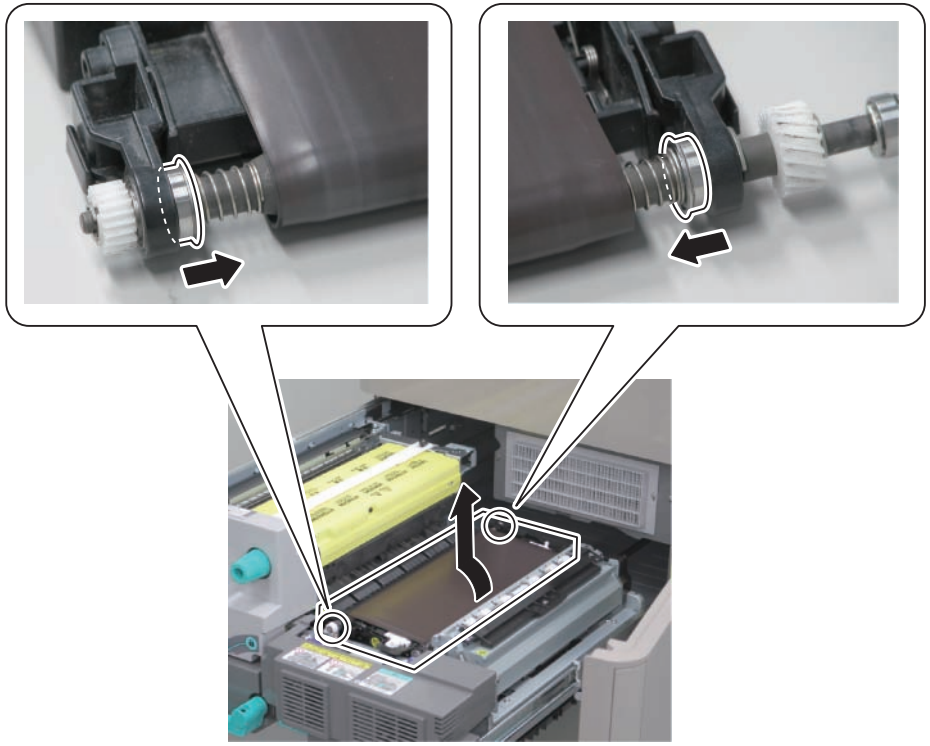
1) Remove the Fixing Feed Right Front Upper Cover.

- 1 Screw



F-4-166

2) Hold the 2 Handles to remove the ETB Unit in the direction of the arrow.



F-4-167

<Processing when replacing the parts>

1) Clear the ETB control counter. (COPIER>FUNCTION>CLEAR>TR-BLT)
   Parts counter (COPIER>COUNTER>DRBL-1>TR-BLT) is also cleared coincidentally.

# Removing the ETB

<Preparation>

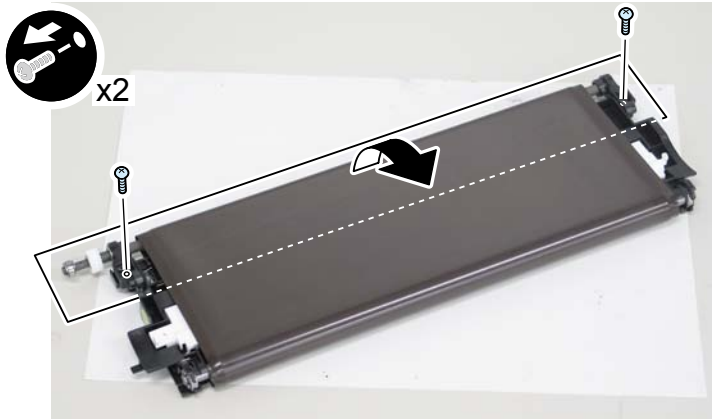
1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)

CAUTION:
Do not touch the surface of the ETB when handling the ETB Unit.

<Procedure>

1) Fold the ETB Drive Roller Unit.

- 2 Screws




F-4-168

2) Set up the ETB Unit to remove the Roller Unit from the ETB.

F-4-169

CAUTION:

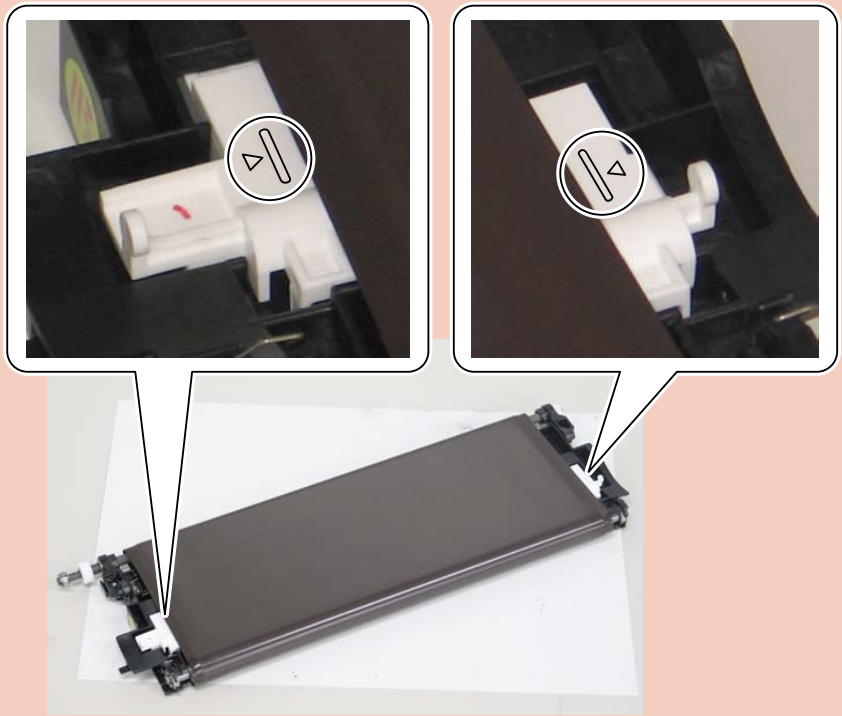
- Be sure to hold within 10mm from both edges of the ETB when handling the ETB.
- Do not touch the surface of the ETB Drive Roller and the Transfer Roller; otherwise, it can cause image faults.

<Processing when replacing the parts>

1) Clear the ETB control counter. (COPIER>FUNCTION>CLEAR>TR-BLT)
   Parts counter (COPIER>COUNTER>DRBL-1>TR-BLT) is also cleared coincidentally.

CAUTION:Points to Caution when Installing the ETB

Set the ETB to make the ETB located inside the Guides at both edges.



F-4-170

## Cleaning the ETB

<Preparation>

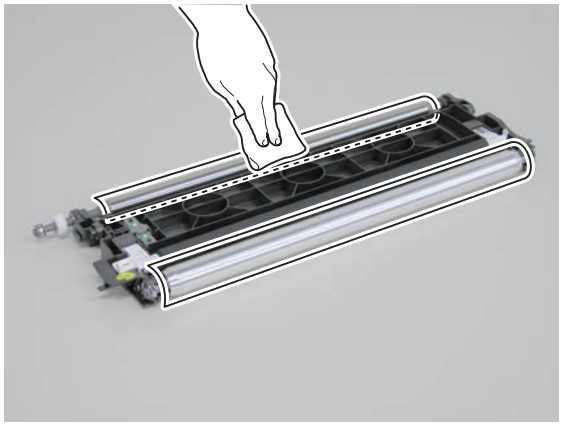
1. Pull out the Fixing Feed Unit. (Refer to “Removing the ETB”)
2. Remove the ETB Unit. (Refer to page 4-127)
3. Remove the Roller Unit from the ETB Unit.

<Procedure>

1) Clean the Transfer Roller and Drive Roller with lint-free paper moistened with alcohol.

CAUTION:

Do not touch the surface of the ETB Drive Roller and the Transfer Roller; otherwise, it can cause image faults.



F-4-171

# Removing the Transfer Roller

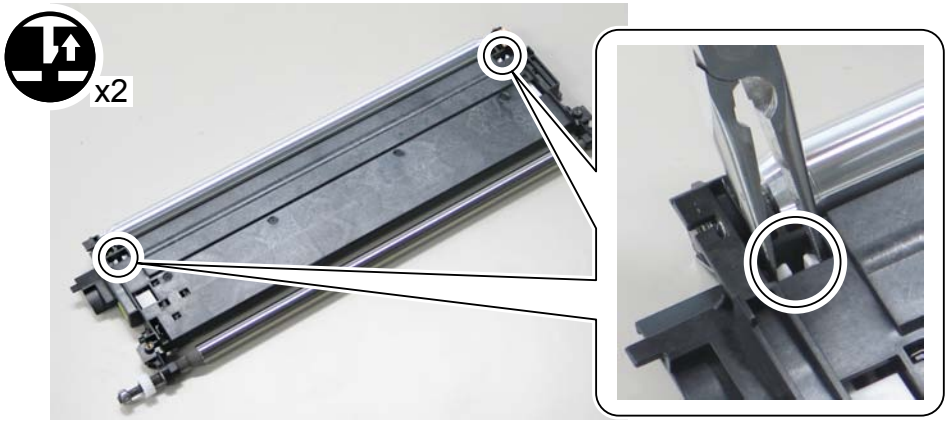
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)
3. Remove the ETB. (Refer to page 4-129)

CAUTION:
Do not touch the surface of the ETB Drive Roller and the Transfer Roller; otherwise, it can cause image faults.

<Procedure>

1) Turn over the Roller Unit to remove the Claw of the Transfer Roller Shaft Support with needlenose pliers.




F-4-172

2) Remove the Transfer Roller Shaft Support from the Transfer Roller.

F-4-173

NOTE:
When installing the Transfer Roller Shaft Support to the Roller Unit, be sure to check that the bosses of the Transfer Roller Shaft Support are fitted into the Springs.

F-4-174

## Removing the ETB Cleaning Blade

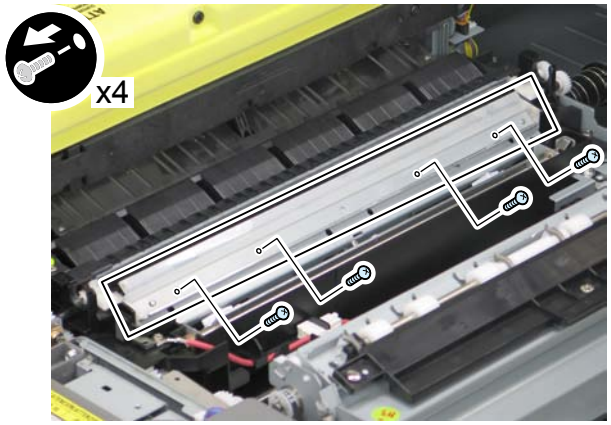
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)

<Procedure>

1) Remove the ETB Cleaning Blade.

- 4 Screws




F-4-175

## Removing the ETB Brush Roller

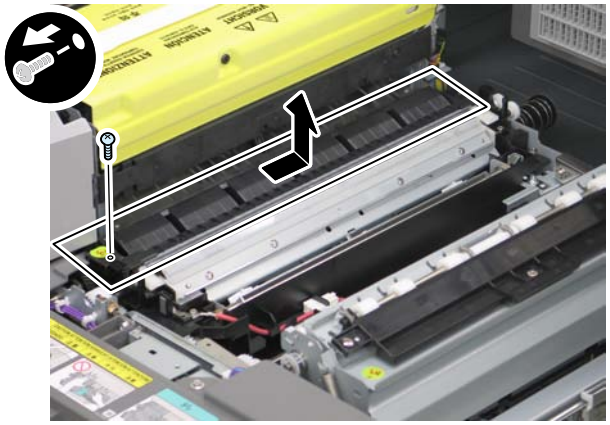
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)

<Procedure>

1) Remove the Post-transfer Guide.

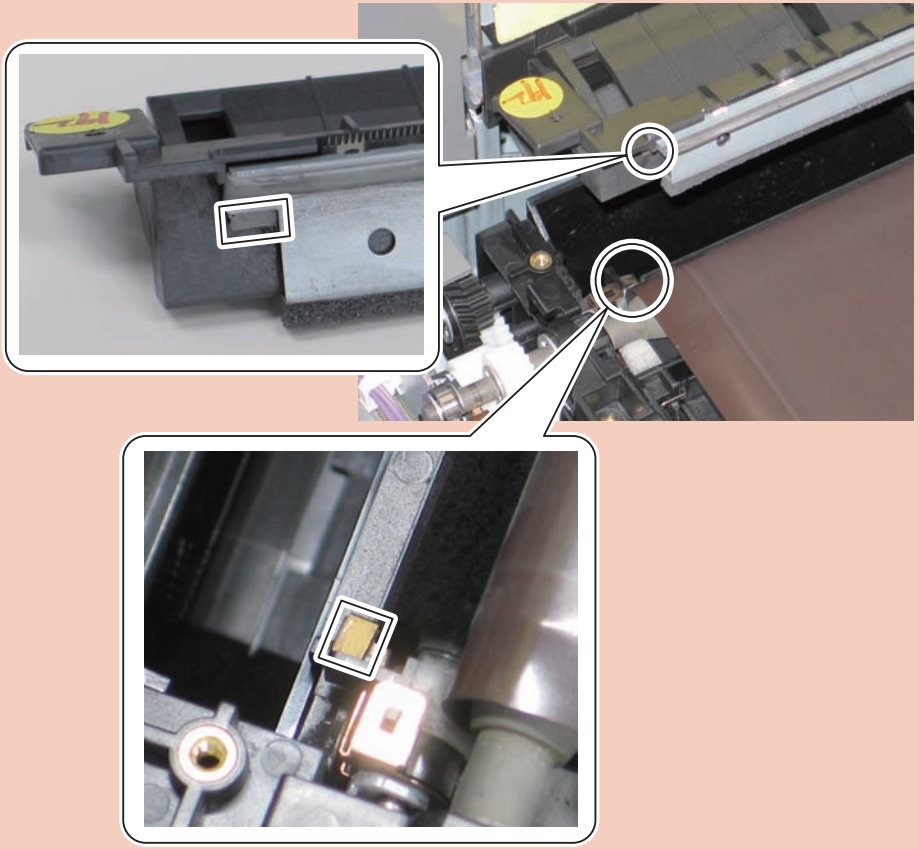
- 1 Screw



F-4-176

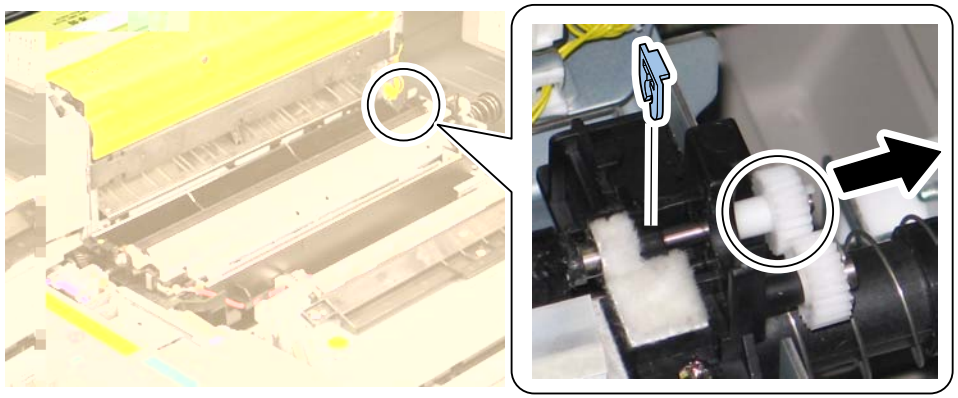
CAUTION:

- Be sure to keep in contact with the Grounding Plate when installing the Post-transfer Guide.
- Do not deform the Grounding Plate when installing the Post-transfer Guide.



F-4-177

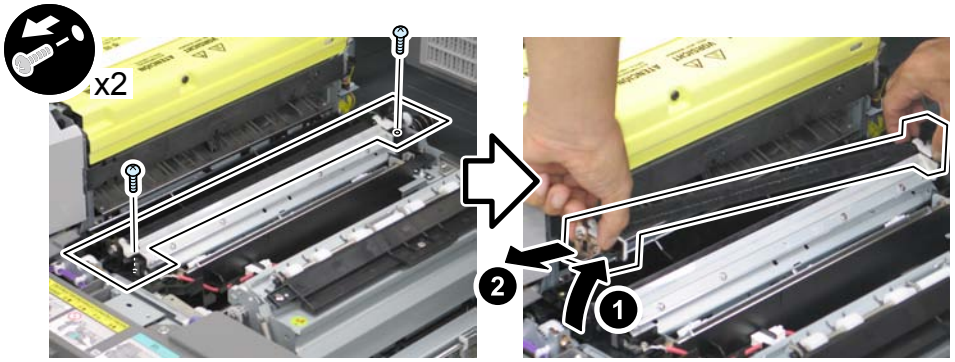
2) Remove the Connection Gear and the N-ring from the ETB Brush Roller.



F-4-178

3) Remove the ETB Brush Roller Unit.

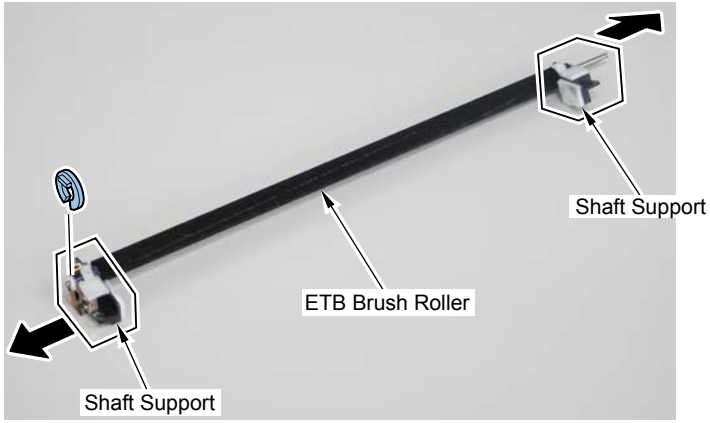
- 2 Screws




F-4-179

4) Remove the Shaft Support from the ETB Brush Roller.

- 1 N-ring




F-4-180

# Removing the Waste Toner Container

1) Remove the Right Rear Lower Cover.

- 1 Screw

F-4-181

2) Remove the Waste Toner Container.

F-4-182

NOTE:
In the case of toner spill when removing the Waste Toner Container, be sure to wipe out the spilled toner.
After the Waste Toner Container is removed, be sure to cover the Waste Toner Container with the Cap attached in the side.
When the Waste Toner Container is removed outside the machine, be sure to promptly cover with the Cap to prevent toner scattering.

<Processing when replacing the parts>

1) Set a new Waste Toner Container.
2) Clear the waste toner counter.(COPIER>COUNTER>MISC>WST-TNR)

# Removing the Drum Heater

<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Put paper on the Photosensitive Drum, so that it is not exposed to direct sunlight.
6. Remove the Drum Cleaning Blade. (Refer to page 4-111)
7. Remove the Drum Retainer Plate.
8. Remove the Drum Unit. (Refer to page 4-115)

<Procedure>

CAUTION:

When handling the Process Unit and Photosensitive Drum, be sure to follow the following points to note.

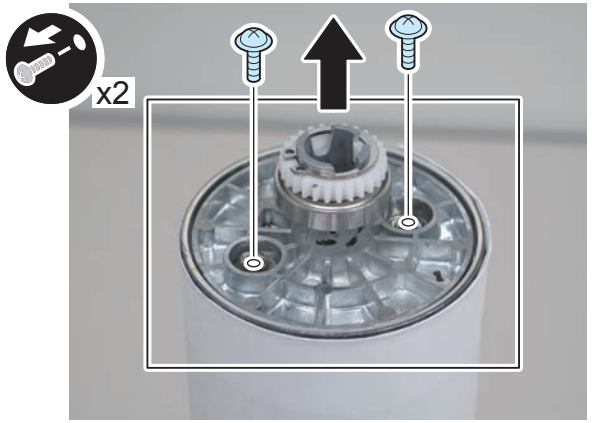
1. When removing the Process Unit, be sure to block light to the Photosensitive Drum. Cover with the Photosensitive Drum Protection Sheet or wrap 5 or more papers around the drum to block light.
2. Do not place the Process Unit and Photosensitive Drum in a location where is exposed to direct rays of the sun (e.g. near the window).
3. Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
4. Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

When installing a new Photosensitive Drum, be sure to remove the Lightproof Sheet after installing the drum to the main body. In addition, be sure to rotate the drum counterclockwise at removal of the Lightproof Sheet. If the drum is rotated clockwise, the Drum Cleaner Blade may be everted.

1) Wrap paper around the Drum Unit to block light.

F-4-183

2) Remove the 2 screws and the Flange.




F-4-184

3) Disconnect the connector and remove the Drum Heater.

F-4-185

## Removing the Primary Charging Shutter Unit

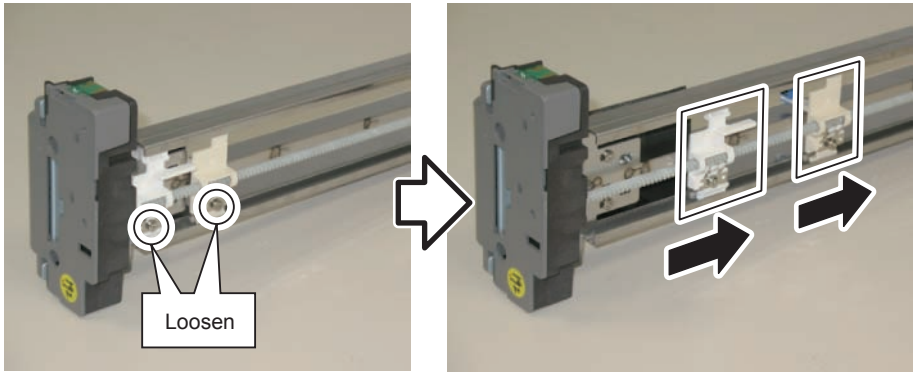
<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
3. Remove the Primary Charging Assembly. (Refer to page 4-89)

<Procedure>

1) Move the Primary Charging Wire Cleaners (Left and Right).

- 2 Screws (to loosen)



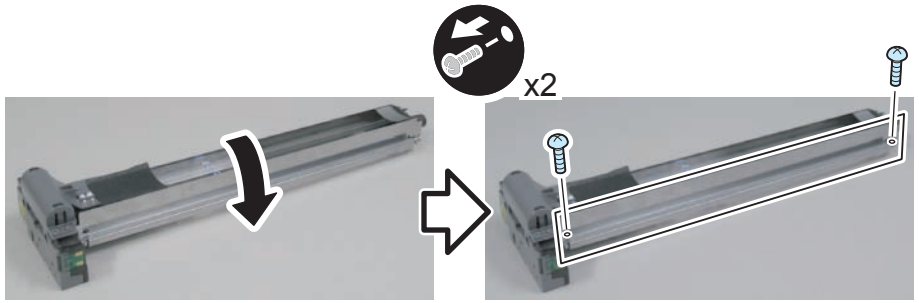

F-4-186

CAUTION:

Do not remove both Shield Plates (Right and Left) of the Primary Charging Assembly at the same time. Be sure to work on one Shield Plate at a time. (Otherwise, the frame of the Primary Charging Assembly can be deformed.)

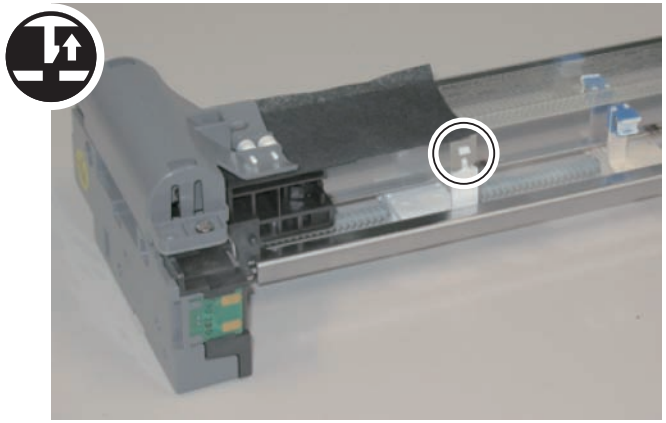
2) Move down the Primary Charging Assembly to remove the Shield Plate (Right).

- 2 Screws




F-4-187

3) Remove the Leaf Spring of the Primary Charging Shutter from the claw.



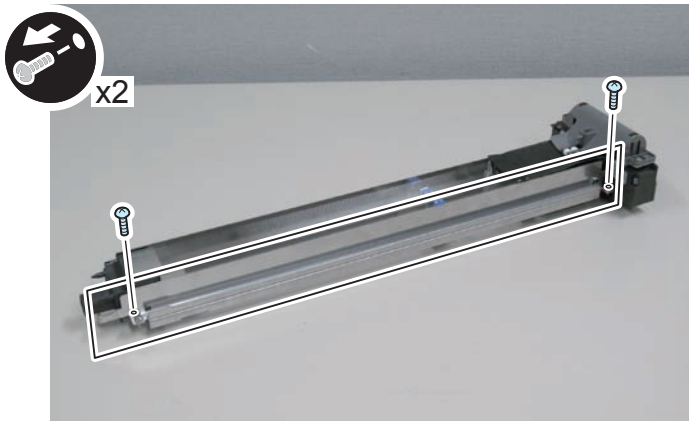
F-4-188

4) Install the Shield Plate (Right).

- 2 Screws

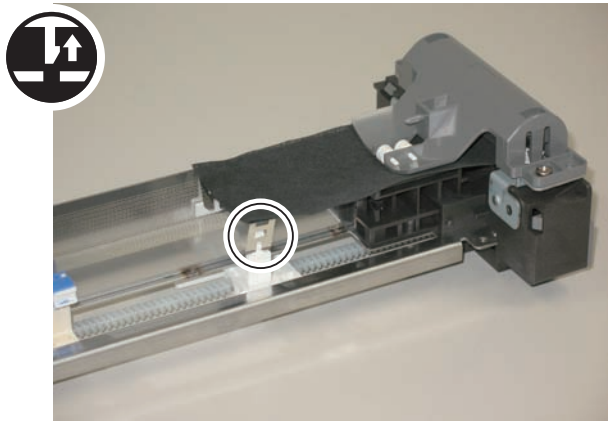
5) Remove the Shield Plate (Left).

- 2 Screws




F-4-189

6) Remove the Leaf Spring of the Primary Charging Shutter from the claw.

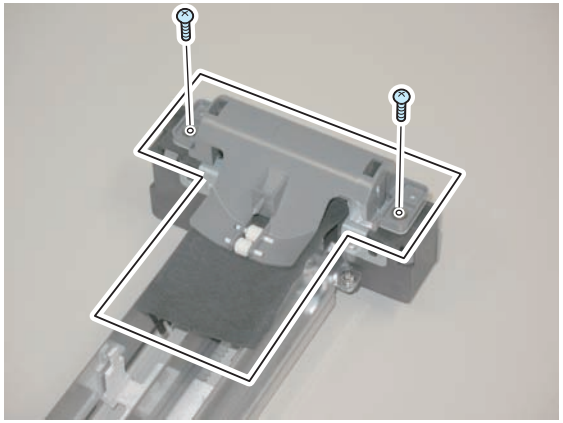


F-4-190

7) Install the Shield Plate (Left).
- 2 Screws

CAUTION:
Do not make the Leaf Spring caught by the Charging Wire when removing the Primary Charging Shutter Unit.

8) Remove the Primary Charging Shutter Unit.
- 2 Screws



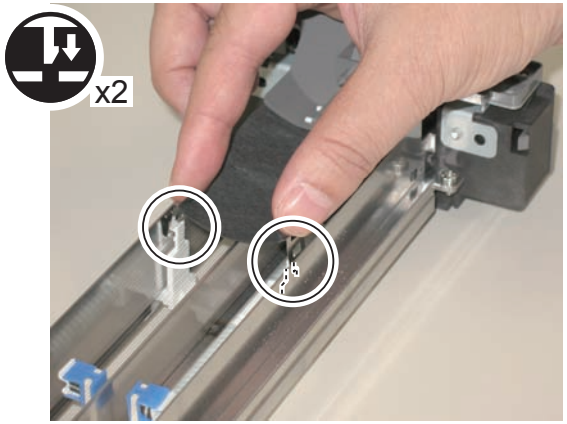
F-4-191

<Installation Method>

CAUTION:Points to Caution at Installation
Be careful not to get the Leaf Spring caught by the Charging Wire to install it to the Cleaner Claw.

NOTE:
The Shield Plate does not need to be removed when installing the Shutter Unit.

1) Set the Leaf Spring of the Primary Charging Shutter to the Cleaner Claw.




F-4-192

2) Install the Primary Charging Shutter Unit.
- 2 Screws

3) Return the Primary Charging Wire Cleaners (Left and Right) to the original position.

# Removing the Pre-transfer Charging Assembly Shutter Unit

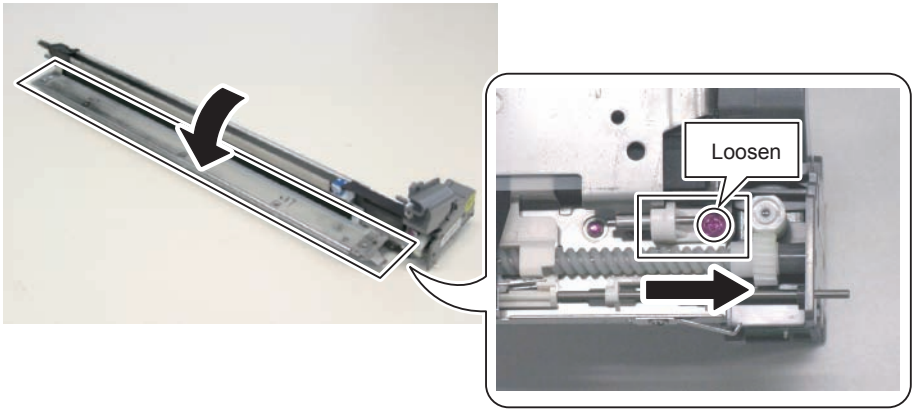
<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)

<Procedure>

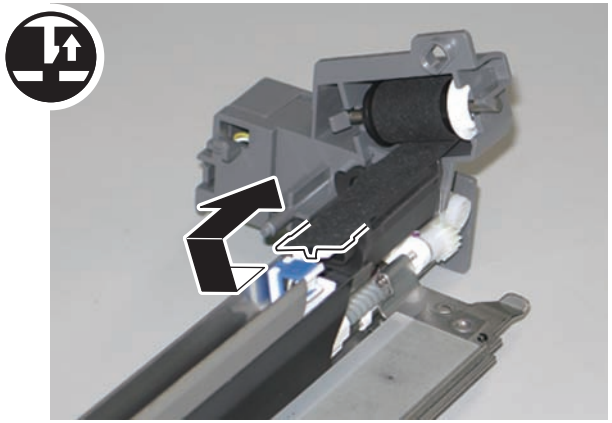
1) Move the Shield Plate Retainer Block to open the Shield Plate in the direction of the arrow.

- 1 Screw (to loosen)



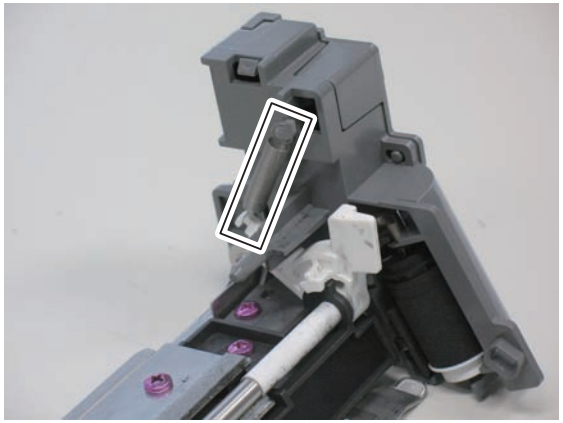

F-4-193

2) Remove the claw at the edge of the Shutter.



F-4-194

3) Remove the spring.



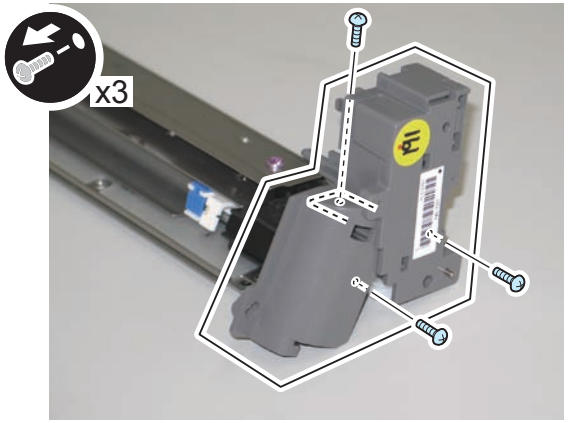
F-4-195

CAUTION:

Be careful not to remove the screw and the Screw Gear when removing the Pre-transfer Charging Assembly Shutter Unit.

4) Hold the screw to remove the Pre-transfer Charging Assembly Shutter Unit while the Motor Unit is installed.

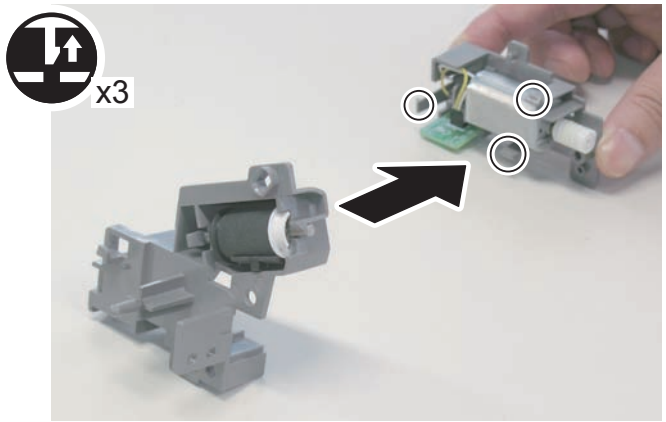
- 3 Screws




F-4-196

5) Remove the Motor Unit from the Pre-transfer Charging Assembly Shutter Unit.

- 3 Claws



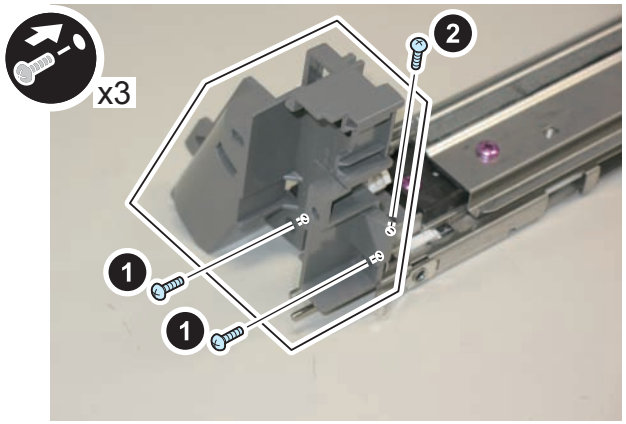

F-4-197

<Installation Method>

NOTE:
Be sure to put the protrusion of the Pre-transfer Charging Assembly Shutter Unit between the arms.

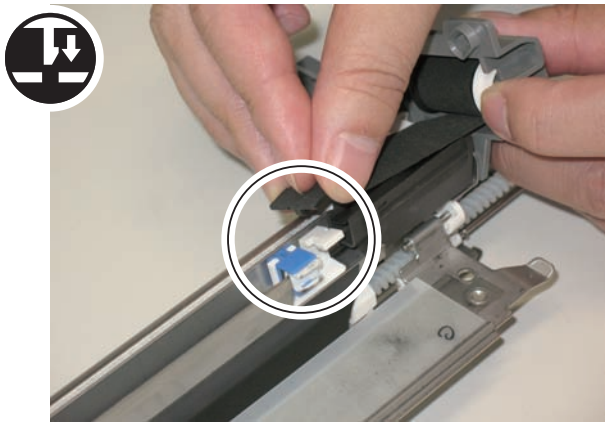
1) Install the Pre-transfer Charging Assembly Shutter Unit.

- 3 Screws



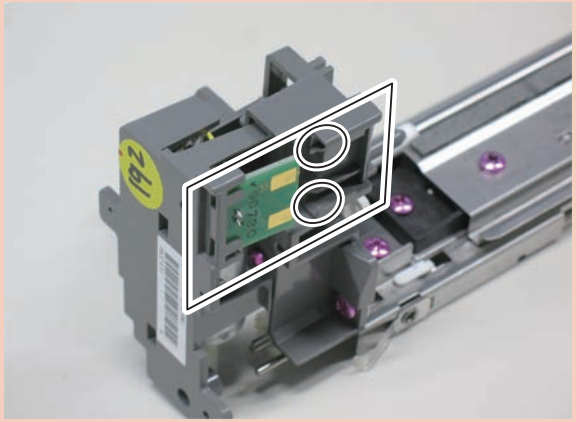

F-4-198

2) Pull the Shutter with your fingers to hook it to the Cleaner Unit.



F-4-199

CAUTION:
When installing the Motor Unit, fit the PCB into the slot.

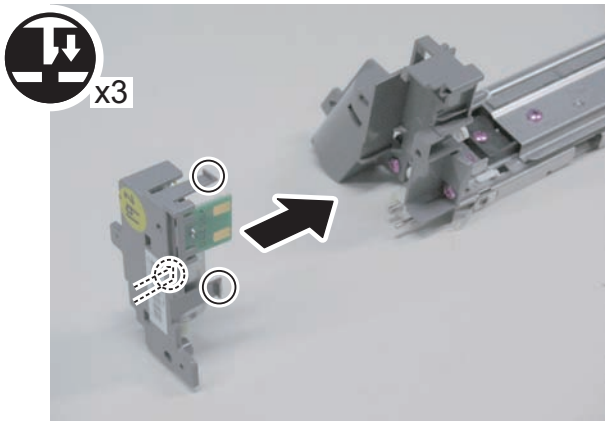


F-4-200

NOTE:
Be sure to check that the rear shaft is secured.

3) Install the Motor Unit.

- 3 Claws




F-4-201

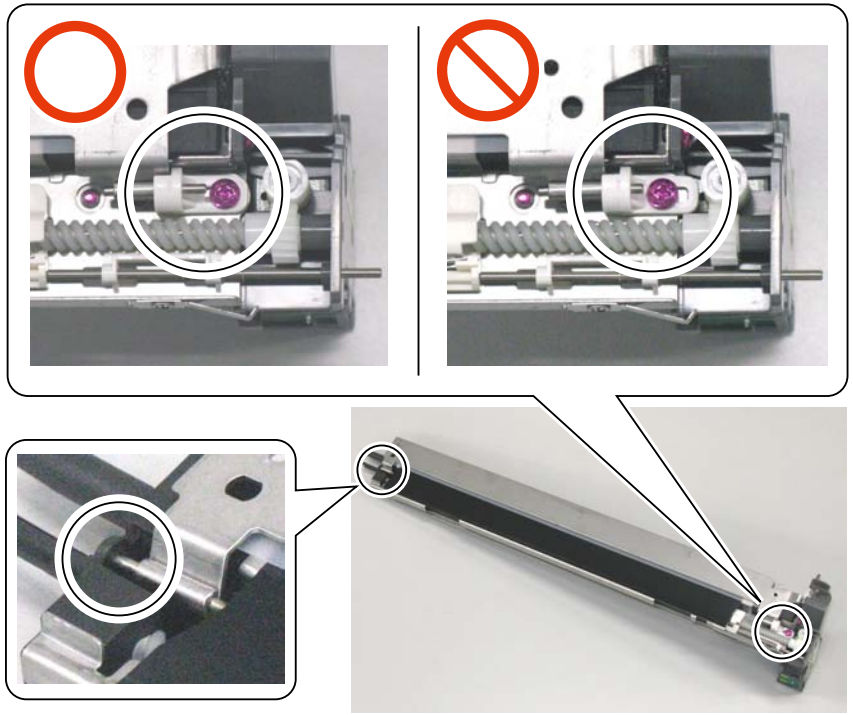
CAUTION:
Be sure to feel tension when installing the spring; otherwise, it can cause image error.

4) Set the spring.

CAUTION: Points to Caution when Securing the Shield Plate
Be sure to check that the rear pin is fit into the frame hole.

5) Move the Shield Plate Retainer Block fully to the inside to secure with the screw.

NOTE:
Move the Shield Plate back and forth to check that the Shield Plate is secured.



F-4-202

# Removing the Patch Sensor

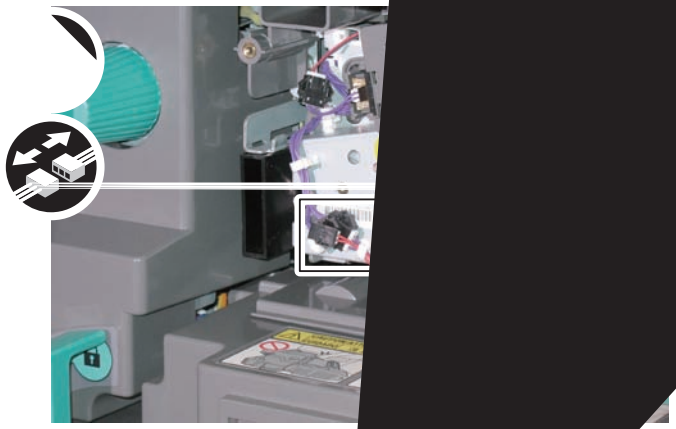
<Preparation>

1. Open the Front Cover.
2. Open the Inner Cover. (Refer to "Removing the Prin

<Procedure>

1) Remove the harness.

- 2 Connectors
- 1 Wire Saddle



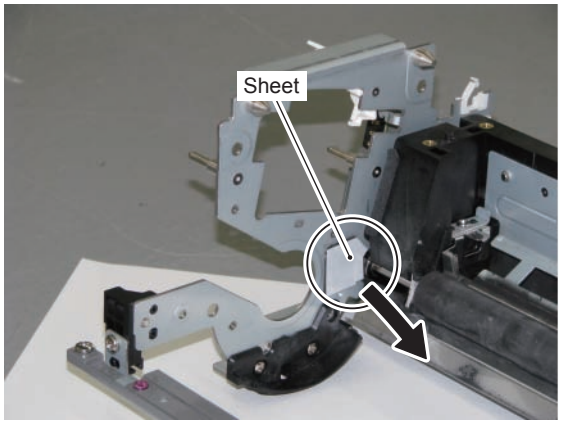
# Removing the Drum Brush Roller

CAUTION:
- Do not touch the Photosensitive Drum.
- Cover the Photosensitive Drum with paper to avoid direct exposure to light.

<Preparation>
1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Drum Cleaning Unit. (Refer to page 4-110)
6. Remove the Drum Unit. (Refer to page 4-115)
7. Remove the Side Seal. (Refer to page 4-121)

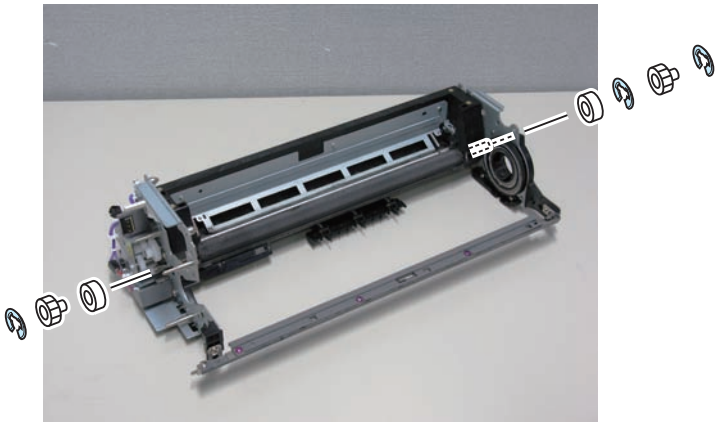
<Procedure>
1) Remove the sheet.

CAUTION:
The removed sheet will be used at the time of assembly, so be sure to remove the sheet neatly and keep it in a safe place.



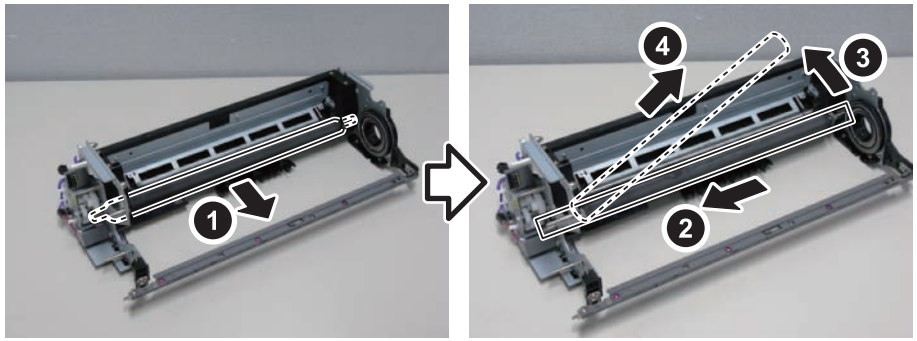

F-4-206

2) Remove the 2 Gears and the 2 Bearings.
- 3 E-rings



F-4-207

3) Remove the Drum Brush Roller by following the procedure as shown in the figure.




F-4-208

# Removing the ETB Drive Unit

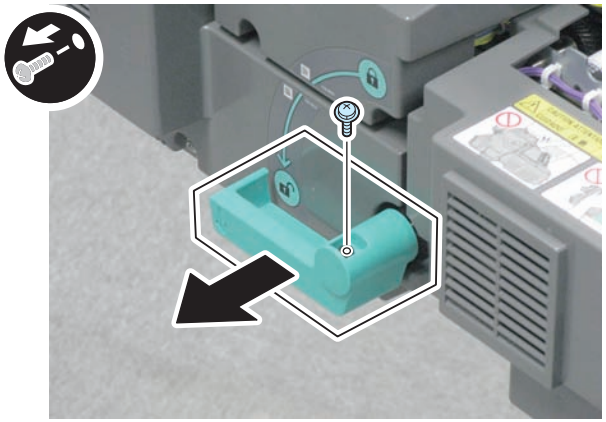
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)

<Procedure>

1) Remove the Fixing Feed Lever.

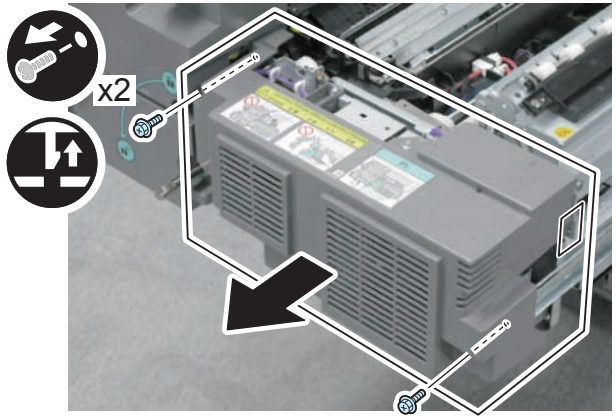
- 1 Screw



F-4-209

2) Remove the Fixing Feed Right Front Cover.

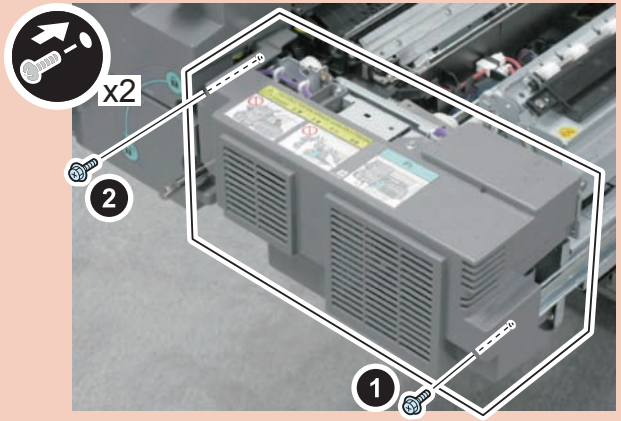
- 2 Screws
- 1 Claw




F-4-210

CAUTION:

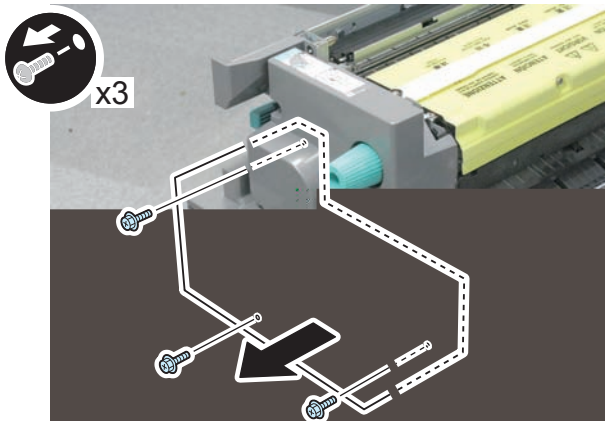
When installing the Fixing Feed Right Front Cover, be sure to follow the order as shown in the figure to tighten screws.




F-4-211

3) Remove the Fixing Feed Left Cover.

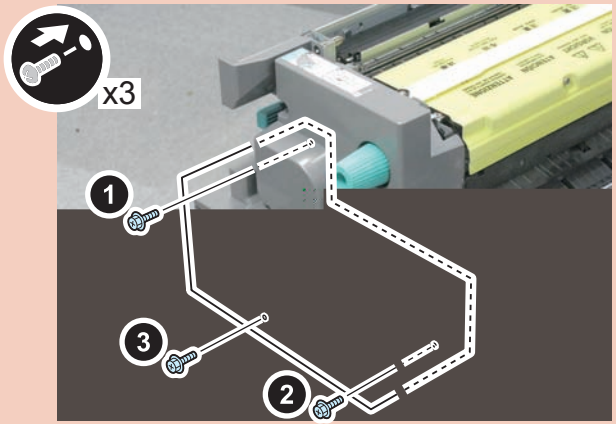
- 3 Screws




F-4-212

CAUTION:

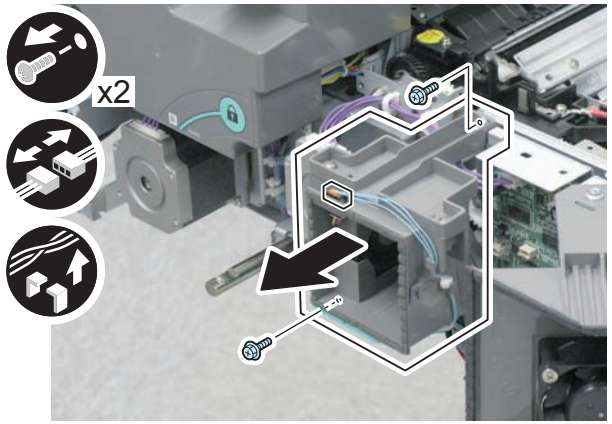
When installing the Fixing Feed Left Cover, be sure to follow the order as shown in the figure to tighten screws.




F-4-213

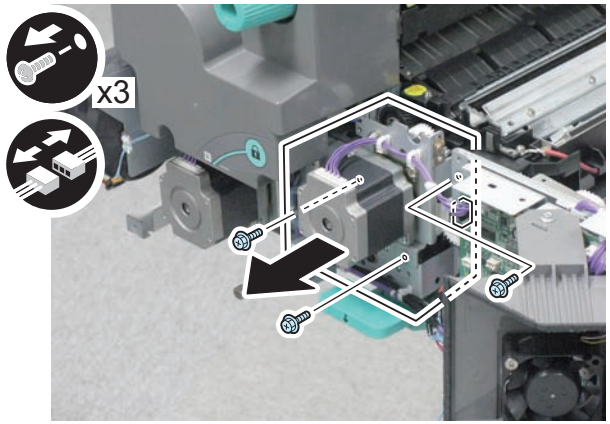
4) Remove the Duct.

- 2 Screws
- 1 Connector
- Harness



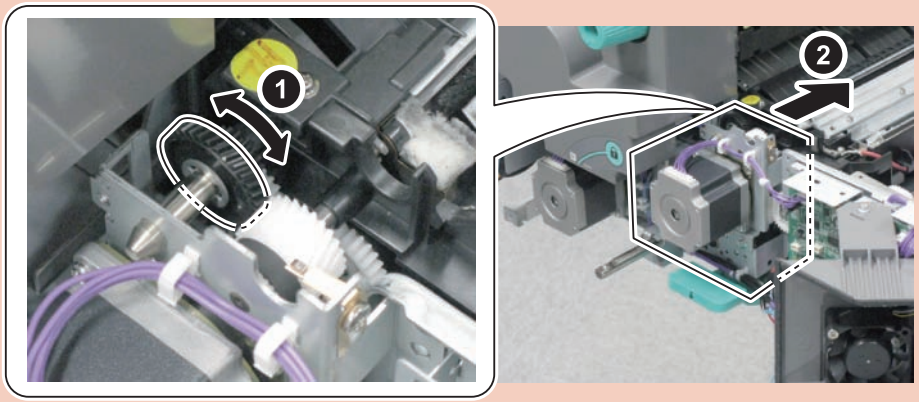

F-4-214

5) Remove the ETB Drive Unit.
- 3 Screws
- 1 Connector




F-4-215

CAUTION:
When installing, turn the gear so that the gear is engaged.

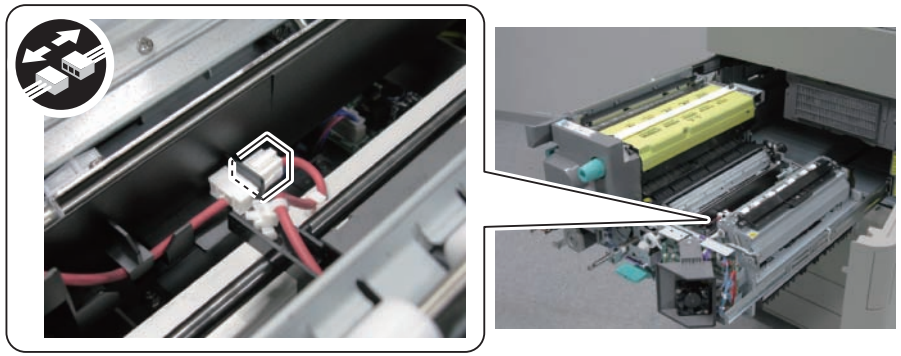



F-4-216

## Removing the Transfer Cleaning Unit

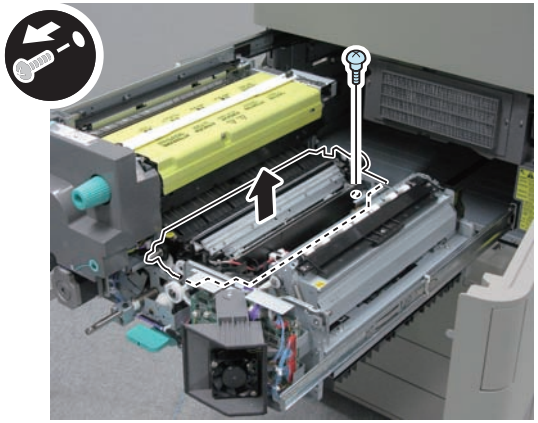
<Preparation>
1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")
2. Remove the ETB Unit. (Refer to page 4-127)
3. Remove the ETB Drive Unit. (Refer to page 4-145)

<Procedure>
1) Disconnect the connectors.



F-4-217

2) Remove the Transfer Cleaning Unit.
- 1 Stepped Screw



F-4-218

# Removing the Post-transfer Static Eliminator

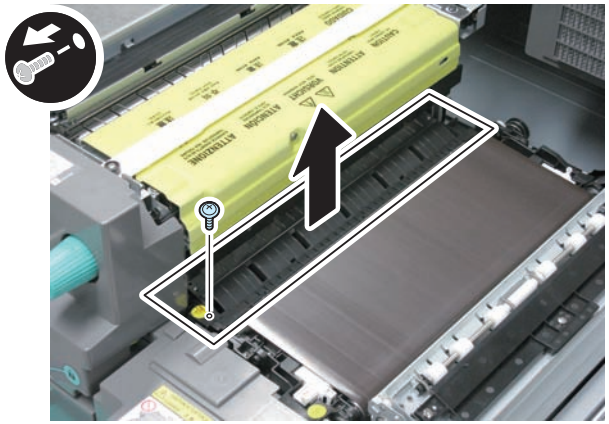
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the ETB Unit")

<Procedure>

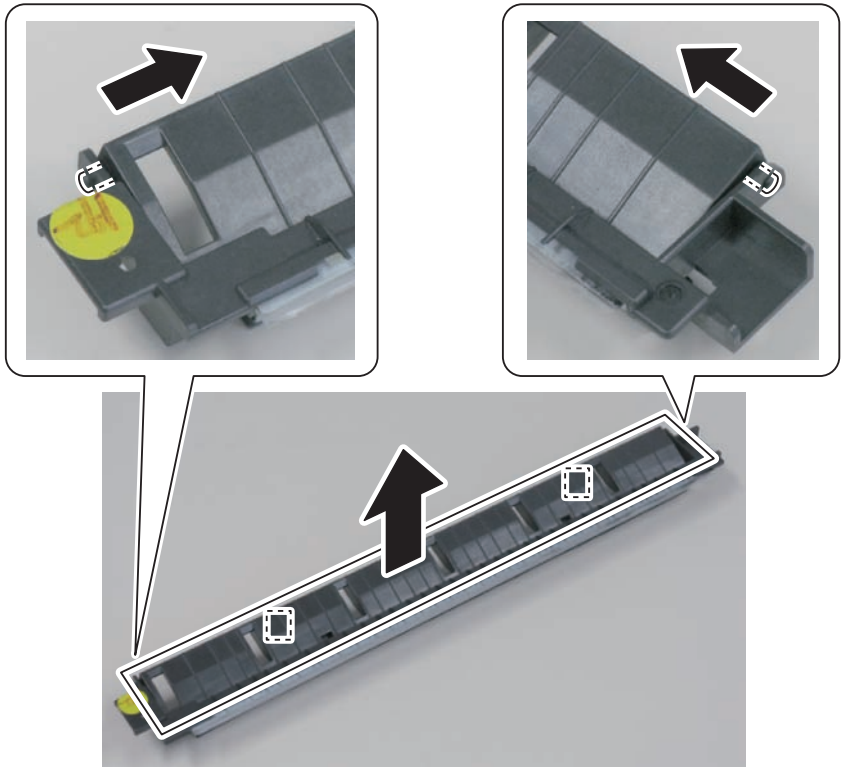
CAUTION:
Do not touch the surface of the ETB when handling the ETB Unit.

1) Remove the Post-transfer Guide Unit.
- 1 Screw



F-4-219

2) Remove the Post-transfer Guide.
- 2 Protrusions
- 2 Springs

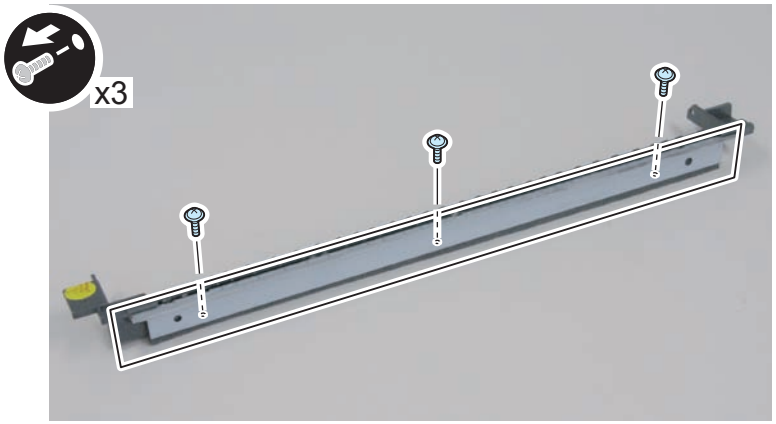


F-4-220

CAUTION:
Be careful not to lose the springs when removing the Post-transfer Guide.

3) Remove the Separation Guide Reinforcing Plate.

- 3 Screws




F-4-221

4) Remove the Post-transfer Static Eliminator.

F-4-222

## Removing the Toner Receptacle Tray

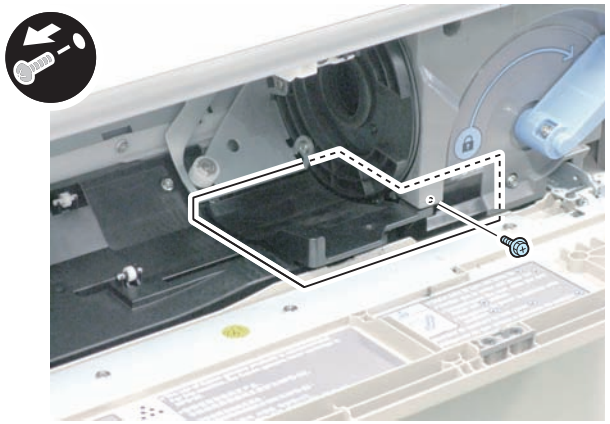
<Preparation>

1. Open the Front Upper Cover.
2. Remove the Toner Bottle.

<Procedure>

1) Remove the Toner Receptacle Tray.

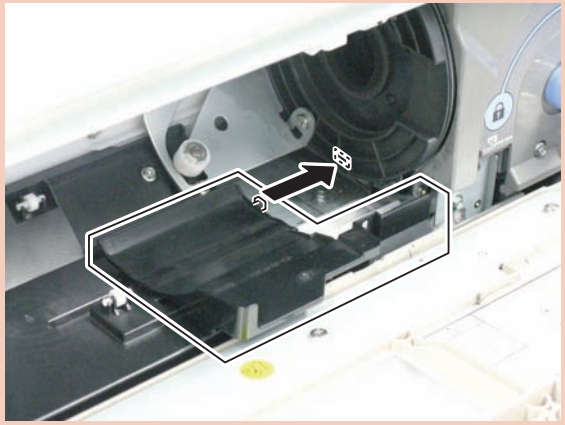
- 1 Screw
- 1 Protrusion



F-4-223

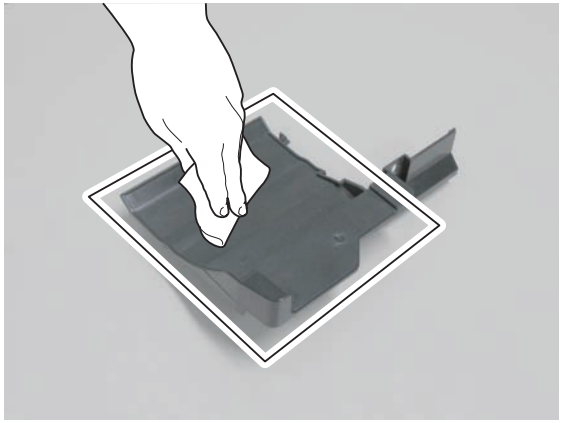
CAUTION:

1. Be sure to fit the protrusion into the groove of the plate to install.
2. Toner can be accumulated in the Toner Receptacle Tray; therefore, be careful not to spill toner when removing.



F-4-224

2) Clean the Toner Receptacle Tray with lint-free paper.

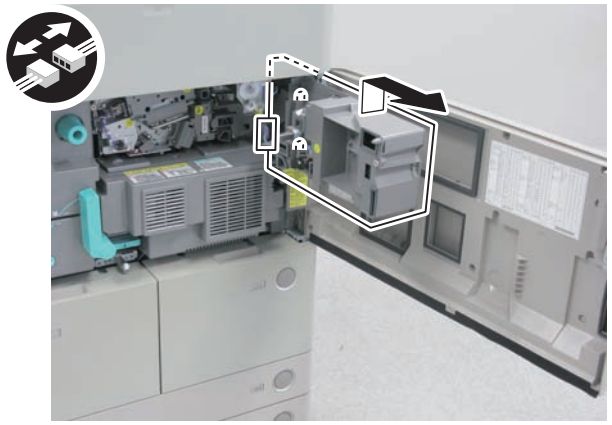


F-4-225

## Removing the Hopper Unit

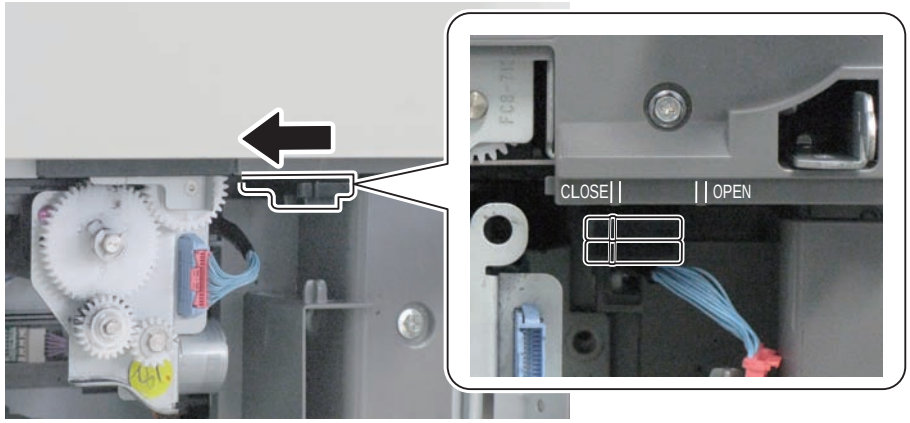
1) Open the Front Cover.
2) Open the Inner Cover (Primary Charging Air Supply Fan Unit).
- 1 Screws (to loosen)

3) Remove the Inner Cover (Primary Charging Air Supply Fan Unit).
- 1 Connector
- 2 Protrusions



F-4-226

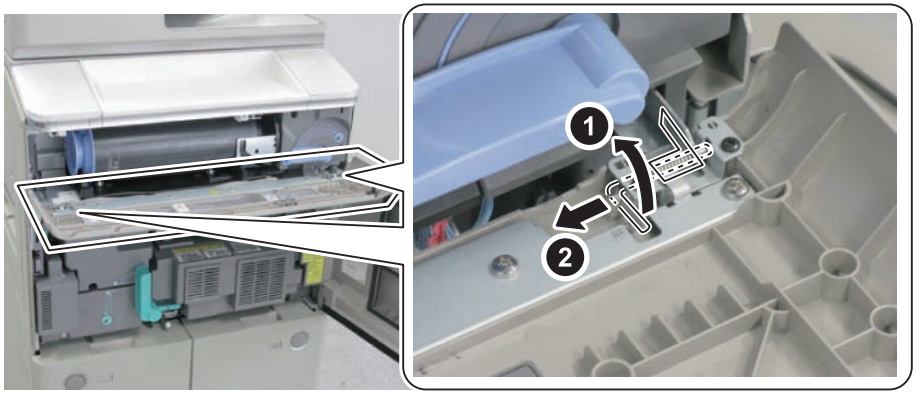
4) Move the lever in the direction of the arrow to close the Shutter.




F-4-227

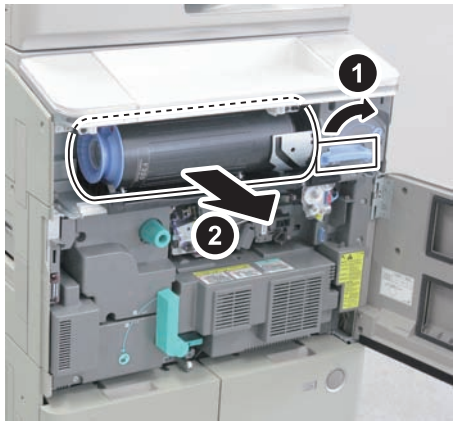
CAUTION:
When starting the host machine, be sure to set the Shutter from CLOSE to OPEN.

5) Remove the Front Upper Cover.
- 2 Hinge Pins
- 2 Springs



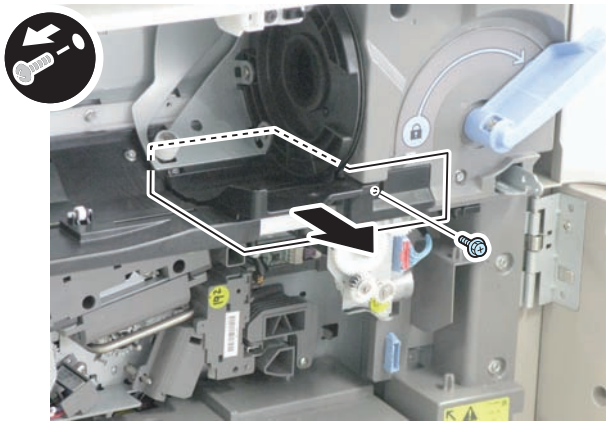

F-4-228

6) Release the Lock Lever to remove the Toner Bottle.




F-4-229

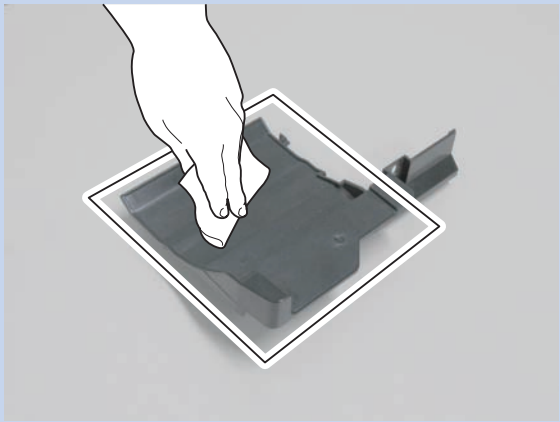
7) Remove the Toner Receptacle Tray.
- 1 Screw
- 1 Protrusion



F-4-230

CAUTION:
1. Toner can be accumulated in the Toner Receptacle Tray; therefore, be careful not to spill toner when removing.
2. Be sure to fit the protrusion into the groove of the plate to install.

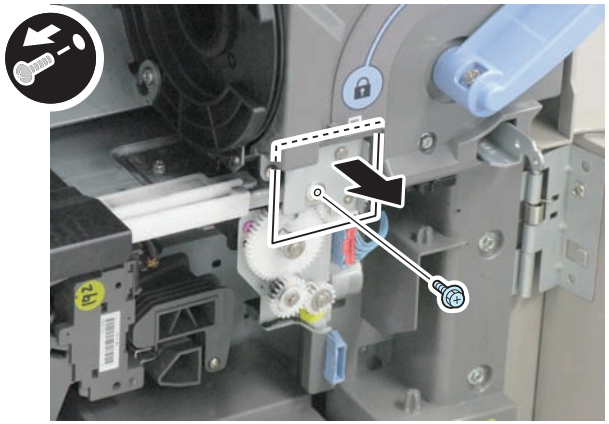
NOTE:
Clean the Toner Receptacle Tray with lint-free paper.



F-4-231

8) Remove the Connecting Drive Unit.

- 1 Screw

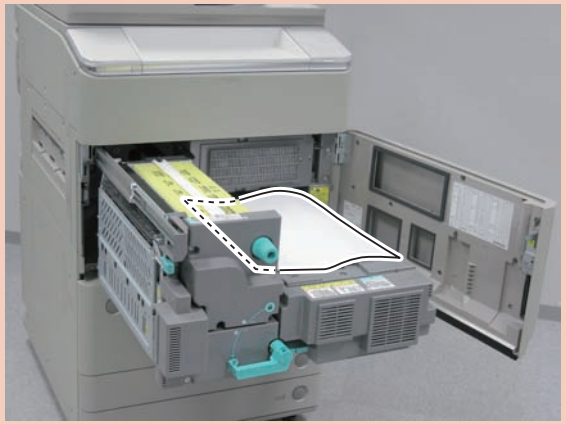


F-4-232

9) Pull out the Fixing Feed Unit.

CAUTION:

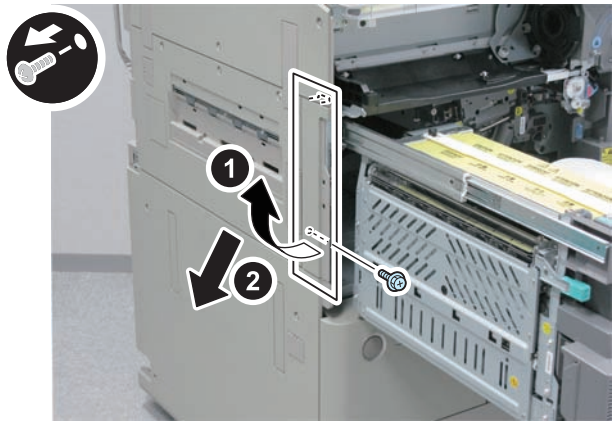
When pulling out the Fixing Feed Unit, be sure to place paper over the ETB Unit for protection.



F-4-233

10) Remove the Left Upper Cover 2.

- 1 Screw
- 1 Protrusion

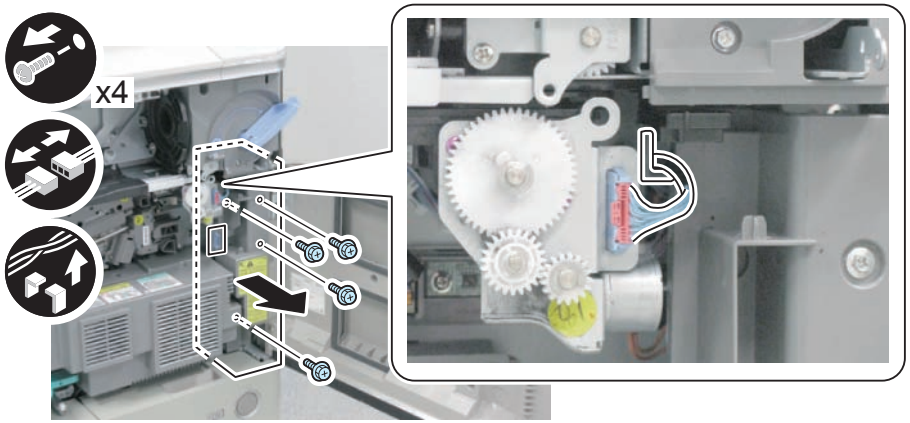



F-4-234

11) Set the Fixing Feed Unit back.

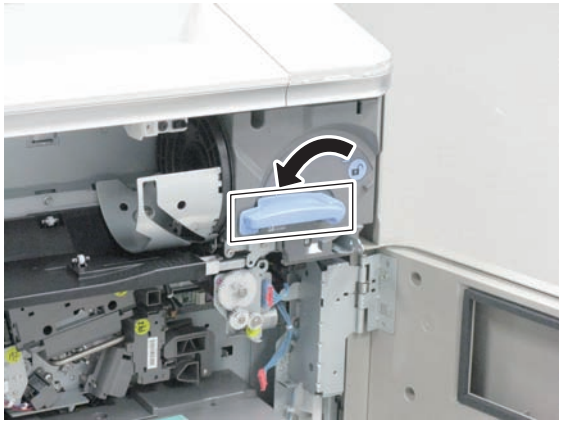
12) Remove the Right Upper Inner Cover.

- 4 Screws
- 1 Connector
- Harness




F-4-235

13) Set the Lock Lever back.



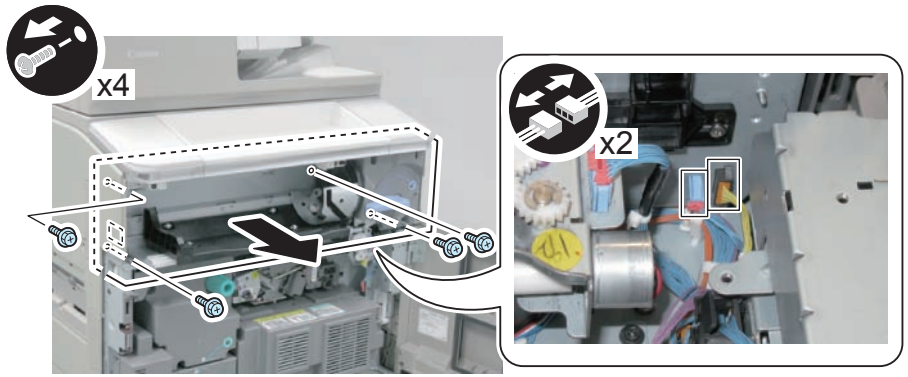
F-4-236

14) Remove the Hopper Unit.

- 4 Screws
- 2 Connectors
- 1 Hook

CAUTION:

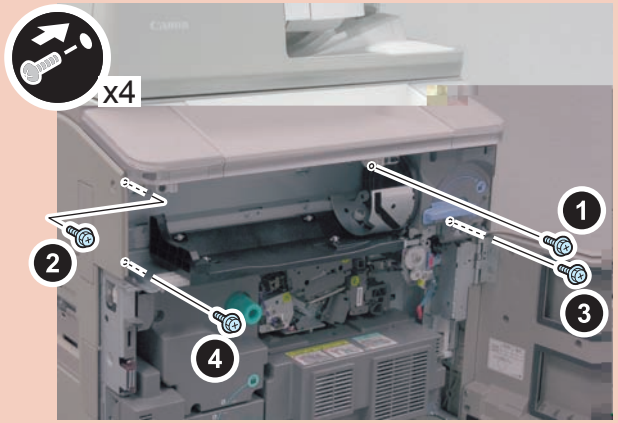
Put the removed Hopper Unit on paper placed on the work space.




F-4-237

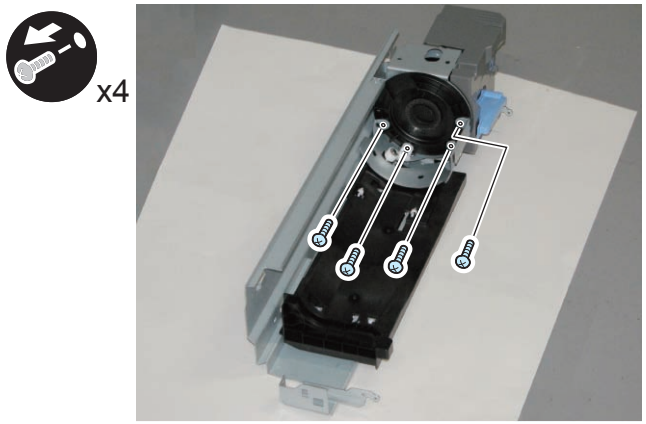
CAUTION:

When installing the Hopper Unit, be sure to follow the order as shown in the figure to tighten screws.




F-4-238

15) Remove the 4 Tapping Screws.

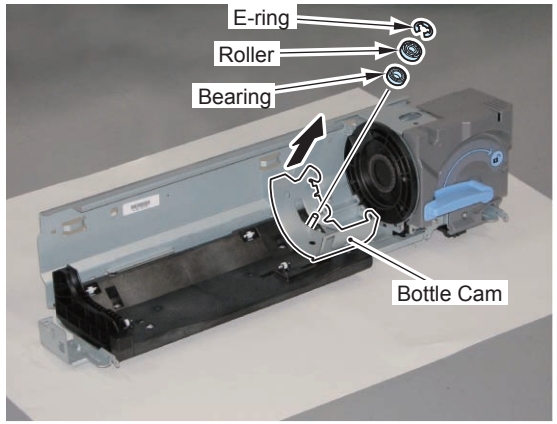



F-4-239

CAUTION: Points to Note when Installing the Tapping Screws

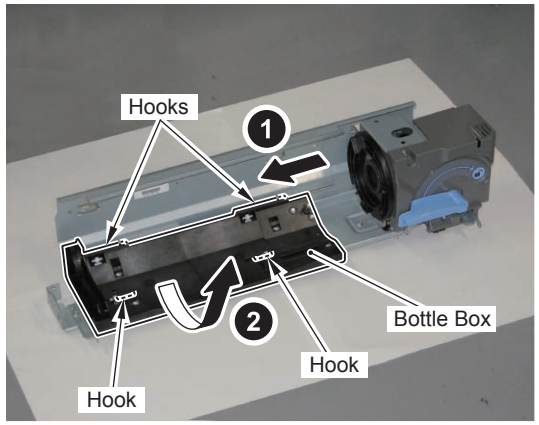
When tightening the Tapping Screws, turn them in the reverse direction to check the screw thread on the Hopper Unit side before tightening them. Otherwise, the screw thread on the Hopper Unit side may be broken, which makes it impossible to tighten the screw.

16) Remove the Bottle Cam.
- 1 E-ring
- 1 Roller
- 1 Bearing




F-4-240

17) Remove the Bottle Box.
- 4 Hooks




F-4-241

## Removing the Buffer Unit

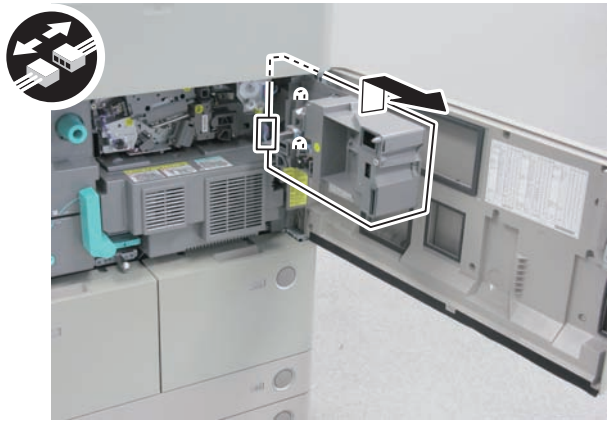
<Preparation>

1. Open the Right Cover.
2. Remove the Developing Assembly. (Refer to page 4-122)

<Procedure>

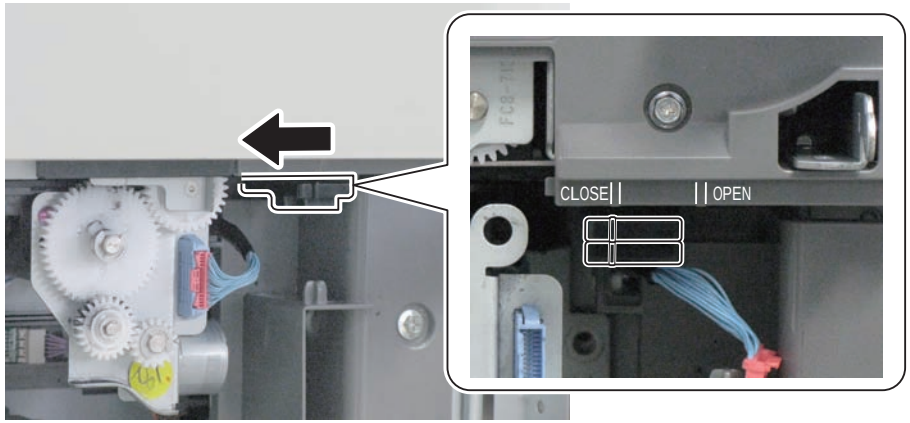
1) Open the Front Cover.
2) Open the Inner Cover (Primary Charging Air Supply Fan Unit).
- 1 Screws (to loosen)

3) Remove the Inner Cover (Primary Charging Air Supply Fan Unit).
- 1 Connector
- 2 Protrusions



F-4-242

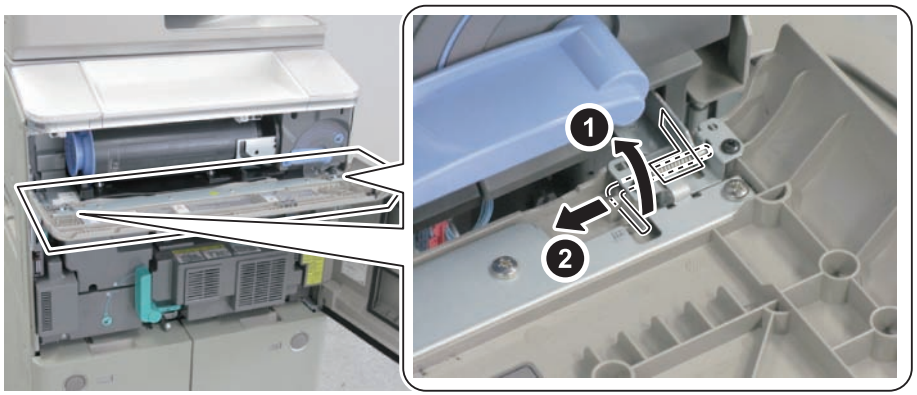
4) Move the lever in the direction of the arrow to close the Shutter.




F-4-243

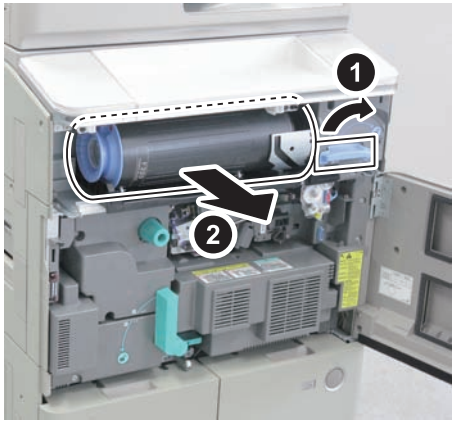
CAUTION:
When starting the host machine, be sure to set the Shutter from CLOSE to OPEN.

5) Remove the Front Upper Cover.
- 2 Hinge Pins
- 2 Springs



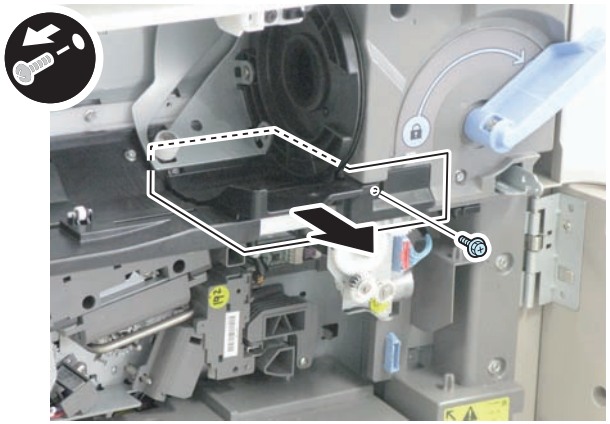

F-4-244

6) Release the Lock Lever to remove the Toner Bottle.




F-4-245

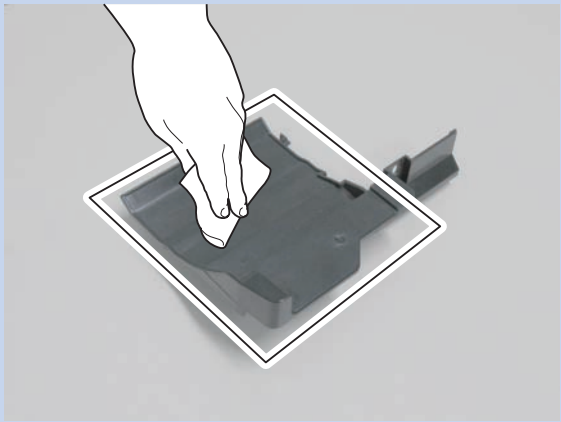
7) Remove the Toner Receptacle Tray.
- 1 Screw
- 1 Protrusion



F-4-246

CAUTION:
1. Be sure to fit the protrusion into the groove of the plate to install.
2. Toner can be accumulated in the Toner Receptacle Tray; therefore, be careful not to spill toner when removing.

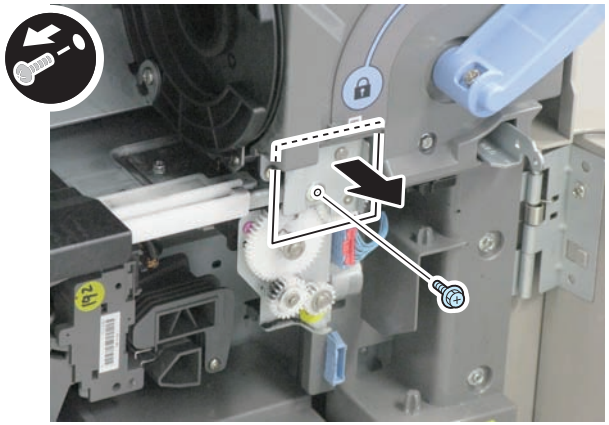
NOTE:
Clean the Toner Receptacle Tray with lint-free paper.



F-4-247

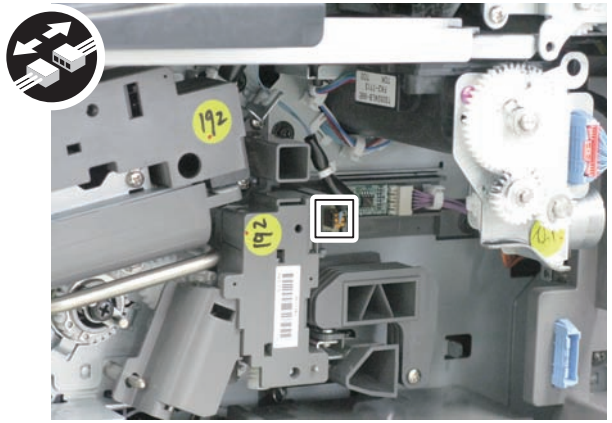
8) Remove the Connecting Drive Unit.

- 1 Screw



F-4-248

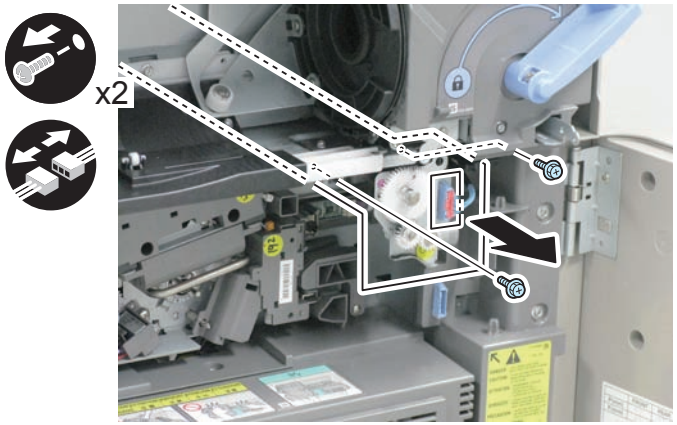
9) Disconnect the connector of the Pre-transfer Charging Assembly.



F-4-249

10) Remove the Buffer Unit.

- 2 Screws
- 1 Connector

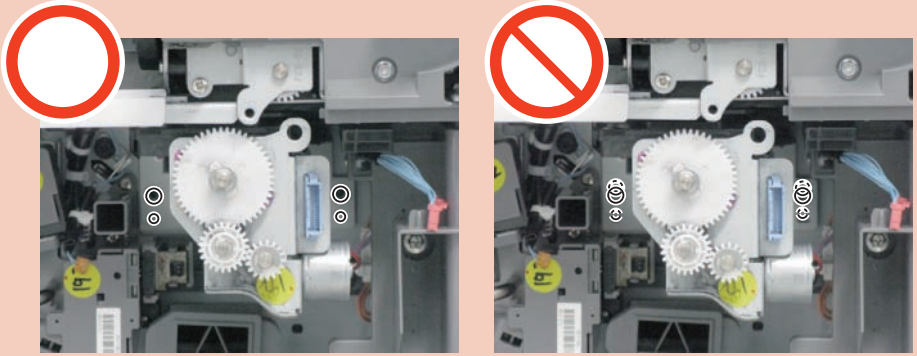



F-4-250

CAUTION:
When removing the Buffer Unit, be sure not to tilt the unit to prevent toner scattering.

CAUTION:Points to Caution When Installing the Buffer Unit

- Be sure to securely set the Buffer Unit on the Rail.
- Do not get the harness caught.
- Fit the emboss into the proper position; otherwise, toner can be scattered.
- Be sure to set the Shutter from CLOSE to OPEN.



F-4-251

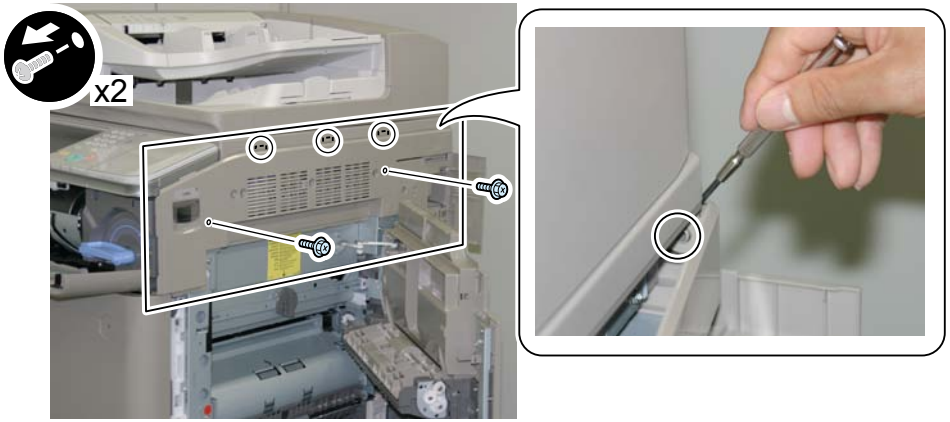
## Removing the Potential Control PCB Unit

<Preparation>

1. Remove the Primary Charging Assembly Unit.
2. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
3. Remove the Process Unit. (Refer to page 4-107)
4. Remove the Hopper Unit. (Refer to page 4-150)
5. Open the Right Door.
6. Remove the Right Upper Cover.

6-1) Open the Front Upper Cover.
6-2) Open the Right Door.
6-3) Open the Box Cover (Right).
6-4) Remove the Right Upper Cover.

- 2 Screws
- 1 Boss
- 3 Protrusions

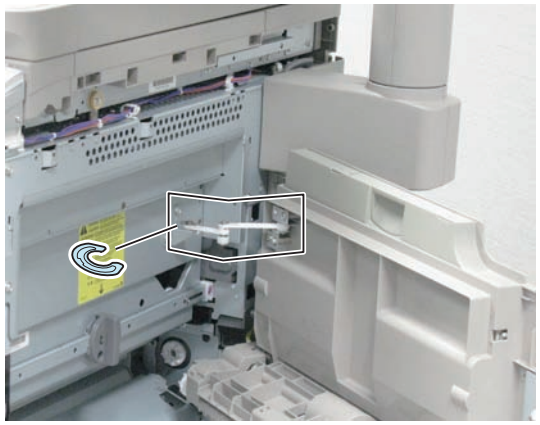



F-4-252

<Procedure>

1) Remove the Right Door Link Unit from the pin.

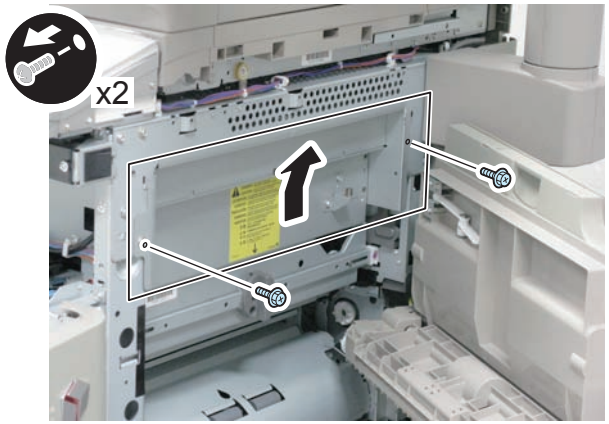
- 1 E-ring



F-4-253

2) Remove the Right Shield Plate.

- 2 Screws




F-4-254

3) Remove the Potential Control Tray.

- 3 Screws
- 2 Connectors
- Wire Saddle

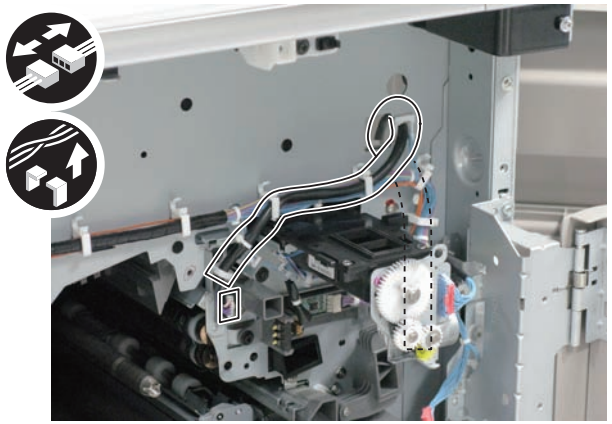
F-4-255

4) Remove the Potential Sensor Control PCB.

- 1 Screw
- 4 Claws
- 2 Connectors

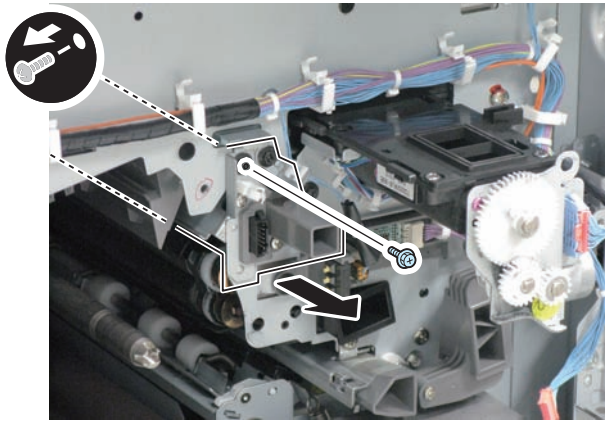
F-4-256

5) Remove the harness.
- 1 Connector
- Edge Saddle
- Wire Saddle



F-4-257

6) Remove the Potential Sensor.
- 1 Screw



F-4-258

## Removing the Waste Toner Feed Unit

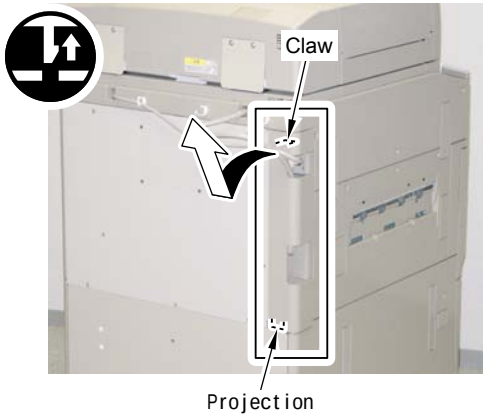
<Preparation>

1. Remove the Box Cover (Left).

1-1) Remove the Harness.
- 2 Wire Saddles

F-4-259

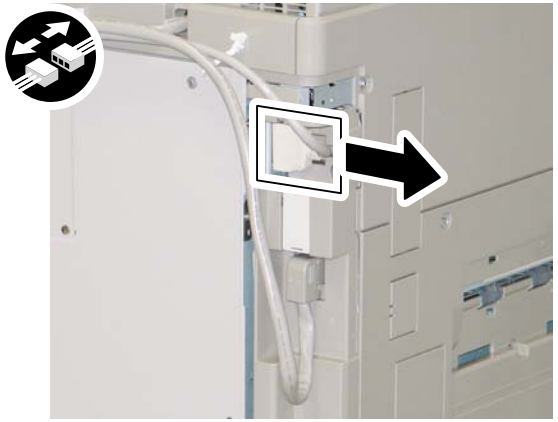
1-2) Remove the Box Cover (Left).
- 1 Claw
- 1 Protrusion




F-4-260

2. Open the Controller Box.

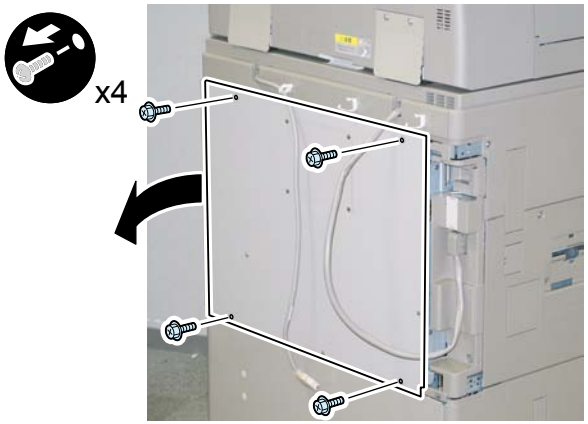
2-1) Disconnect the Reader Communication Cable.



F-4-261

2-2) Open the Controller Box in the direction of the arrow.

- 4 Screws

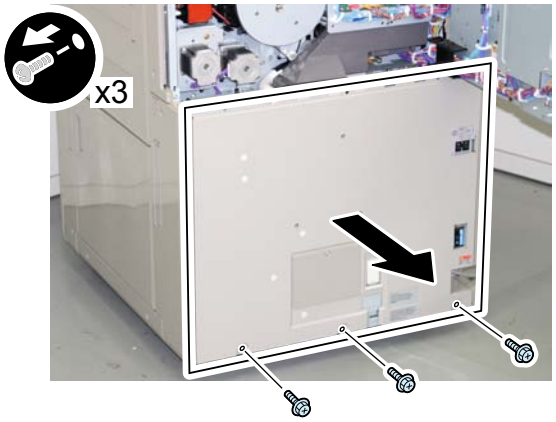



F-4-262

3. Remove the Rear Lower Cover.

3-1) Remove the Rear Lower Cover in the direction of the arrow.

- 3 Screws



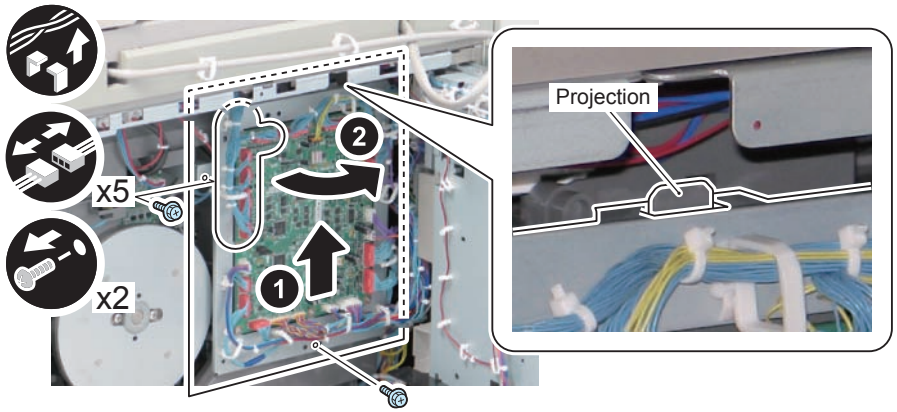

F-4-263

<Procedure>

1) Open the Motor Driver Support Plate.

- 2 Screws
- 5 Connectors
- Wire Saddle
- Reuse Band

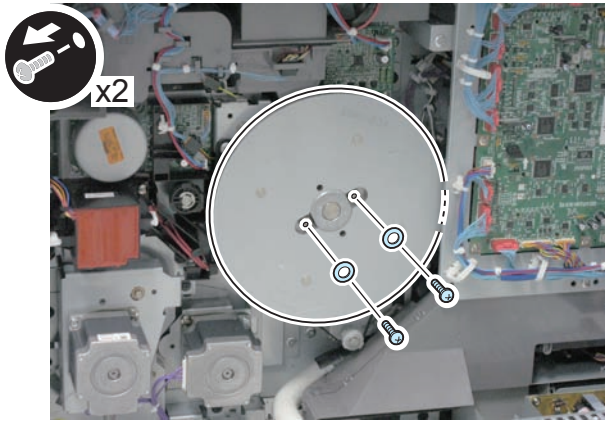
NOTE:
When opening the Motor Driver Support Plate, be sure to free from the protrusion.




F-4-264

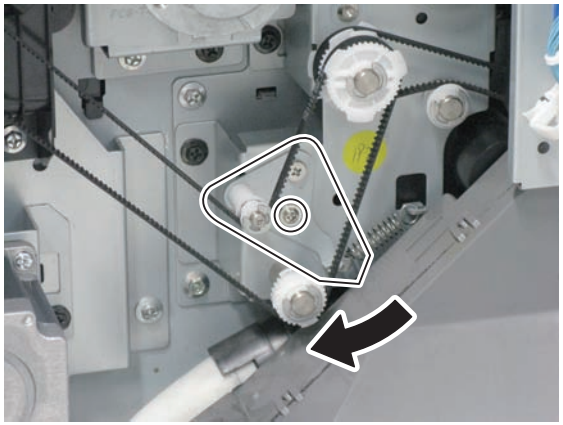
2) Remove the Flywheel.

- 2 Screws



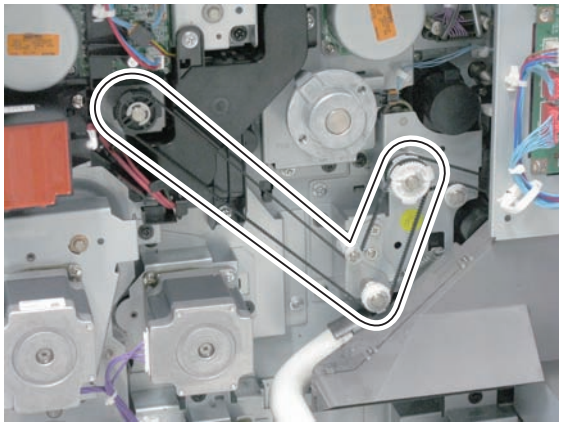

F-4-265

3) Loosen the screw and move the Belt Tensioner in the direction of the arrow, and then again tighten the screw.



F-4-266

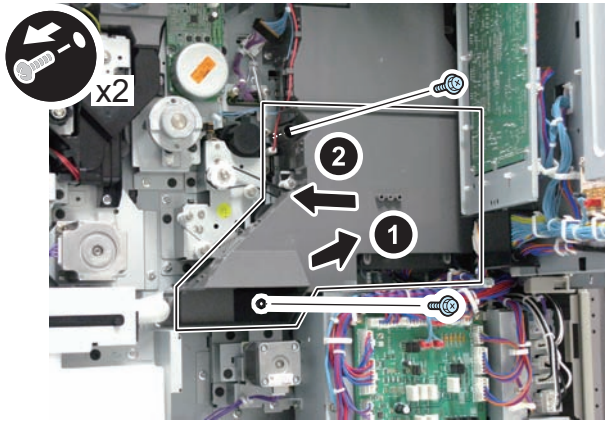
4) Remove the belt from the pully.



F-4-267

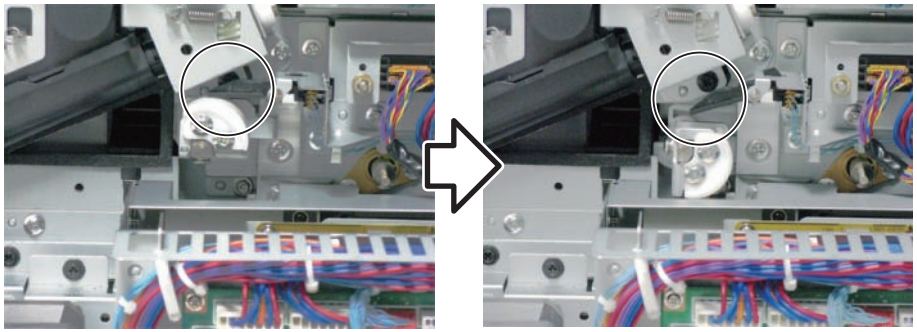
5) Remove the Duct.

- 2 Screws




F-4-268

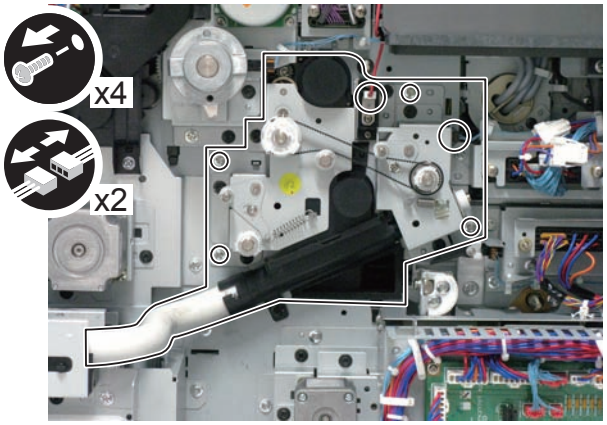
6) Open the Front Cover to move the Fixing Feed Lever down.
(To move the cam at the rear of the Fixing Feed Lever Shaft to the position where it does not interfere with the Waste Toner Feed Unit.)



F-4-269

7) Remove the Waste Toner Feed Unit.

- 2 Connectors
- 4 Screws




F-4-270

# Removing the Drum Drive Unit

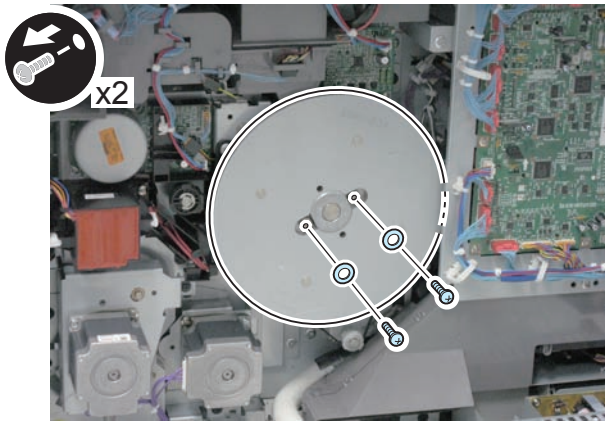
<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Primary Charging Assembly")
2. Remove the Primary Charging Assembly. (Refer to page 4-89)
3. Remove the Pre-transfer Charging Assembly. (Refer to page 4-100)
4. Remove the Process Unit. (Refer to page 4-107)
5. Remove the Box Cover (Left). (Refer to "Removing the Waste Toner Feed Unit")
6. Open the Controller Box. (Refer to "Removing the Waste Toner Feed Unit")

<Procedure>

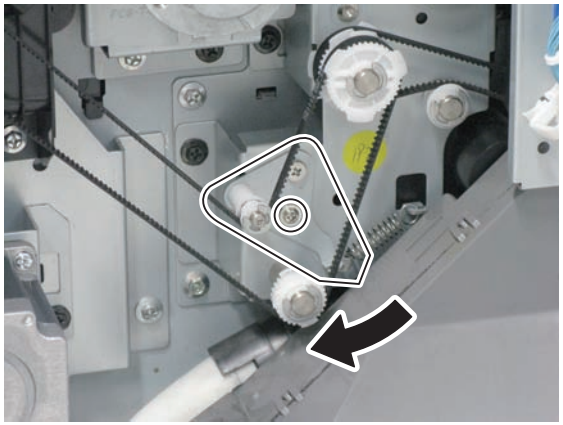
1) Remove the Flywheel.

- 2 Screws
- 2 Washers



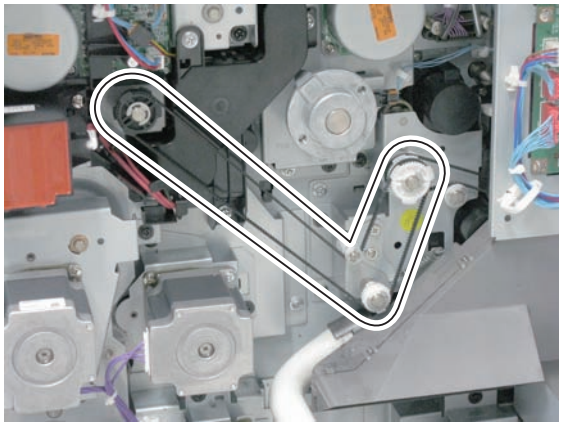

F-4-271

2) Loosen the screw and move the Belt Tensioner in the direction of the arrow, and then again tighten the screw.



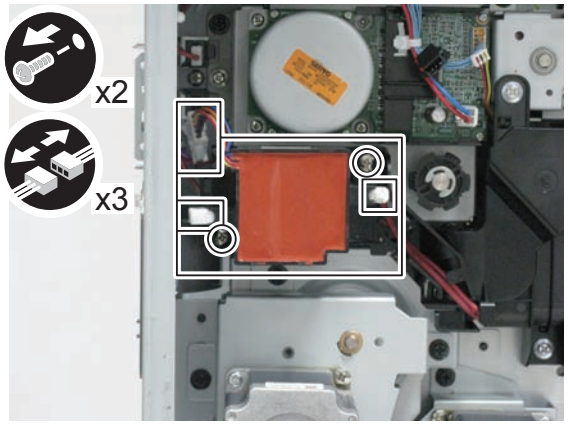
F-4-272

3) Remove the belt from the pully.



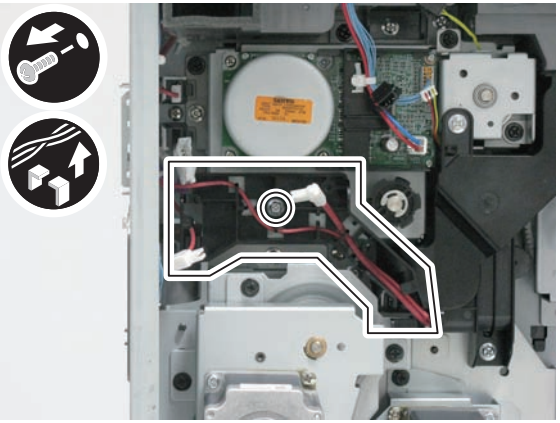
F-4-273

4) Remove the transformer.
- 2 Screws
- 3 Connectors



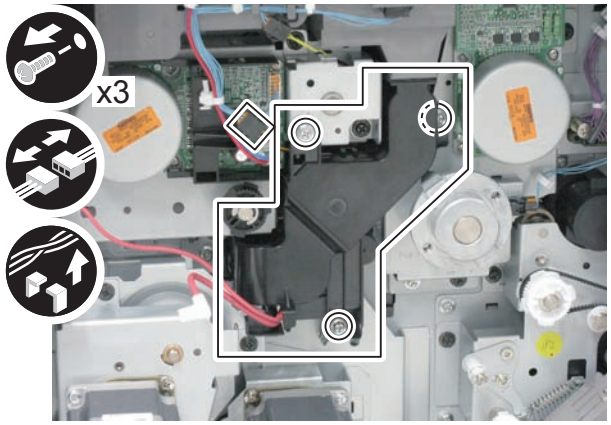

F-4-274

5) Free the harness and remove the Transformer Support Base.
- 1 Screw
- Harness



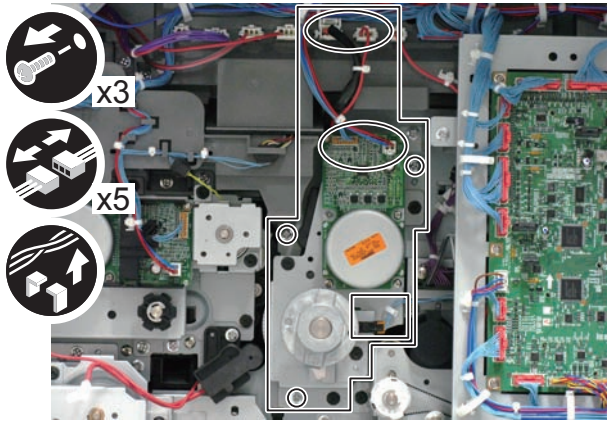
F-4-275

6) Remove the Duct Unit.
- 3 Screws
- 1 Connector
- Harness




F-4-276

7) Remove the Drum Drive Unit.
- 5 Connectors
- 1 Wire Saddle
- 3 Screws




F-4-277

# Removing the Developing Drive Unit

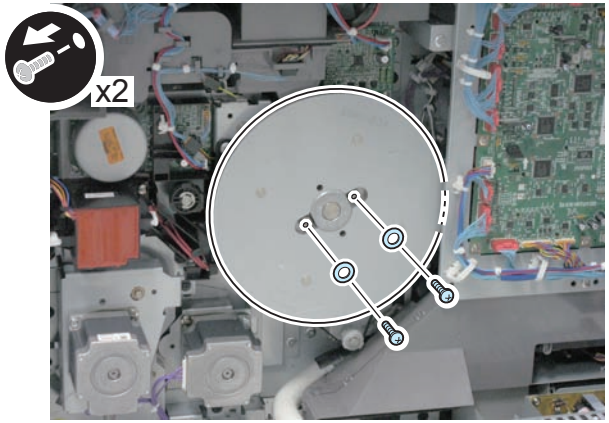
<Preparation>

1. Remove the Developing Assembly. (Refer to page 4-122)
2. Remove the Box Cover (Left). (Refer to "Removing the Waste Toner Feed Unit")
3. Open the Controller Box. (Refer to "Removing the Waste Toner Feed Unit")

<Procedure>

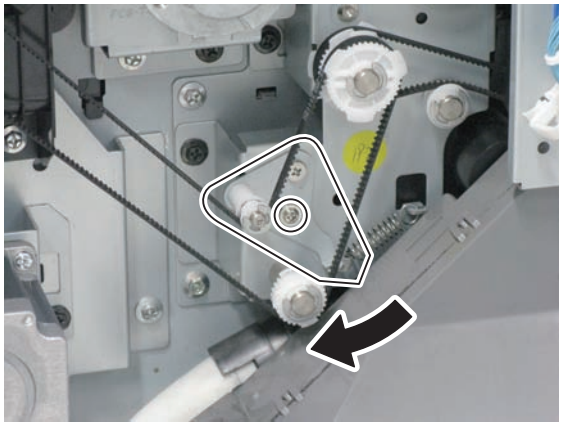
1) Remove the Flywheel.

- 2 Screws
- 2 Washers



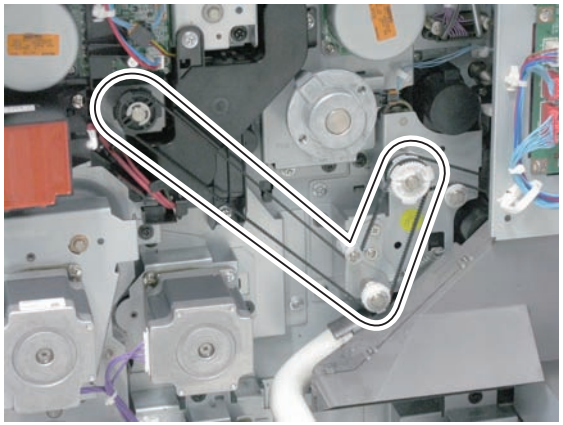

F-4-278

2) Loosen the screw and move the Belt Tensioner in the direction of the arrow, and then again tighten the screw.



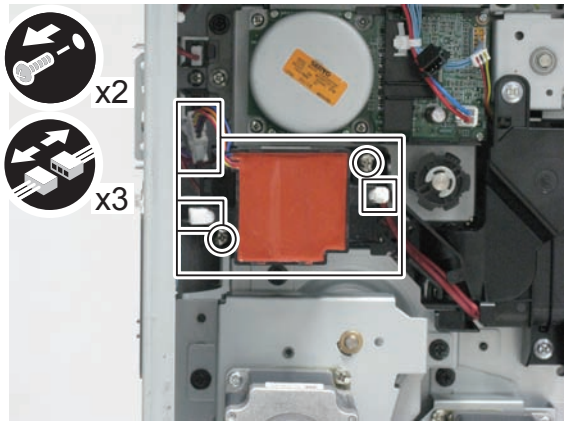
F-4-279

3) Remove the belt from the pully.



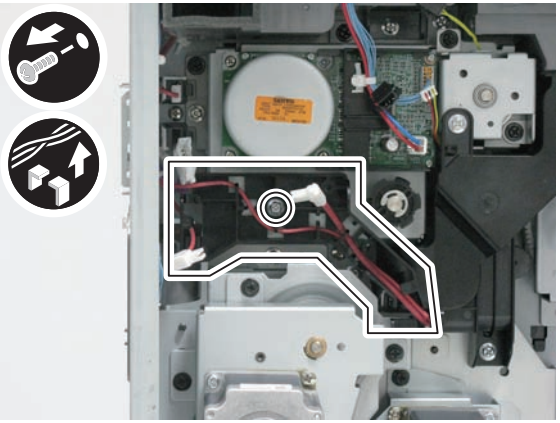
F-4-280

4) Remove the transformer.
- 2 Screws
- 3 Connectors



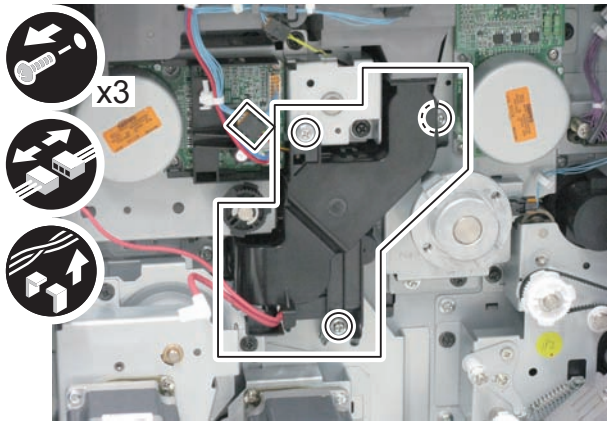

F-4-281

5) Free the harness and remove the Transformer Support Base.
- 1 Screw
- Harness



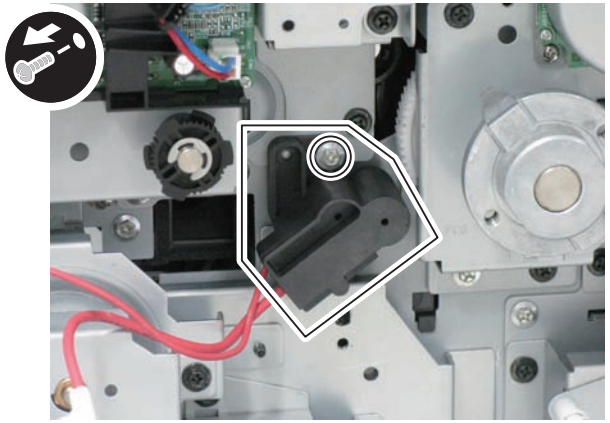
F-4-282

6) Remove the Duct Unit.
- 3 Screws
- 1 Connector
- Harness




F-4-283

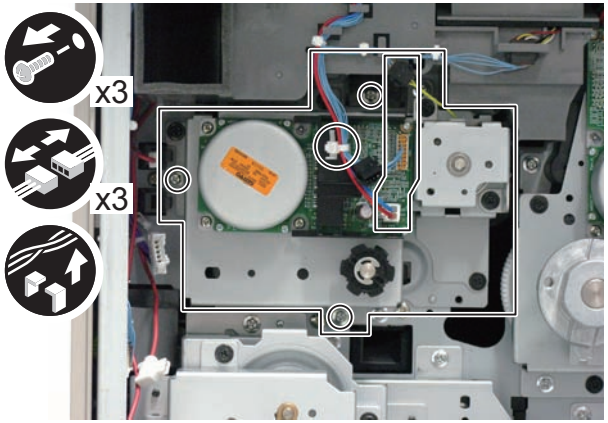
7) Disconnect the Pre-transfer Charging High Voltage Connector.
- 1 Screw



F-4-284

8) Remove the Developing Drive Unit.

- 3 Connectors
- 1 Reuse Band
- 3 Screws




F-4-285

# Fixing

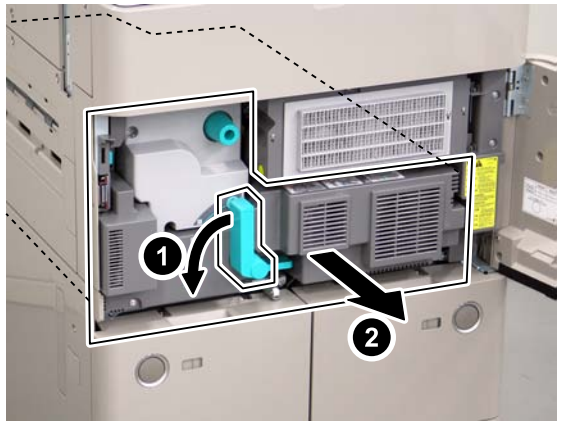
## Removing the Fixing Assembly

<Preparation>

1. Pull out the Fixing Feed Unit.

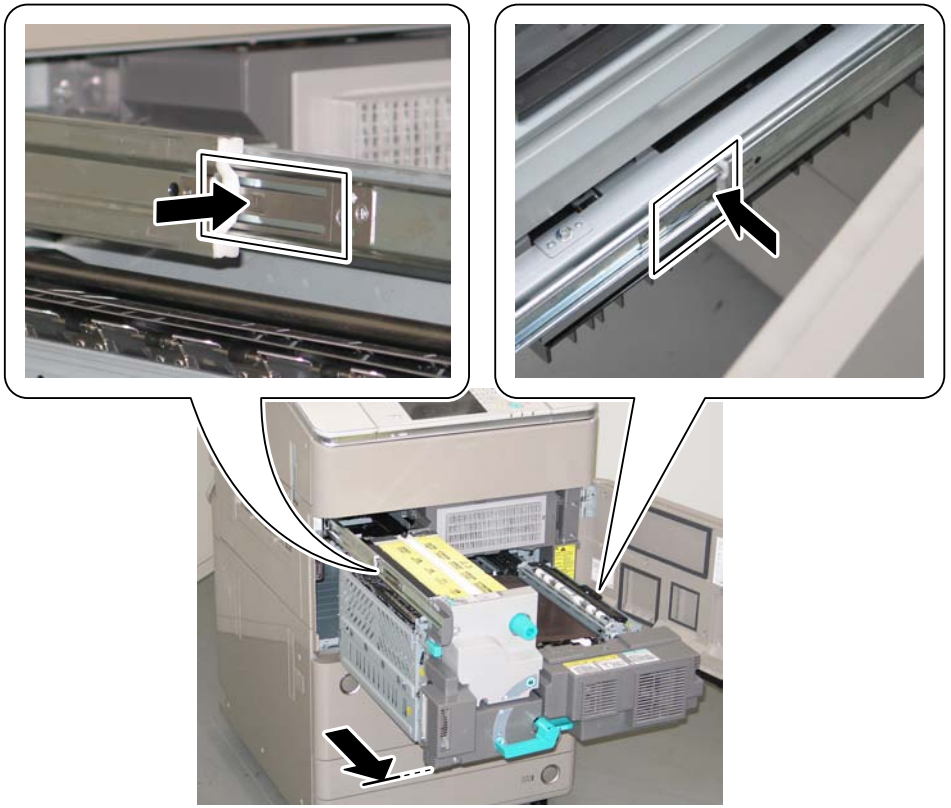
1-1) Open the Front Cover.

1-2) Turn the Fixing Feed Unit Pressure Release Lever in the direction of the arrow to pull out the Fixing Feed Unit.




F-4-286

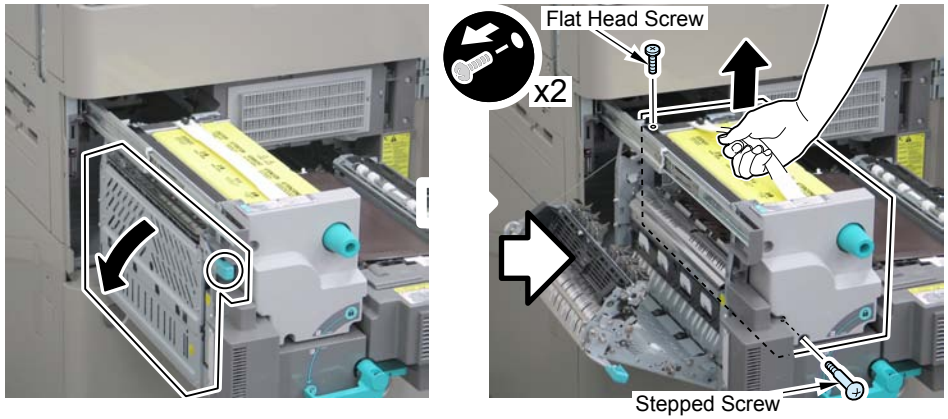
1-3) Push to release the Release Springs at both sides of the Rail, and then further pull out the Fixing Feed Unit until it stops.



F-4-287

<Procedure>

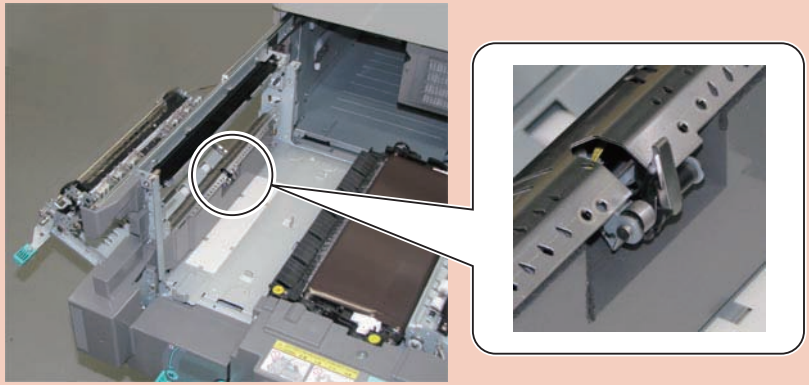
1) Hold the Lever of the Feed Unit to open the Feed Unit.
2) Remove the Fixing Assembly.
- 2 Screws




F-4-288

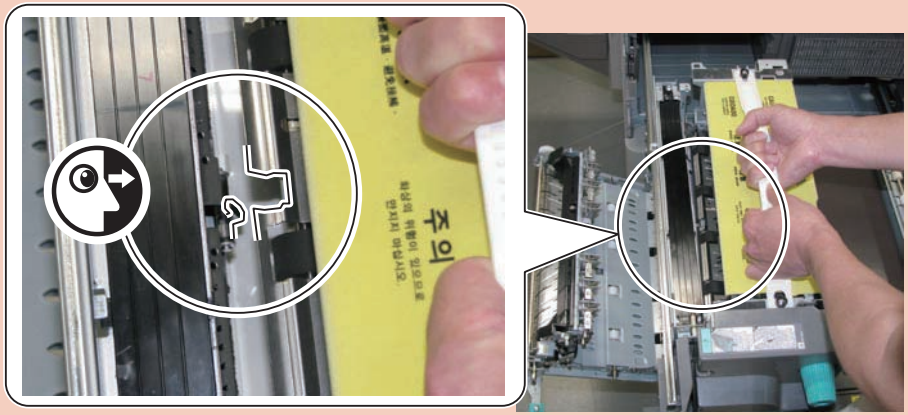
CAUTION: Points to Caution at Installation

- Be careful not to damage the Inner Delivery Sensor Flag.



F-4-289

- When installing the Fixing Assembly, be sure that the Inner Delivery Sensor Flag passes through the cut-off of the Fixing Outlet Guide.



F-4-290

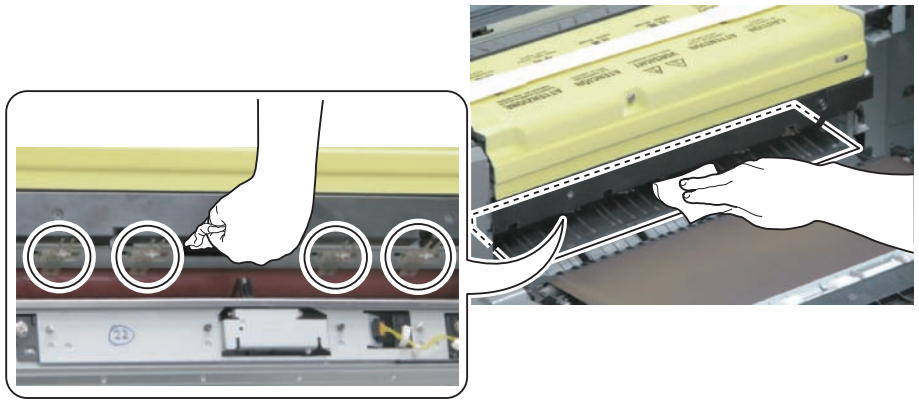
# Cleaning the Fixing Inlet Guide,Fixing Inlet Sensor Flag, Fixing Right Stay, Dowel, Dowel Holder

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)

<Procedure>

1) Clean the Fixing Inlet Guide with lint-free paper moistened with alcohol.
2) Clean the Fixing Right Stay, Dowel, Dowel Holder with lint-free paper moistened with alcohol.



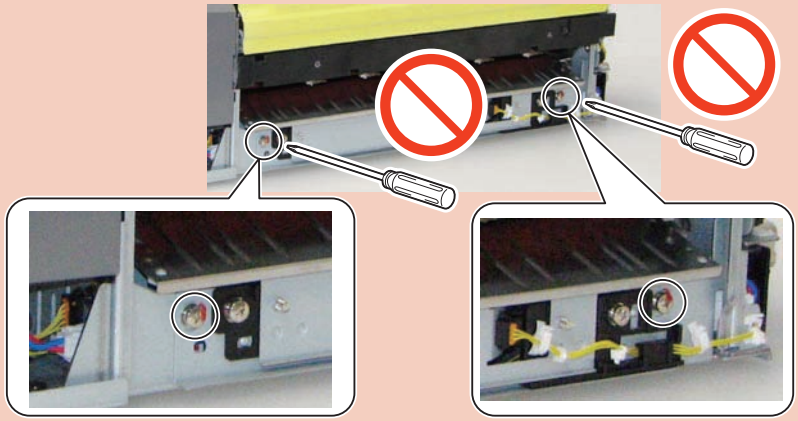
F-4-291

3) Remove the Fixing Inlet Guide Unit.

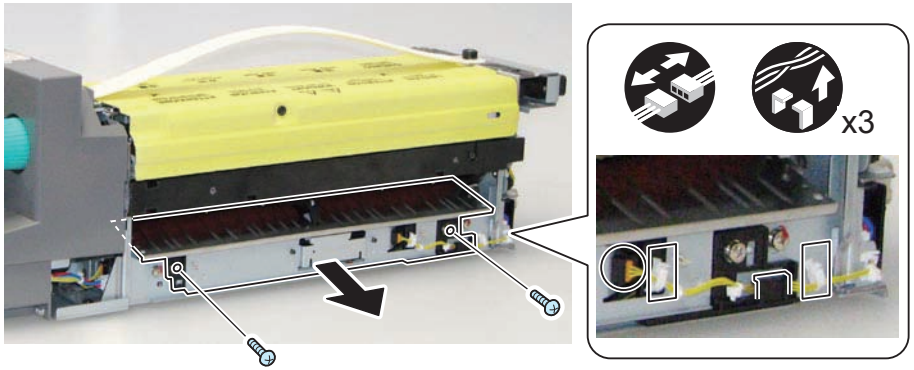
- 1 Connector
- 2 Wire Saddles
- 1 Harness Guide
- 2 Screws

CAUTION:

When removing the Fixing Inlet Guide Unit, be careful no to turn the 2 Adjustment Screws.

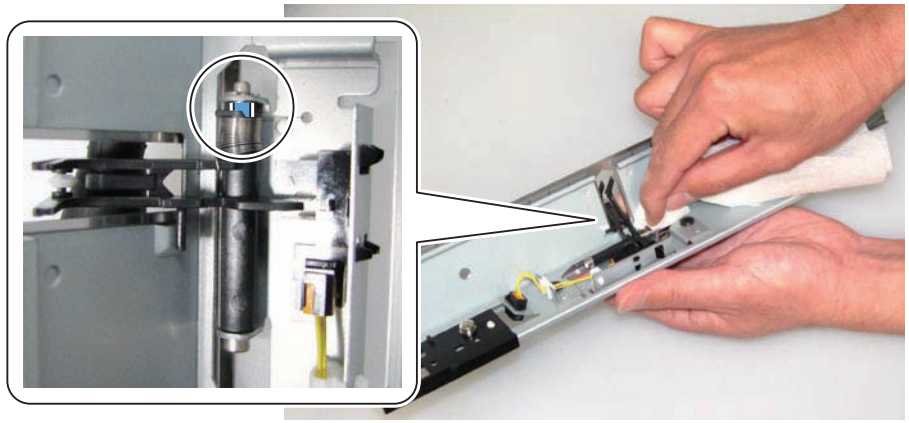


F-4-292



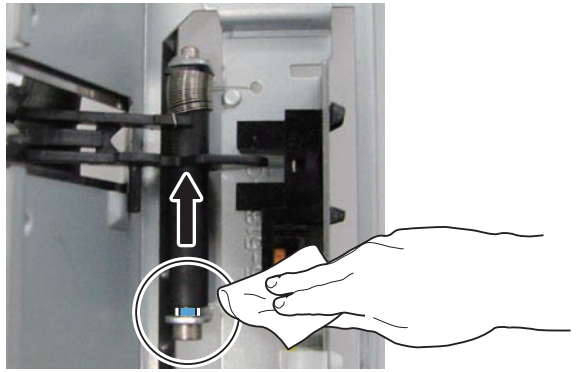

F-4-293

4) Turn over the Fixing Inlet Guide Unit, and insert lint-free paper into the clearance (front side) between the Fixing Inlet Sensor Flag Shaft and the Shaft Support Plate to remove the accumulated paper lint by dry wipe.



F-4-294

5) Slide the sensor flag to the rear side, and insert lint-free paper into the clearance (rear side) between the Fixing Inlet Sensor Flag Shaft and the Shaft Support Plate to remove the accumulated paper lint by dry wipe.



F-4-295

CAUTION:Checking after Cleaning the Fixing Inlet Sensor Flag Shaft

Be sure to check that the sensor flag rotates and moves back and forth smoothly by moving it manually.

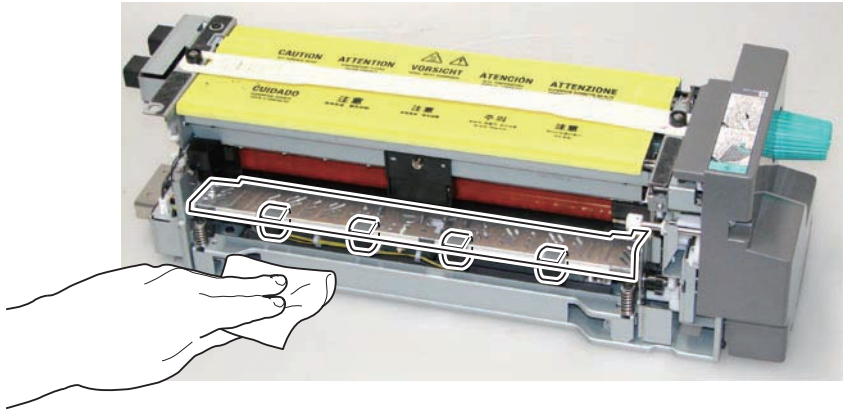
## Cleaning the Inner Delivery Roller

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)

<Procedure>

1) Clean the Inner Delivery Roller with lint-free paper moistened with alcohol.




F-4-296

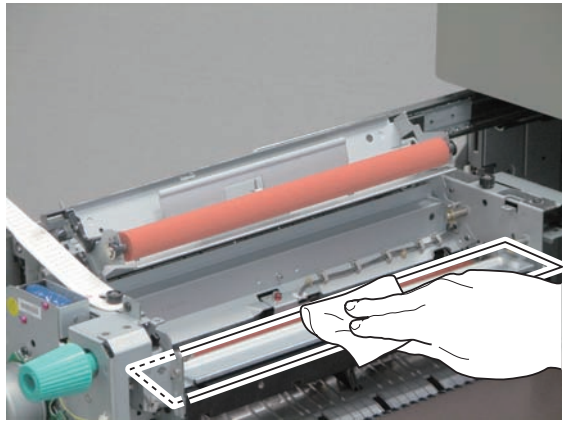
## Cleaning the Fixing Oil Pan

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")
3. Remove the Fixing Upper Cover. (Refer to "Removing the Fixing Cleaning Web")

<Procedure>

1) Clean the surface of the Fixing Oil Pan with lint-free paper.



F-4-297

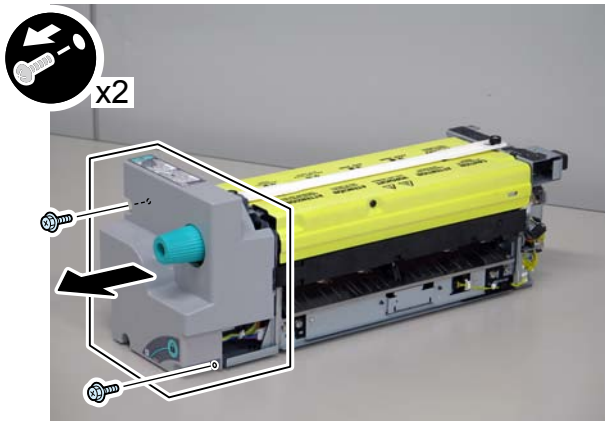
## Removing the Fixing Cleaning Web

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover.

3-1) Remove the Fixing Front Cover.

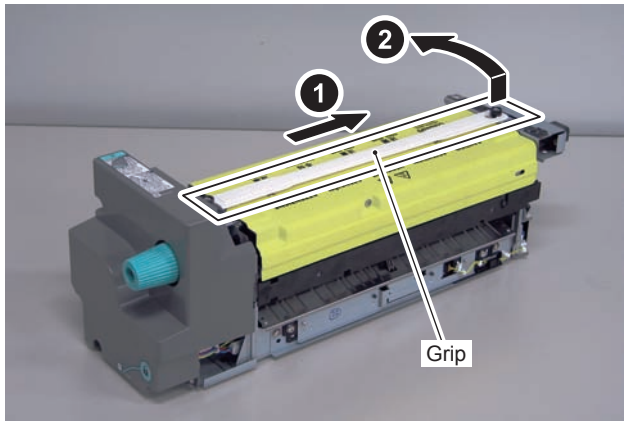
- 2 Screws




F-4-298

4. Remove the Fixing Upper Cover.

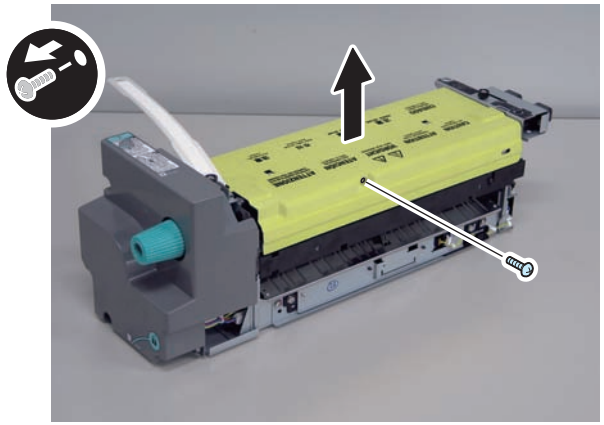
4-1) Remove the Handle by sliding to the rear side.




F-4-299

4-2) Remove the Fixing Upper Cover.

- 1 Screw



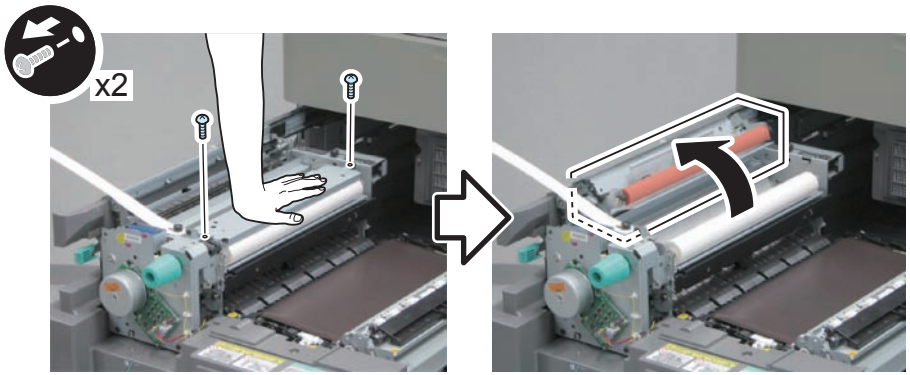
F-4-300

<Procedure>

1) Open the Fixing Cleaning Web Cover.

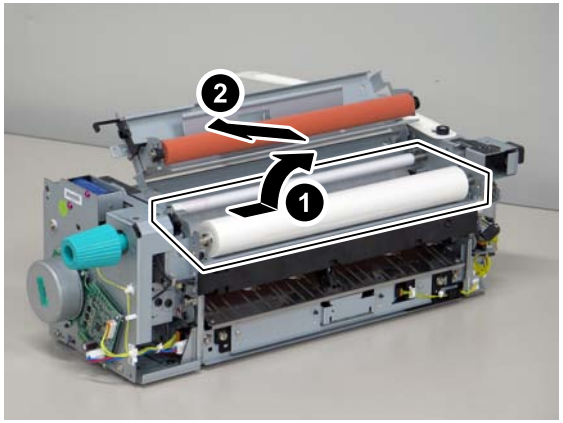
- 2 Screws

NOTE:
Because it is engaged, hold the Fixing Cleaning Web Cover to remove the screws.




F-4-301

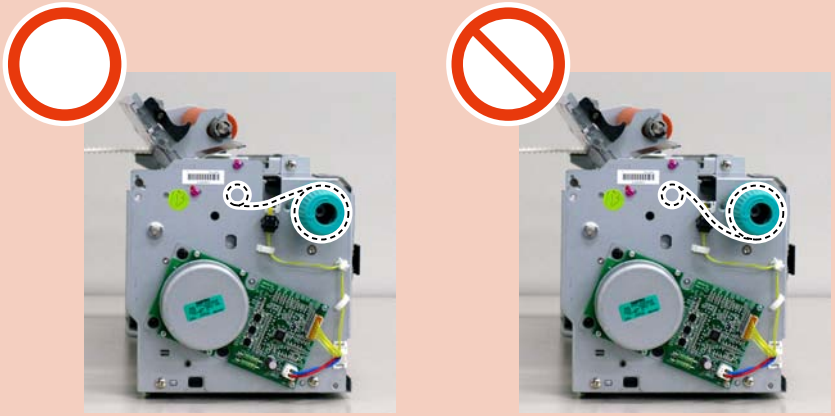
2) Remove the Fixing Cleaning Web.




F-4-302

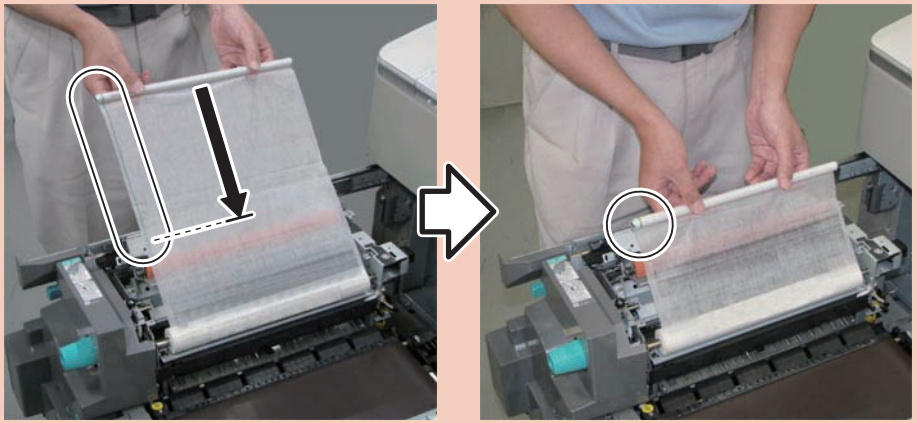
CAUIOTN: Points to Caution at Installation

- Be sure to install the Fixing Cleaning Web in the correct direction.



F-4-303

- When installing the Fixing Cleaning Web, be sure to wind the web around the Web Take-up Roller until the green line on the web disappears from view.



F-4-304

## Cleaning the Fixing Roller Static Eliminator

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to “Removing the Fixing Assembly”)
2. Remove the Fixing Cleaning Web. (Refer to “Removing the Fixing Cleaning Web”)

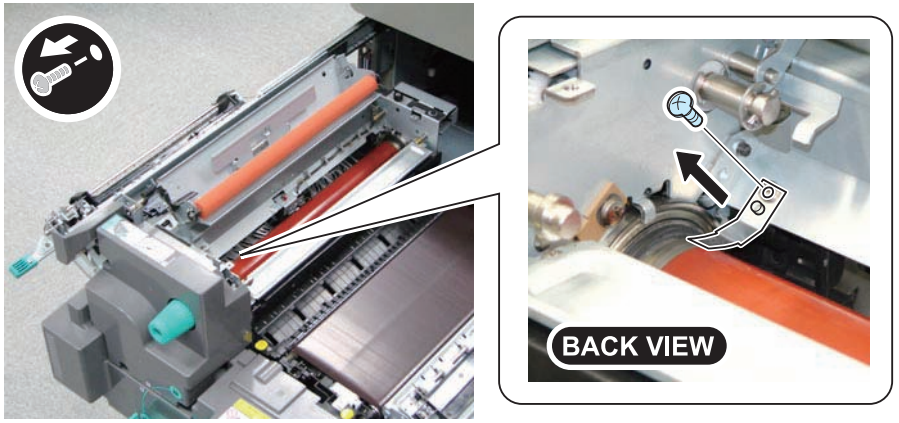
<Procedure>

1) Remove the Fixing Roller Static Eliminator.

- 1 Screw
- 1 Boss

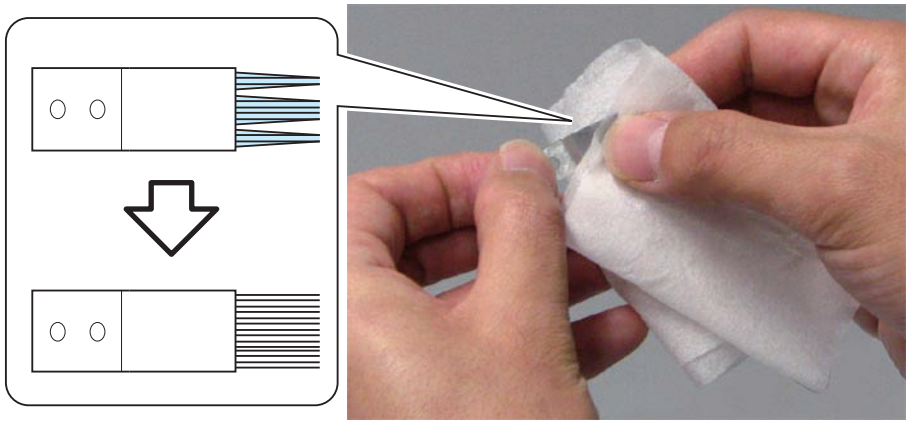
CAUTION:

When removing the Fixing Roller Static Eliminator, be careful not to drop it inside of the Fixing Assembly.




F-4-305

2) Dry wipe oil on the Fixing Roller and paper lint adhered on the Fixing Roller Static Eliminator with lint-free paper, and loosen up the strands of Static Eliminator clotted with oil.



F-4-306

## Separating the Fixing Upper Unit from the Fixing Lower Unit

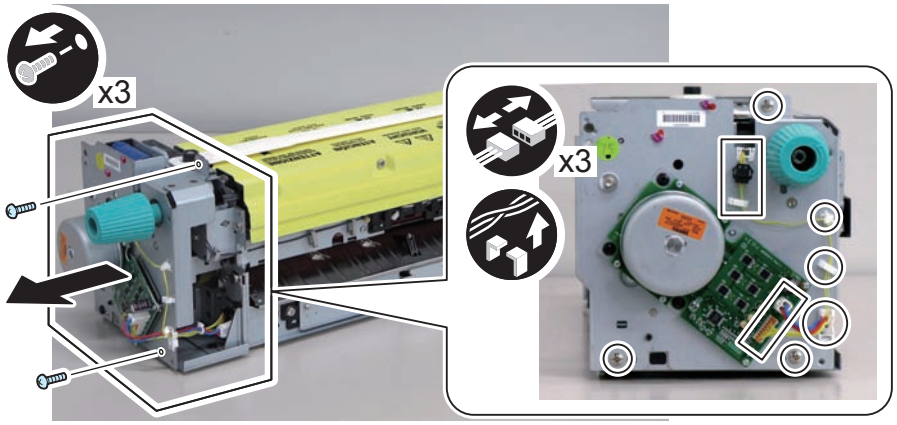
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")

<Procedure>

1) Remove the Fixing Drive Unit.

- Wire Saddle
- Edge Saddle
- Reuse Band
- 3 Connectors
- 3 Screws

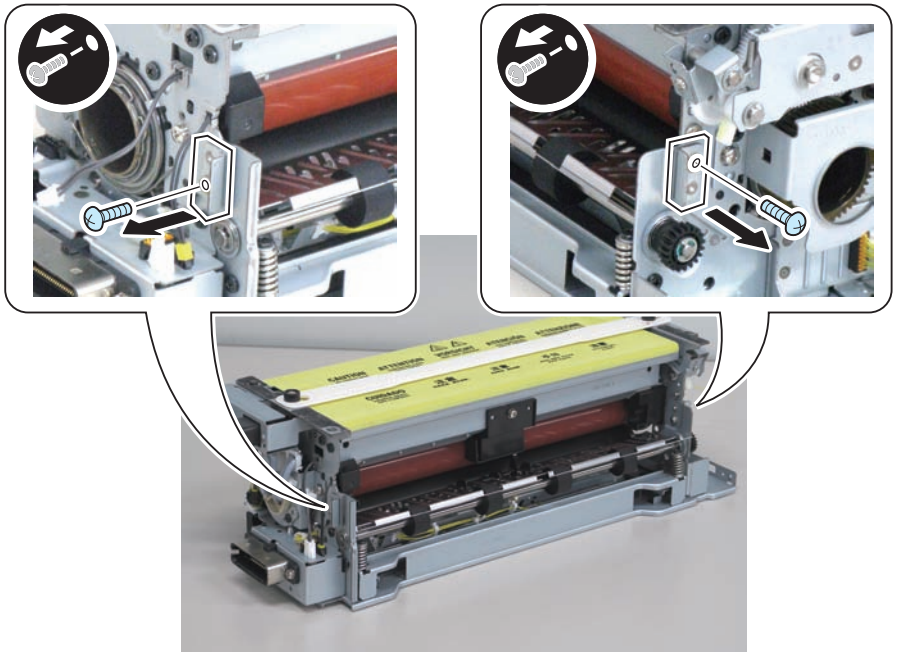



F-4-307

2) Remove the Fixing Pin.

- 2 Screws

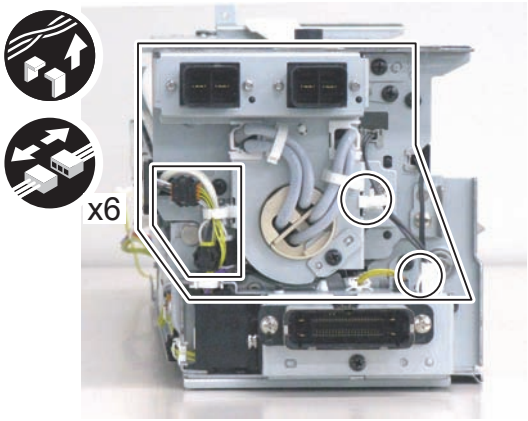
NOTE:
Because it is engaged, hold the Fixing Upper Unit to remove the Fixing Pin.



F-4-308

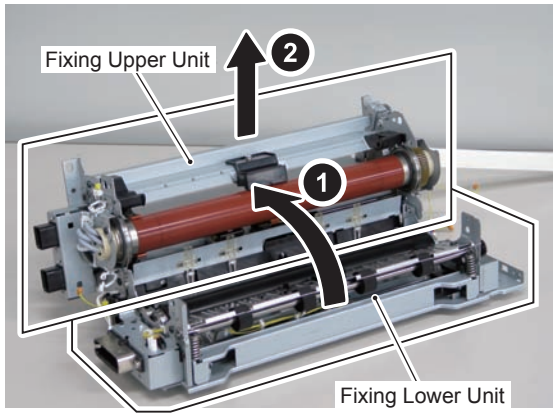
3) Disconnect the Connectors of Heater Unit.

- Wire Saddle
- 6 Connectors




F-4-309

4) Separate the Fixing Upper Unit from the Fixing Lower Unit.




F-4-310

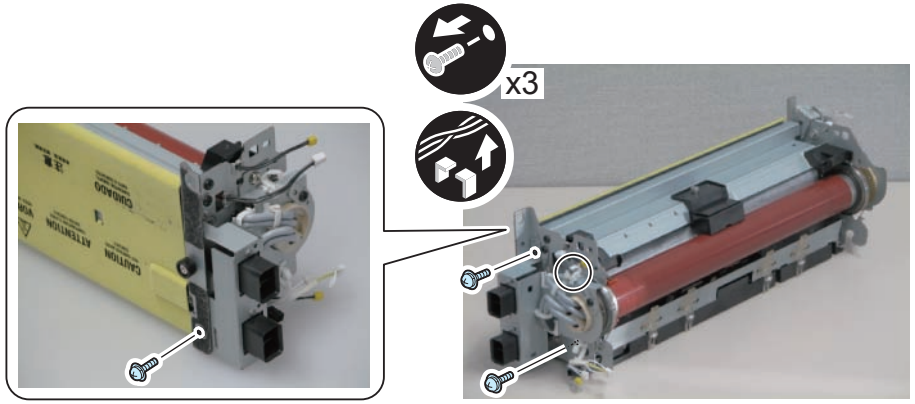
# Removing the Fixing Roller, Insulating Bush and Thrust Stopper

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")
4. Separate the Fixing Upper Unit from the Fixing Lower Unit. (Refer to page 4-175)
5. Remove the Heater Unit.

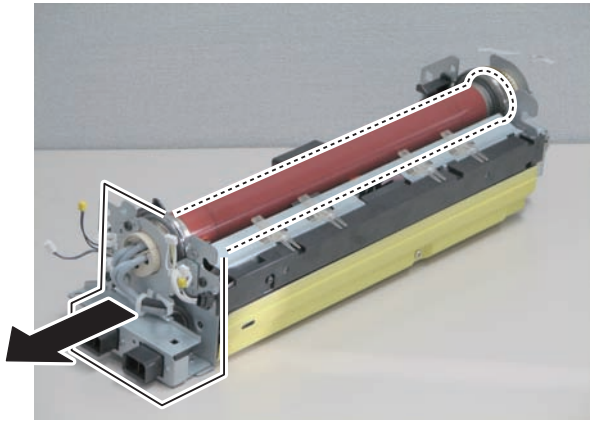
5-1) Free the Harness from the Wire Saddle and remove the 3 screws.

- 6 Connectors
- 3 Screws




F-4-311

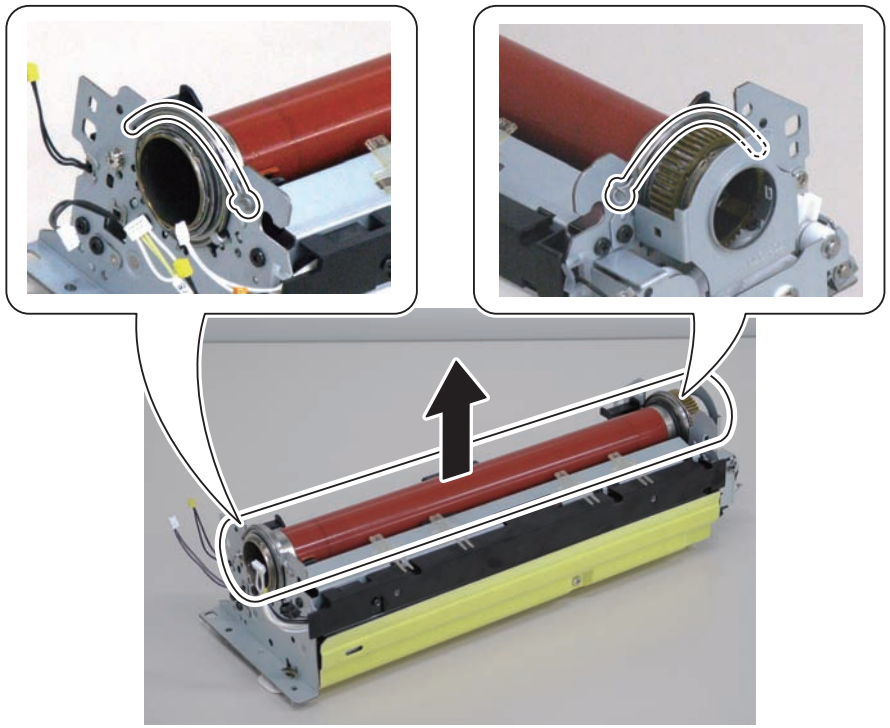
5-2)Remove the Heater Unit.



F-4-312

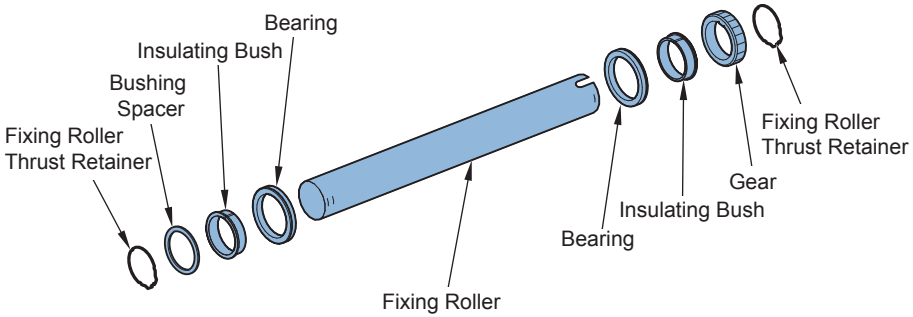
<Procedure>

1) Place the Fixing Upper Unit as shown in the figure and remove the Fixing Roller Bearing Retainer.
2) Remove the Fixing Roller Unit.



F-4-313

3) Remove the Thrust Stopper from the Fixing Roller Unit to remove the Fixing Roller.




F-4-314

CAUTION: Points to Caution at Installation

Be sure to locate the groove of the Fixing Roller Bearing outside the Fixing Upper Unit to install.

F-4-315

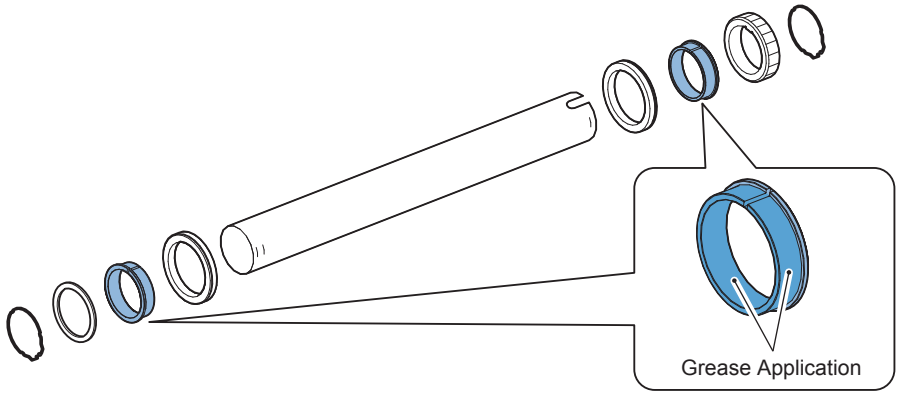
CAUTION: Points to Caution when Replacing the Fixing Roller

Do not reuse the once removed Thrust Stopper.

If the Thrust Stopper is reused, it may come off during printing.

<Processing after replacing the parts>

- Grease Application
  Apply approx. 20mg of grease (MOLYKOTE HP-300; CK-8012) to inner circumference and outer circumference of the Bushing so that all circumferences are covered with white film; otherwise, abnormal noise can occur (squeaking).




F-4-316

- Clear the counter
  COPIER >COUNTER > DRBL-1 > FX-UP-RL

## Removing the Pressure Roller

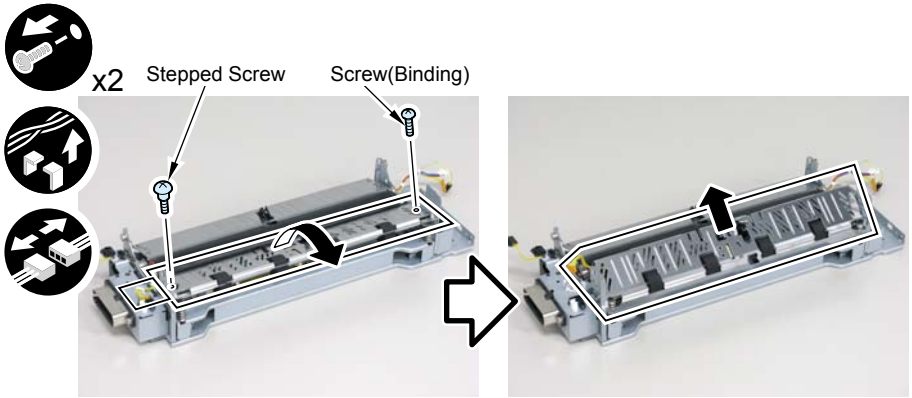
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")
4. Separate the Fixing Upper Unit from the Fixing Lower Unit. (Refer to page 4-175)

<Procedure>

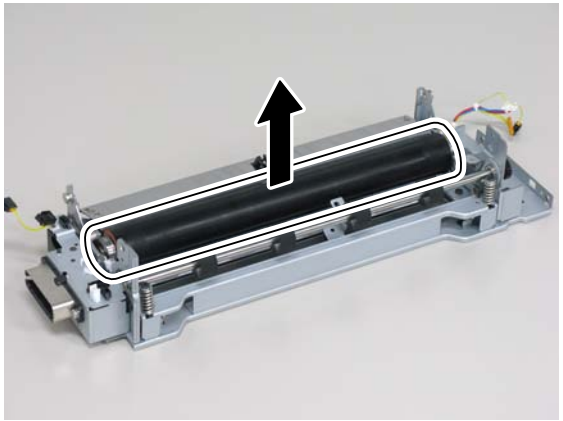
1) Remove the Fixing Inlet Guide.

- 2 Screws
- Wire Saddle
- Edge Saddle
- 1 Connector




F-4-317

2) Remove the Pressure Roller Unit.



F-4-318

## Removing the Pressure Roller Static Eliminator

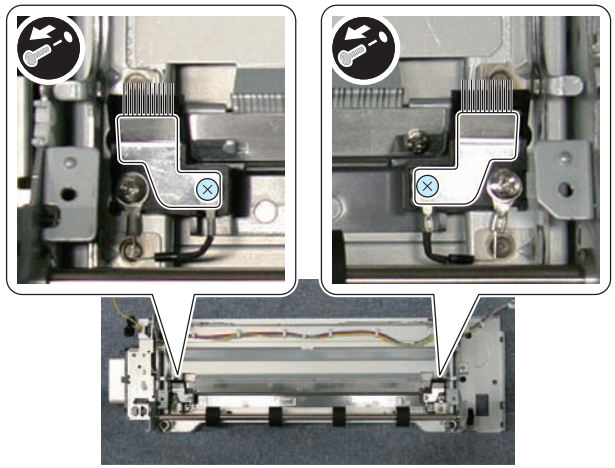
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")
4. Separate the Fixing Upper Unit from the Fixing Lower Unit. (Refer to page 4-175)
5. Remove the Pressure Roller Unit. (Refer to page 4-179)

<Procedure>

1) Remove the Pressure Roller Static Eliminators (at the front and rear).

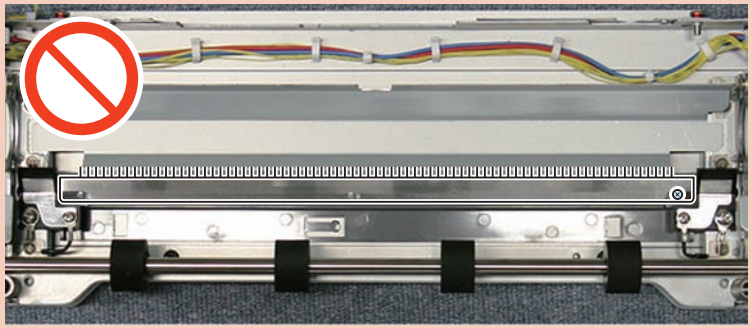
- 2 Screws



F-4-319

CAUTION:

Do not remove the Static Eliminator with short bristles at the center because it is not a consumable part.



F-4-320

## Removing the Main Thermistor

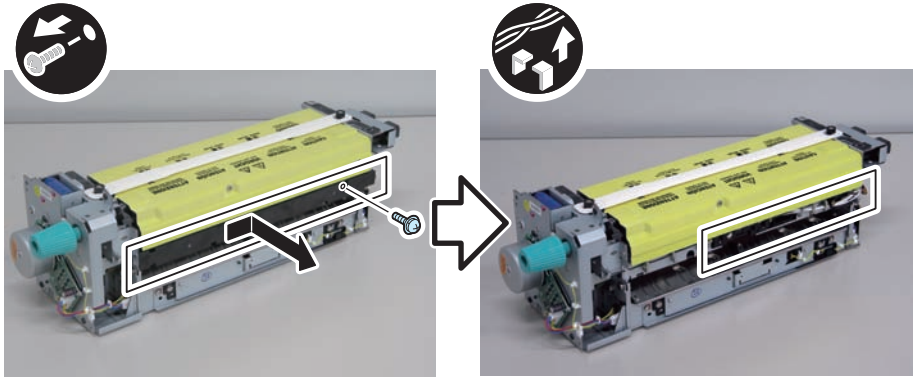
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")

<Procedure>

1) Remove the Harness Guide Cover and free the Harness from the Guide.

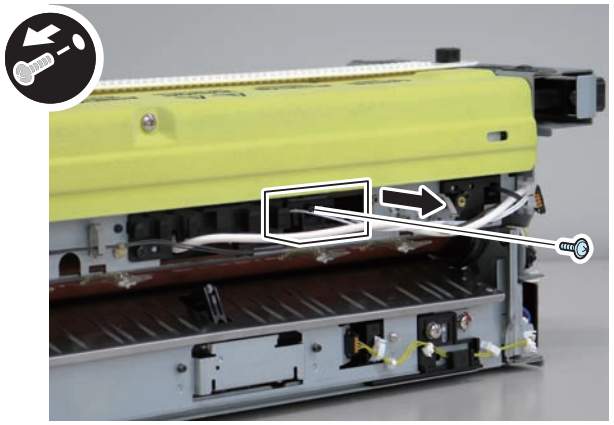
- 1 Screw
- Edge Saddle
- Harness Guide



F-4-321

2) Remove the DC Thermoswitch Unit.

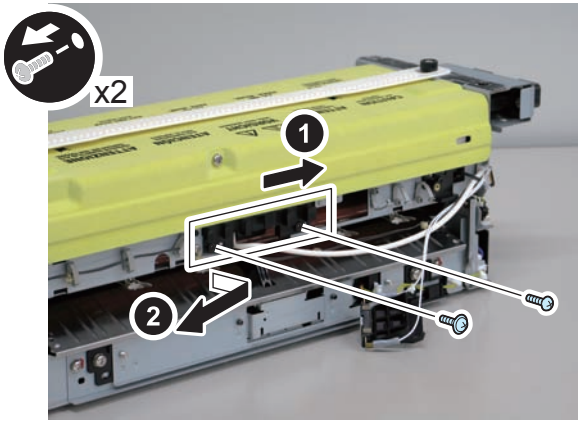
- 1 Screw



F-4-322

3) Remove the Main Thermistor Unit.

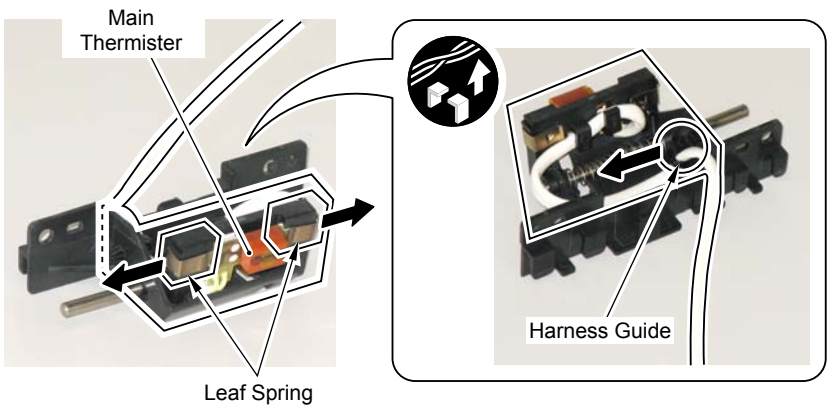
- 2 Screws




F-4-323

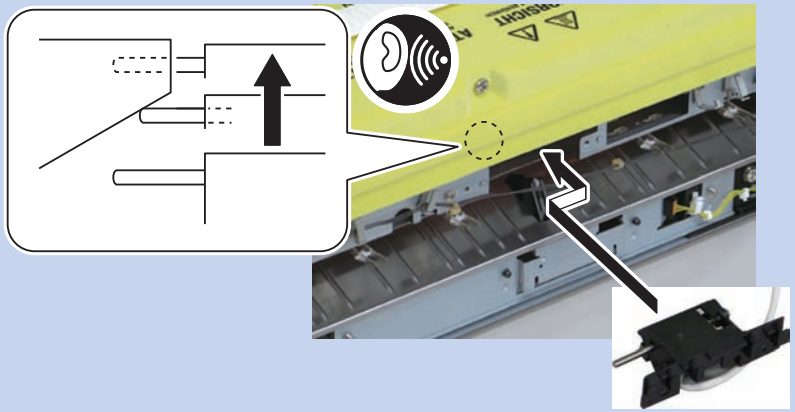
4) Remove the Copper Plate and the Harness Band to remove the Main Thermistor from the Main Thermistor Support Member.

- Harness Guide




F-4-324

NOTE:
When installing the Main Thermistor Unit, be sure to fit the shaft of Main Thermistor Unit in the shaft support until clicky sound is heard.



F-4-325

# Removing the Sub Thermistor 1

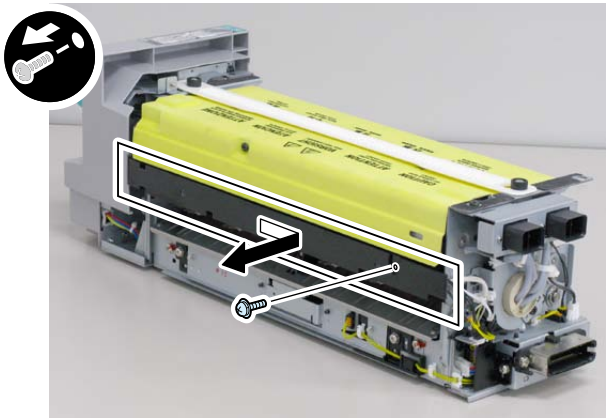
<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)

<Procedure>

1) Remove the Harness Guide Cover.

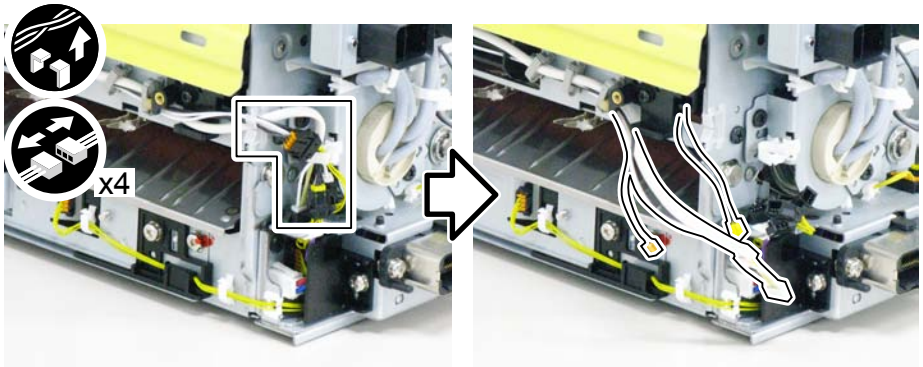
- 1 Screw



F-4-326

2) Remove the Harness to free as shown in the figure.

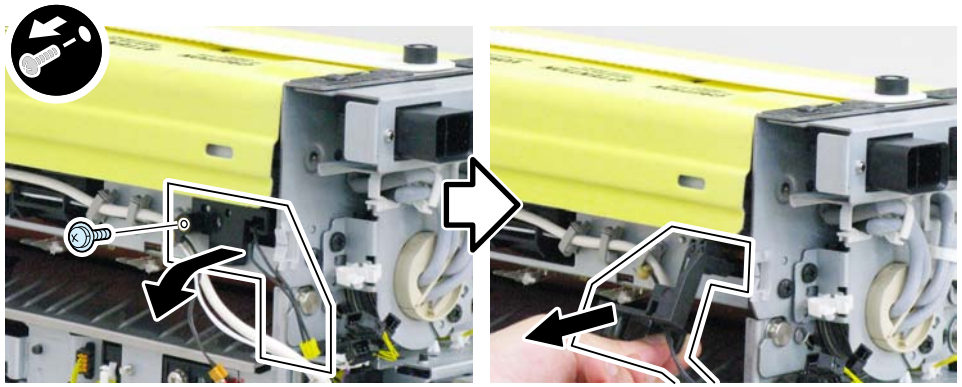
- 4 Connectors
- Edge Saddle
- Wire Saddle




F-4-327

3) Remove the Fixing Sub Thermistor 1 Holder.

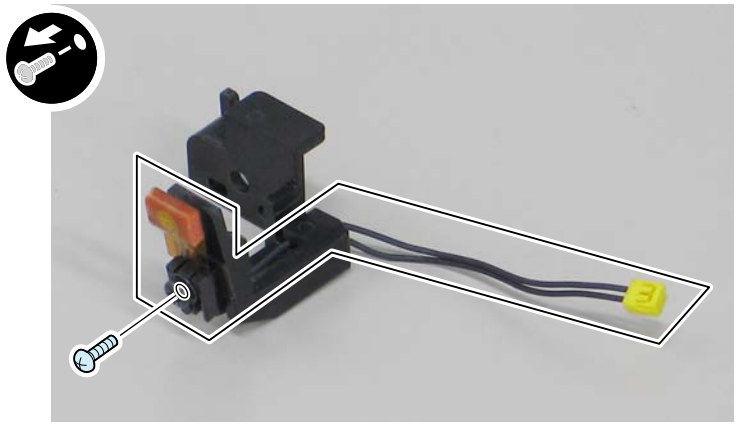
- 1 Screw



F-4-328

4) Remove the Fixing Sub Thermistor 1.

- 1 Screw



F-4-329

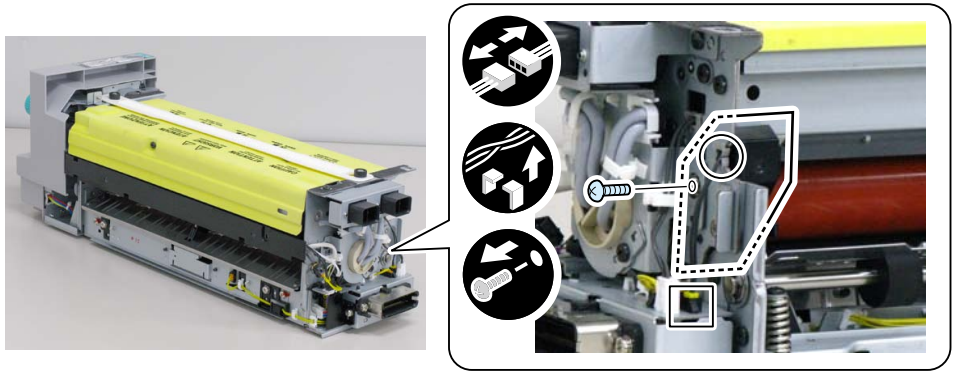
# Removing the Sub Thermistor 2

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Removing the Sub Thermistor 1. (Refer to page 4-183)

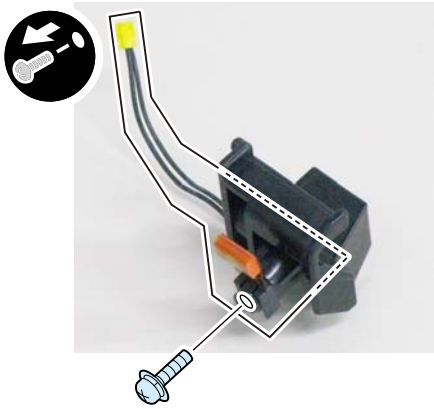
<Procedure>

1) Remove the Fixing Sub Thermistor 2 Holder.
- 1 Connector
- Edge Saddle
- 1 Screw



F-4-330

2) Remove the Fixing Sub Thermistor 2.
- 1 Screw



F-4-331

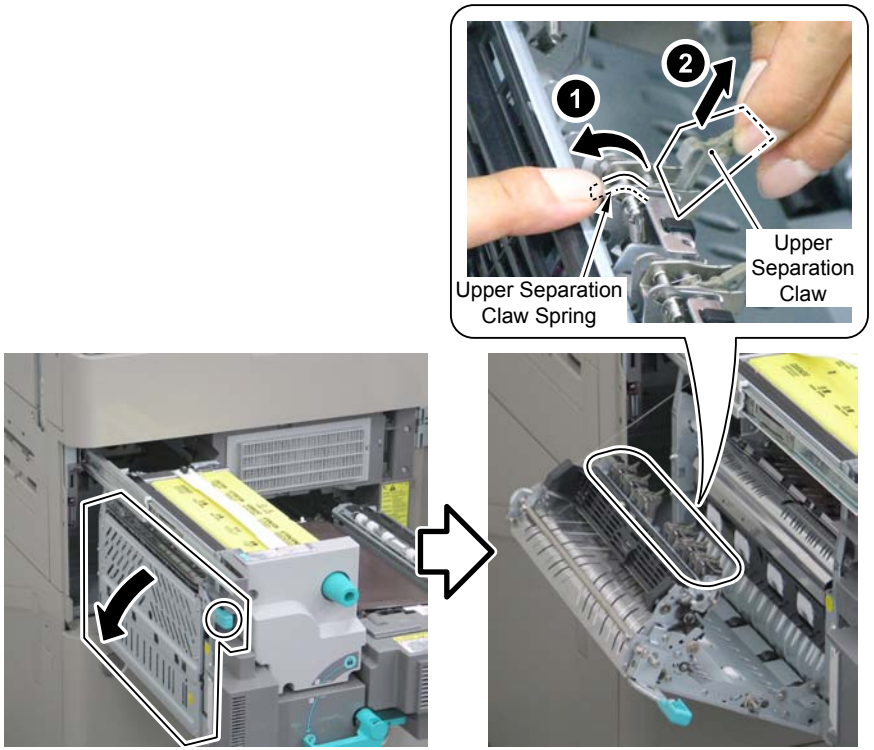
## Removing the Upper Separation Claw

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")

<Procedure>

1) Hold the Lever of the Left Guide to open the Left Guide.
2) While holding the Upper Separation Claw Retaining Spring, remove the Upper Separation Claw.




F-4-332

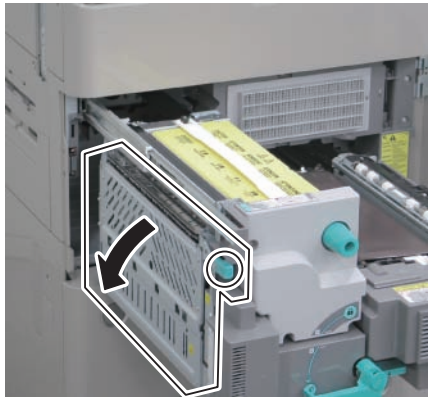
## Cleaning the Upper Separation Claw

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")

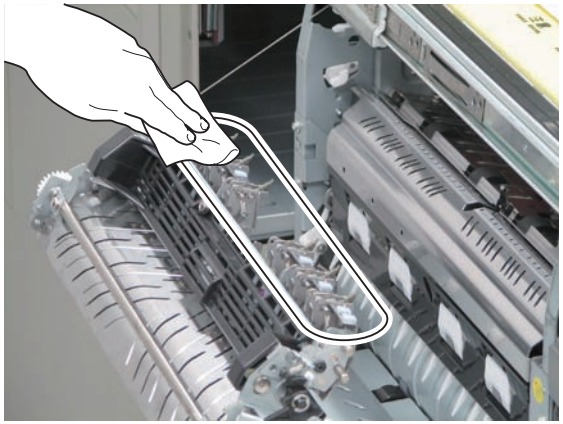
<Procedure>

1) Hold the Lever of the Feed Unit to open the Feed Unit.



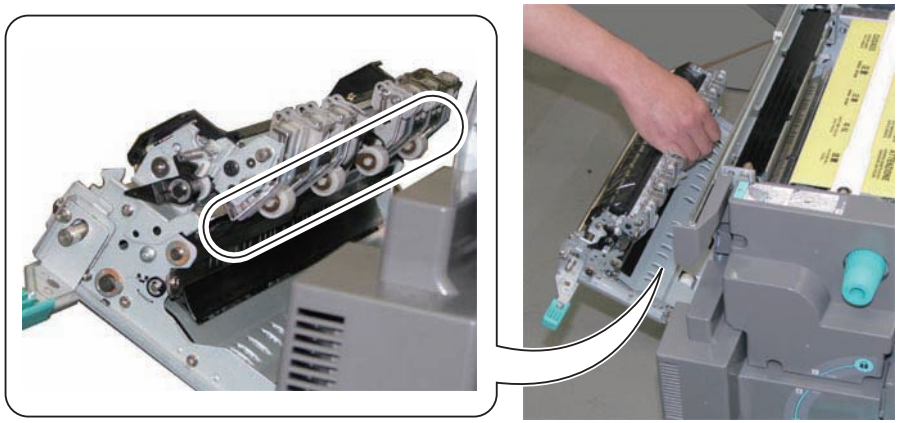
F-4-333

2) Clean the Upper Separation Claw with lint-free paper moistened.



F-4-334

3) Wipe toner off the 4 Inner Delivery Rollers with lint-free paper moistened with alcohol.



F-4-335

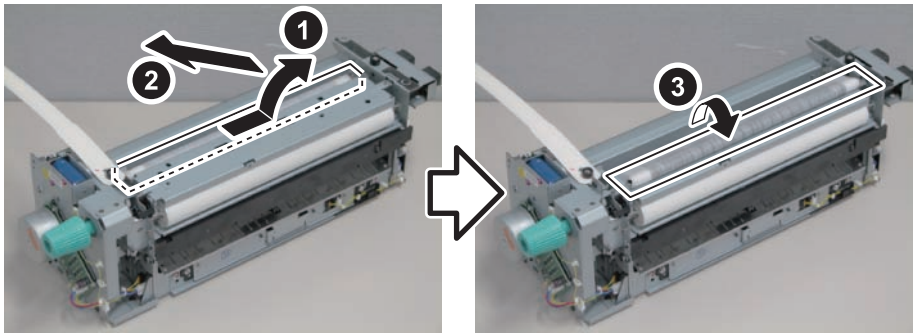
# Removing the Thermoswitch 2

<Preparation>

1. Pull out the Fixing Feed Unit. (Refer to "Removing the Fixing Assembly")
2. Remove the Fixing Assembly. (Refer to page 4-168)
3. Remove the Fixing Front Cover. (Refer to "Removing the Fixing Cleaning Web")
4. Remove the Fixing Upper Cover. (Refer to "Removing the Fixing Cleaning Web")

<Procedure>

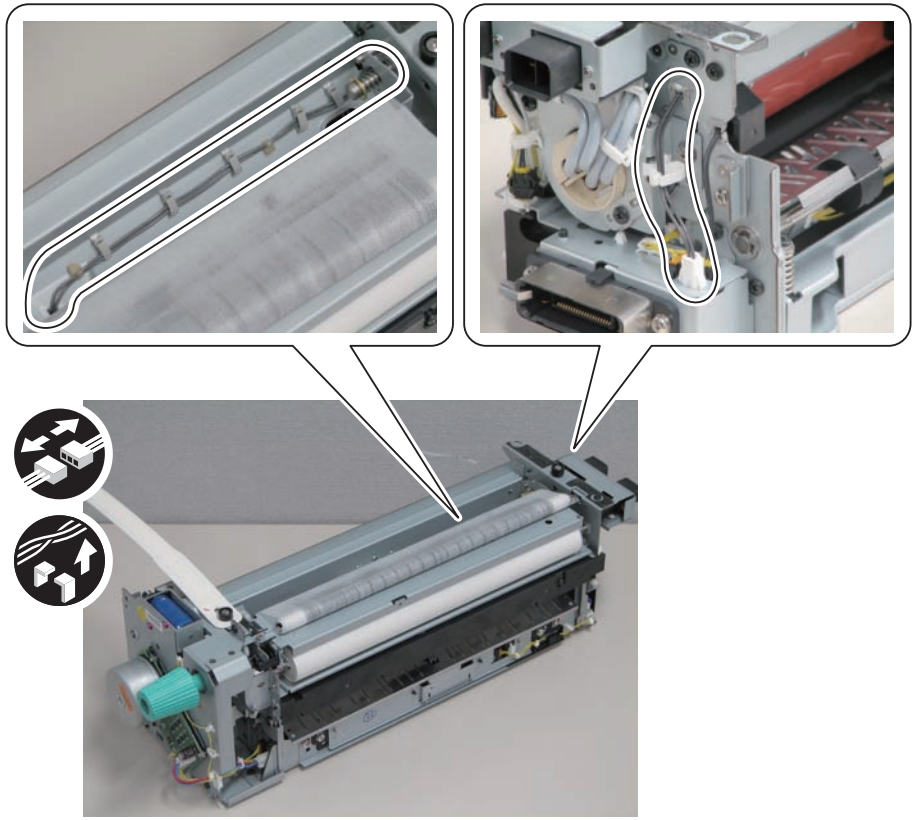
1) Remove the Fixing Cleaning Web (take-up side).




F-4-336

2) Free the harness of Thermoswitch 2.

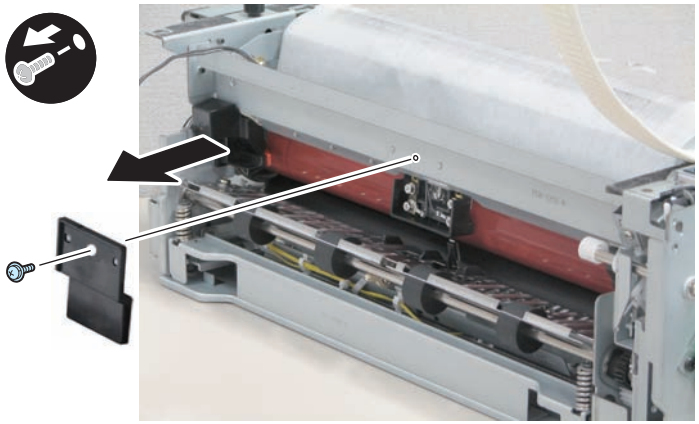
- 1 Connector
- Wire Saddle



F-4-337

3) Remove the Thermoswitch Cover.

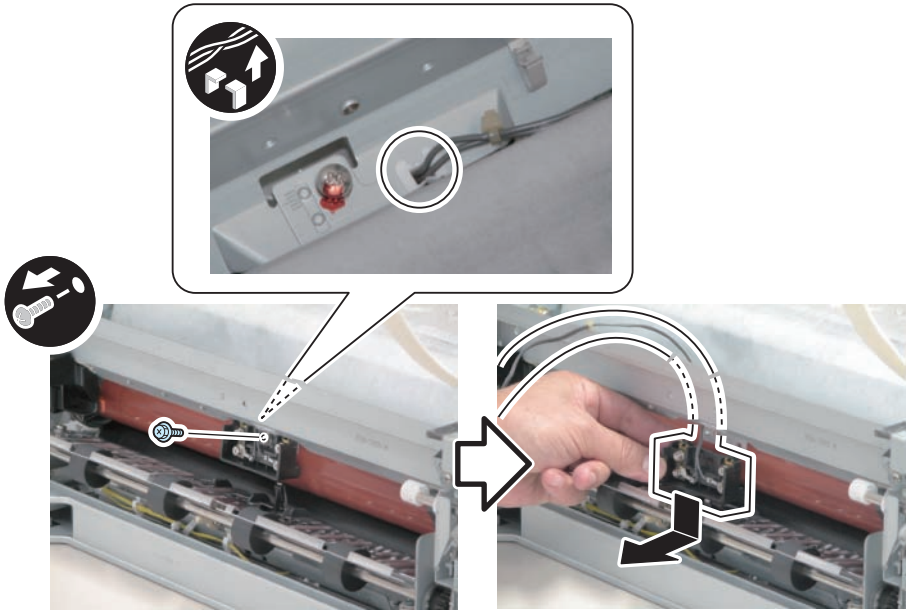
- 1 Screw



F-4-338

4) Free the harness from the Edge Saddle and remove the Thermoswitch 2 Unit.

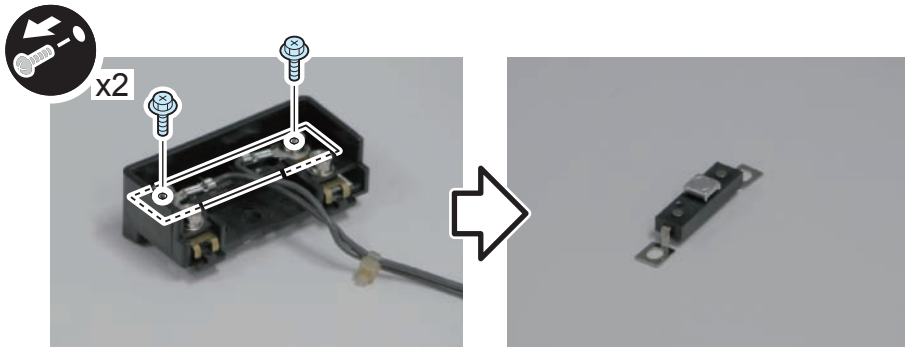
- 1 Screw



F-4-339

5) Remove the Thermoswitch 2.

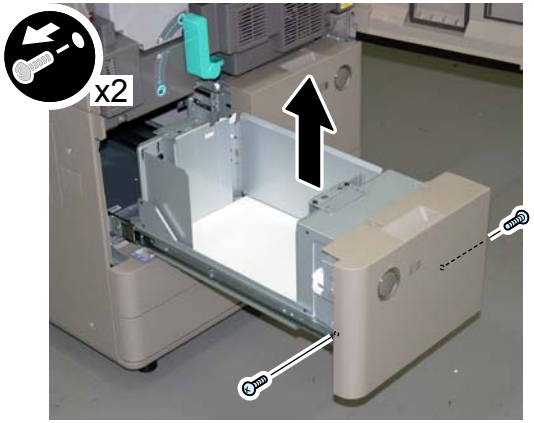
- 2 Screws




F-4-340

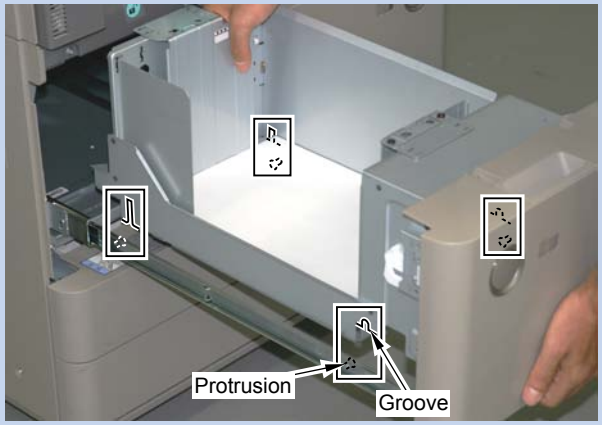
## Removing the Left Pickup Deck

1) Open the Front Cover.
2) Pull out the Left Pickup Deck to remove.
- 2 Screws




F-4-341

NOTE:
When installing the Left Pickup Deck, be sure to fit the 4 protrusions on the Rail into the 4 grooves of the Left Pickup Deck to install.

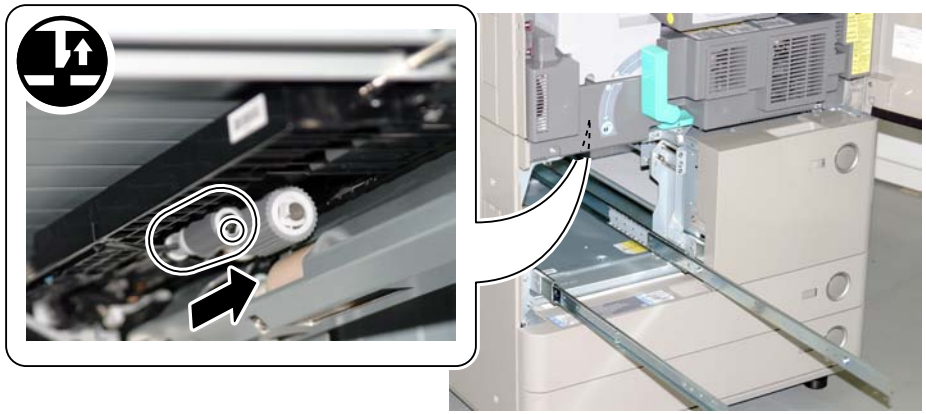



F-4-342

## Removing the Left Deck Pickup Roller

<Preparation>
1. Open the Front Cover.
2. Remove the Left Pickup Deck. (Refer to page 4-189)

<Procedure>
1) Remove the Left Deck Pickup Roller.
- 1 Claw



F-4-343

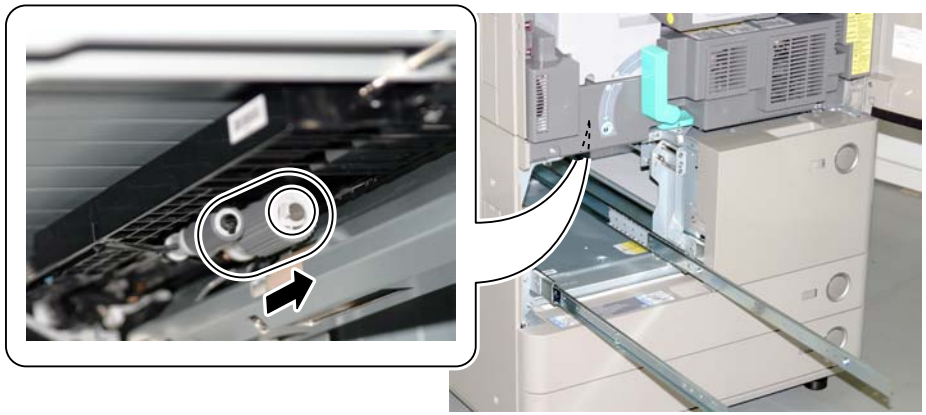
## Removing the Left Deck Feed Roller

<Preparation>

1. Open the Front Cover.
2. Remove the Left Pickup Deck. (Refer to page 4-189)

<Procedure>

1) Remove the Stopper to remove the Left Deck Feed Roller.

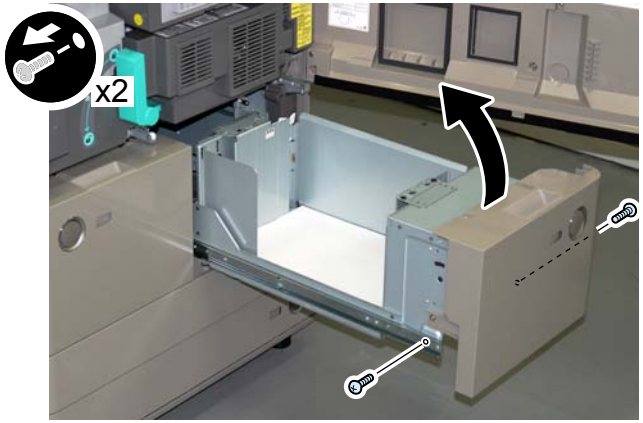


F-4-344

## Removing the Right Pickup Deck

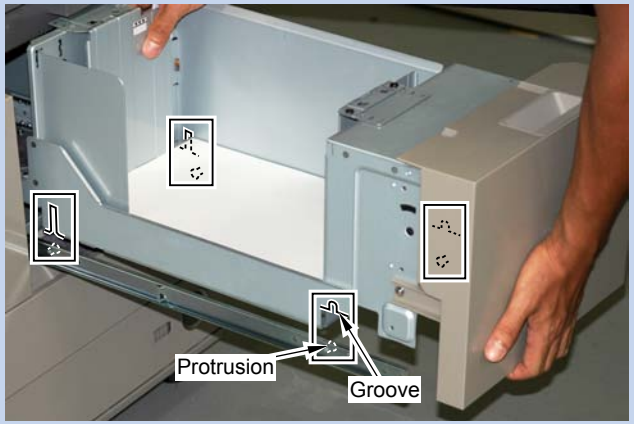
1) Open the Front Cover.
2) Pull out the Right Pickup Deck to remove.

- 2 Screws




F-4-345

NOTE:
When installing the Right Pickup Deck, be sure to fit the 4 protrusions on the Rail into the 4 grooves of the Right Pickup Deck to install.




F-4-346

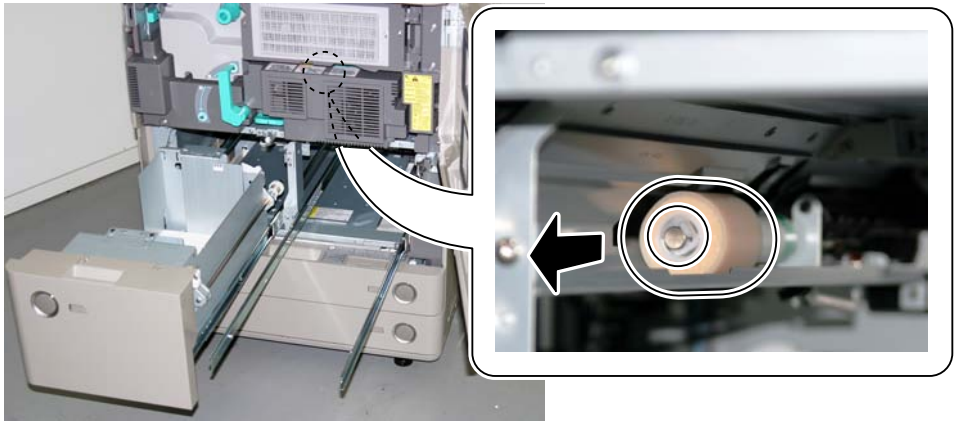
## Removing the Left Deck Separation Roller /Cleaning the Left Deck Pickup Sensor 2 (PS20)

<Preparation>

1. Open the Front Cover.
2. Remove the Right Pickup Deck. (Refer to page 4-190)

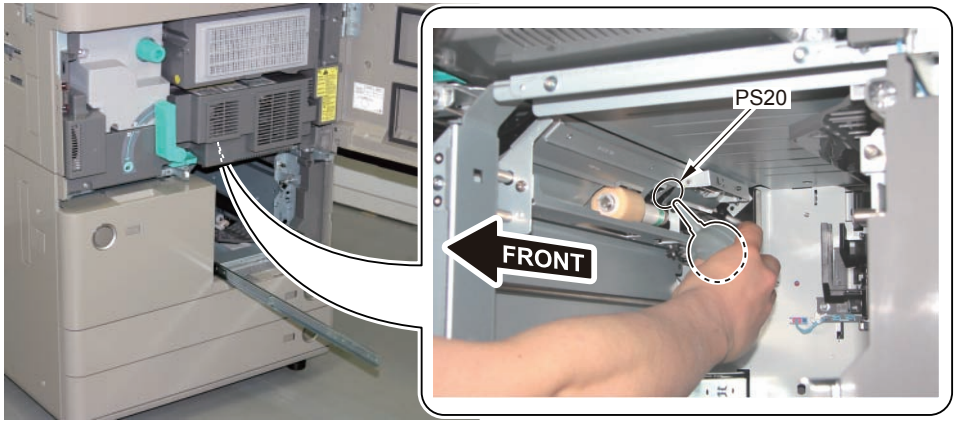
<Procedure>

1) Pull out the Left Pickup Deck.
2) Remove the Stopper to remove the Left Deck Separation Roller.



F-4-347

3) Clean paper dust on the Left Deck Pickup Sensor 2 (PS20) with a blower when replacing the Separation Roller.




F-4-348

## Removing the Right Deck Pickup Roller

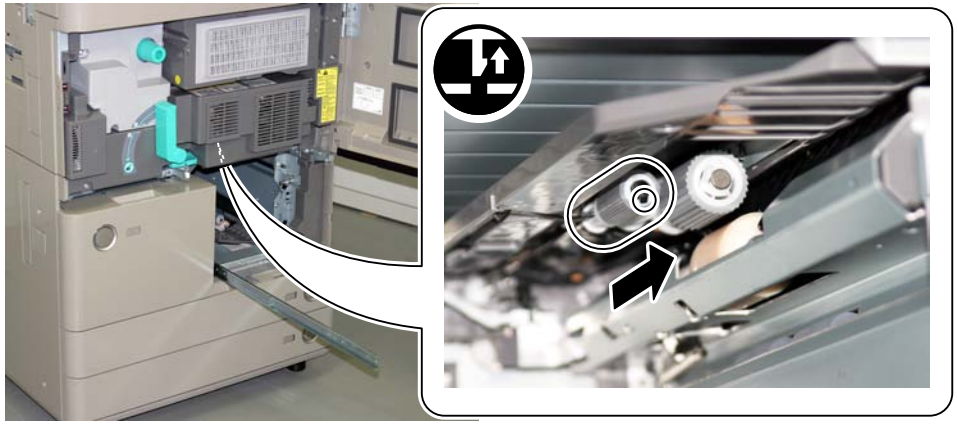
<Preparation>

1. Open the Front Cover.
2. Remove the Right Pickup Deck. (Refer to page 4-190)

<Procedure>

1) Remove the Right Deck Pickup Roller.

- 1 Claw



F-4-349

## Removing the Right Deck Feed Roller

<Preparation>

1. Open the Front Cover.
2. Remove the Right Pickup Deck. (Refer to page 4-190)

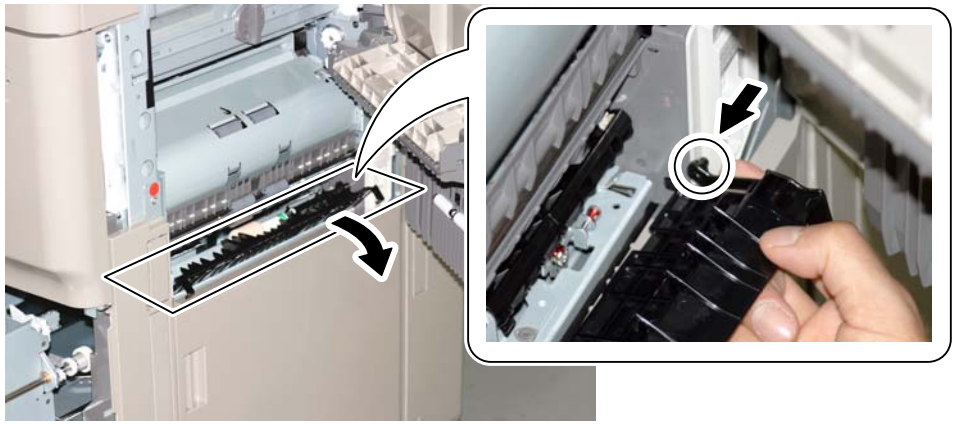
<Procedure>

1) Remove the Stopper to remove the Right Deck Feed Roller.

F-4-350

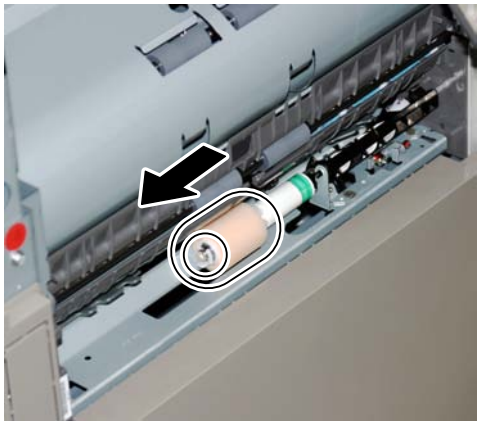
## Removing the Right Deck Separation Roller /Cleaning the Right Deck Pickup Sensor 2 (PS19)

1) Open the Right Upper Cover.
2) Pull out the Right Pickup Deck.
3) Remove the Feed Guide.
- 1 Boss



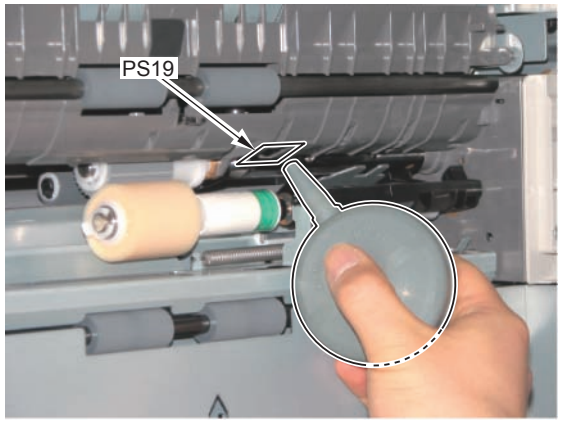
F-4-351

4) Remove the Stopper to remove the Right Deck Separation Roller.



F-4-352

5) Clean paper dust on the Right Deck Pickup Sensor 2 (PS19) with a blower when replacing the Separation Roller.

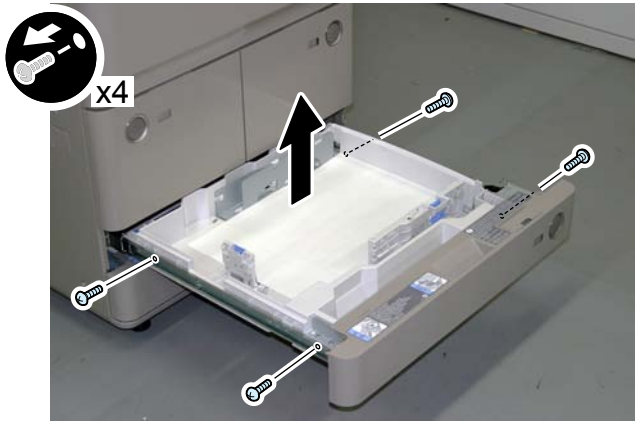



F-4-353

## Removing the Upper Cassette

1) Pull out the Upper Cassette to remove.

- 4 Screws




F-4-354

## Removing the Upper Cassette Pickup Roller

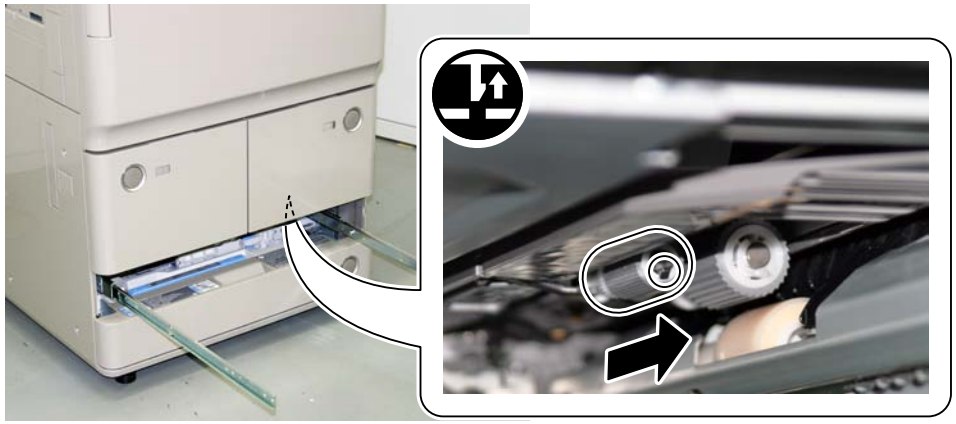
<Preparation>

1. Remove the Upper Cassette. (Refer to page 4-193)

<Procedure>

1) Remove the Upper Cassette Pickup Roller.

- 1 Claw



F-4-355

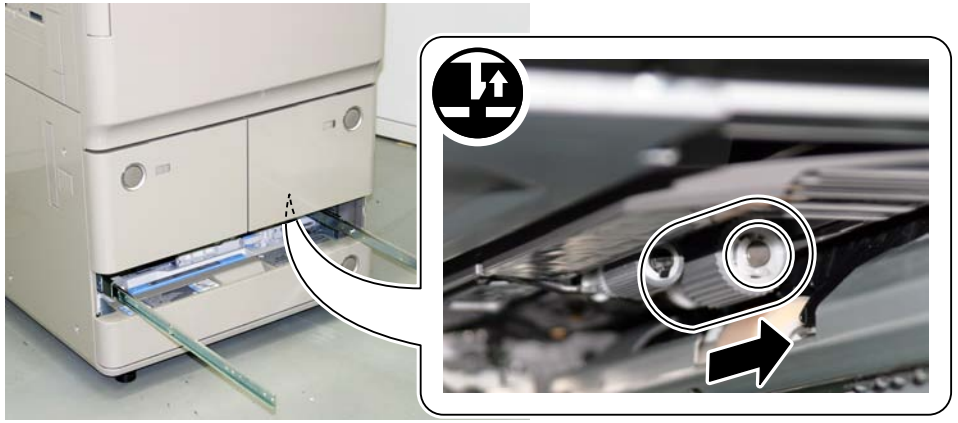
## Removing the Upper Cassette Feed Roller

<Preparation>

1. Remove the Upper Cassette. (Refer to page 4-193)

<Procedure>

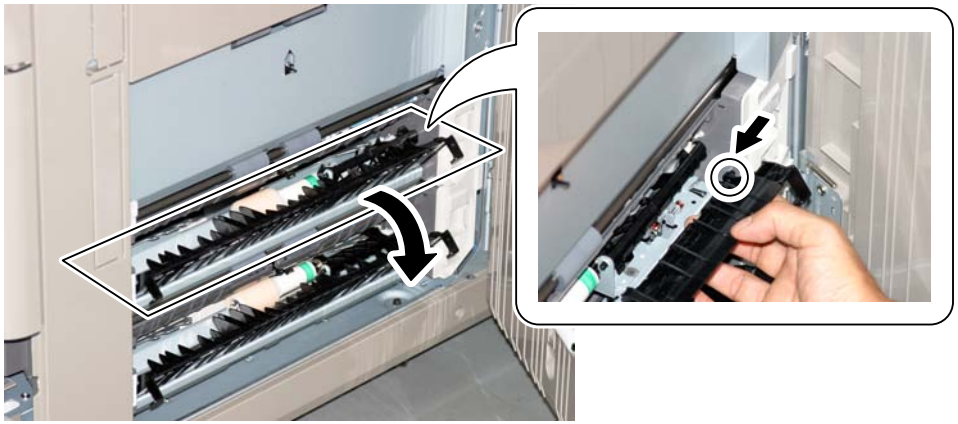
1) Remove the Stopper to remove the Upper Cassette Feed Roller.



F-4-356

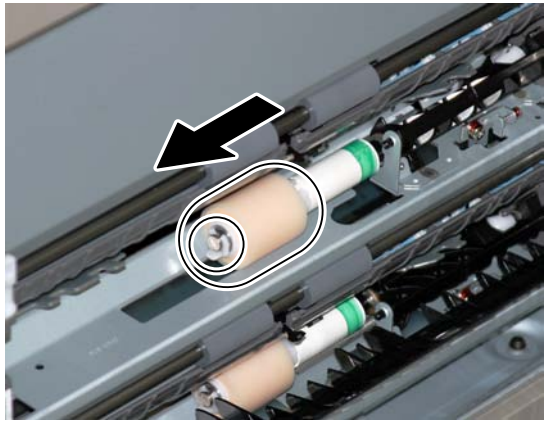
# Removing the Upper Cassette Separation Roller /Cleaning the Cassette 3 Pickup Sensor 2 (PS21)

1) Open the Right Lower Cover.
2) Remove the Upper Cassette.
3) Remove the Feed Guide.
- 1 Boss



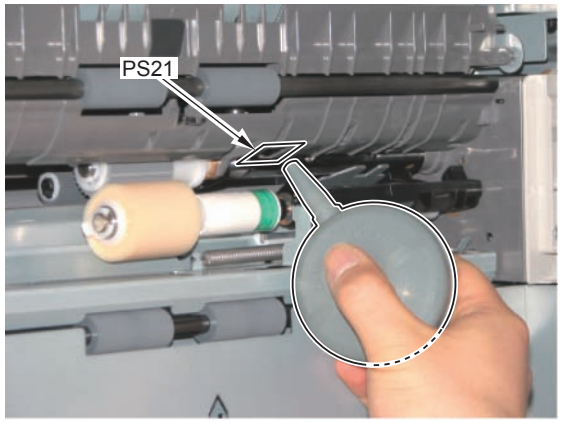
F-4-357

4) Remove the Stopper to remove the Upper Cassette Separation Roller.



F-4-358

5) Clean paper dust on the Cassette 3 Pickup Sensor 2 (PS21) with a blower when replacing the Separation Roller.

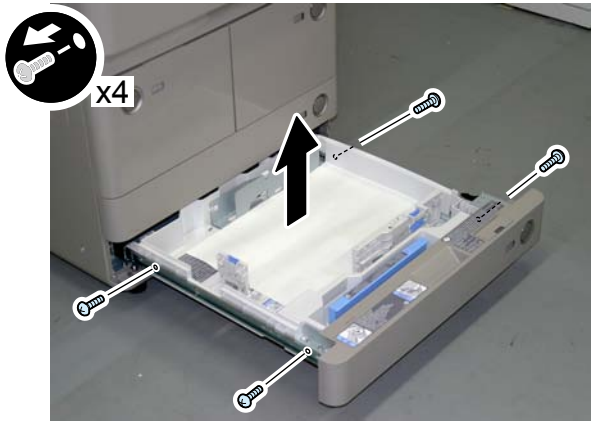



F-4-359

## Removing the Lower Cassette

1) Pull out the Lower Cassette to remove.

- 4 Screws




F-4-360

## Removing the Lower Cassette Pickup Roller

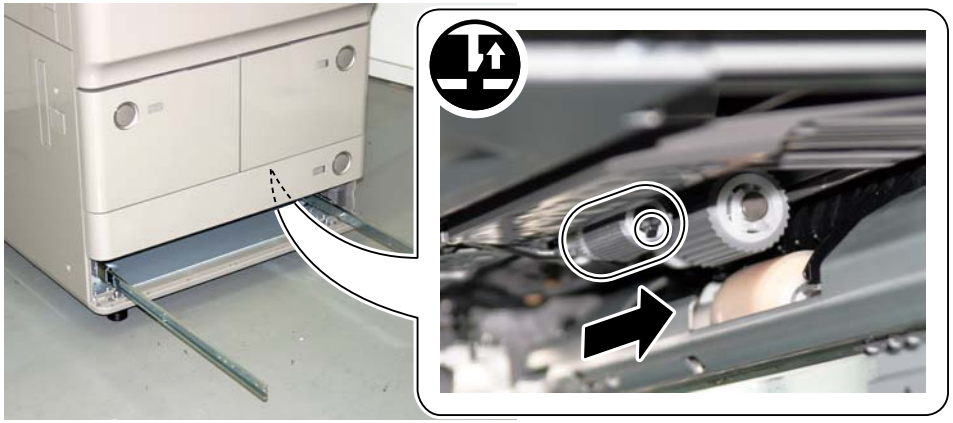
<Preparation>

1. Remove the Lower Cassette. (Refer to page 4-196)

<Procedure>

1) Remove the Lower Cassette Pickup Roller.

- 1 Claw



F-4-361

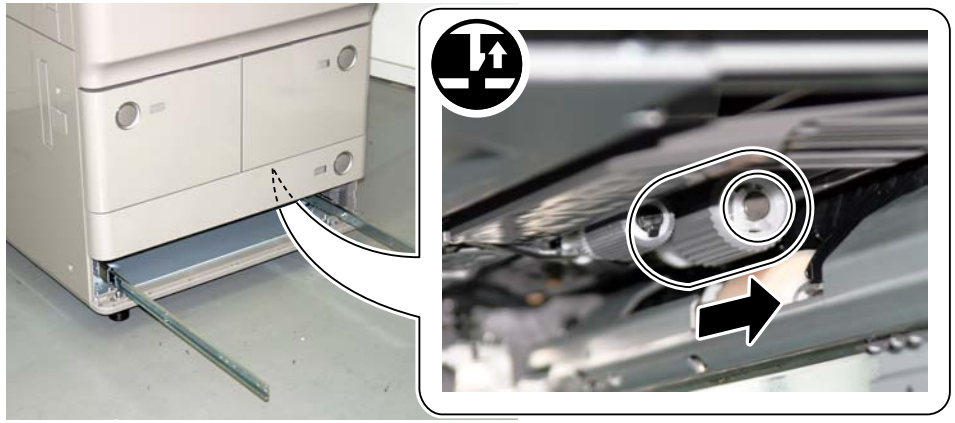
## Removing the Lower Cassette Feed Roller

<Preparation>

1. Remove the Lower Cassette. (Refer to page 4-196)

<Procedure>

1) Remove the Stopper to remove the Lower Cassette Feed Roller.

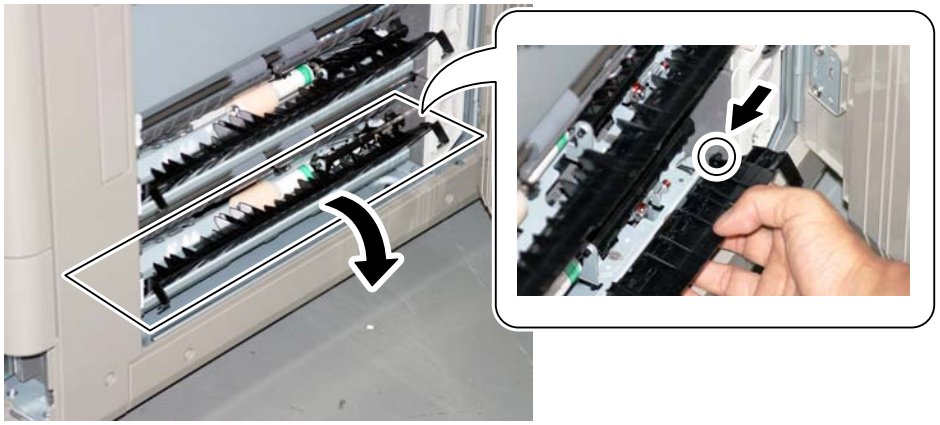


F-4-362

## Removing the Lower Cassette Separation Roller /Cleaning the Cassette 4 Pickup Sensor 1 (PS22)

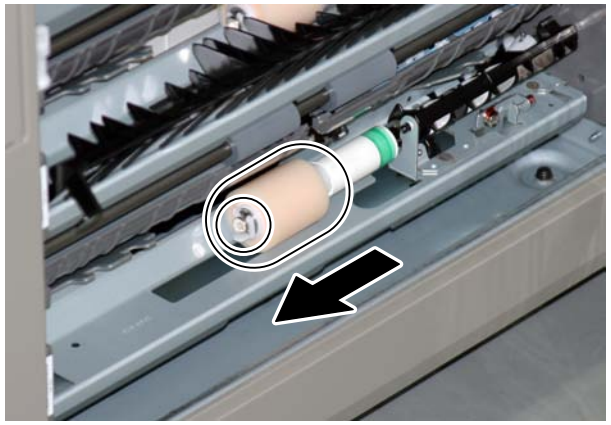
1) Open the Right Lower Cover.
2) Remove the Lower Cassette.
3) Remove the Feed Guide.

- 1 Boss



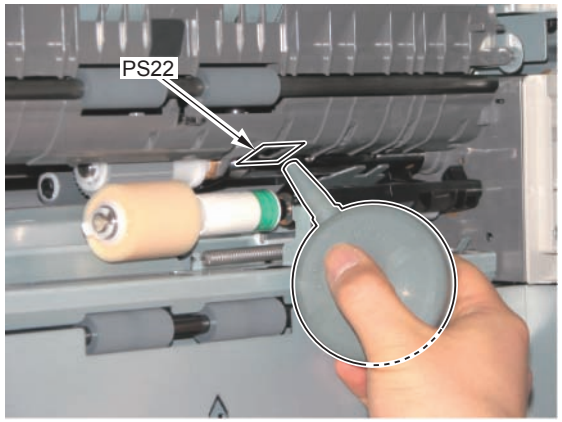
F-4-363

4) Remove the Stopper to remove the Lower Cassette Separation Roller.



F-4-364

5) Clean paper dust on the Cassette 4 Pickup Sensor 1 (PS22) with a blower when replacing the Separation Roller.




F-4-365

# Removing the Multi-purpose Tray Feed Roller

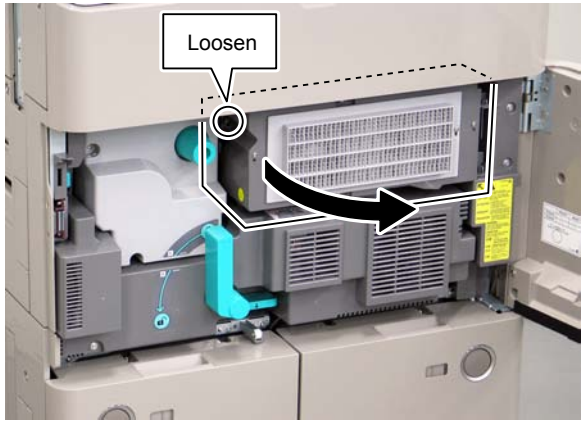
<Preparation>

1. Open the Inner Cover.

1-1) Open the Front Cover.

1-2) Open the Inner Cover.

- 1 Screw (to loosen)

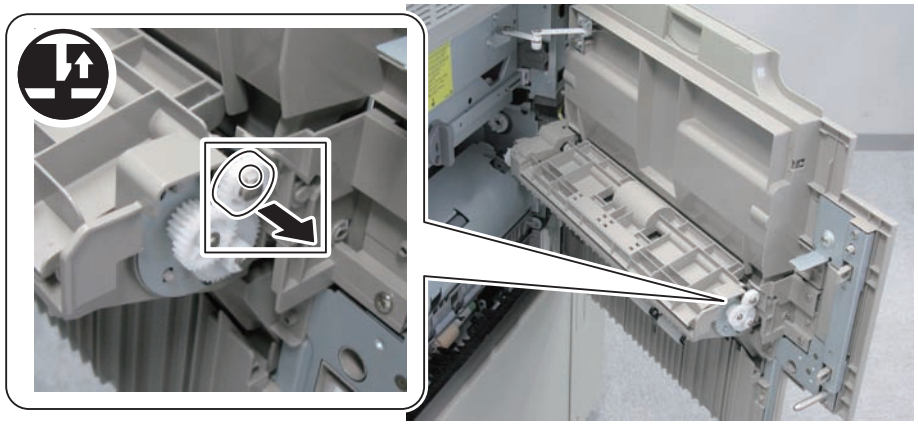



F-4-366

<Procedure>

1) Remove the gear.

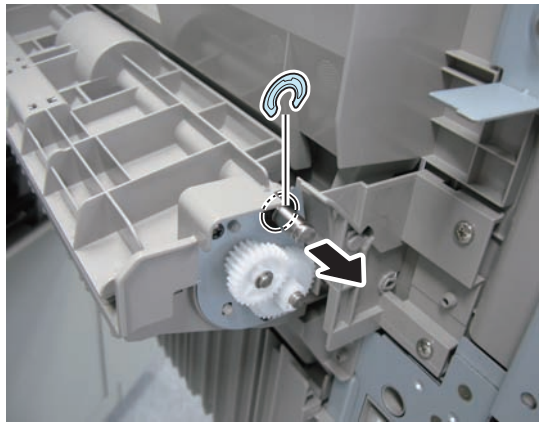
- 1 Claw



F-4-367

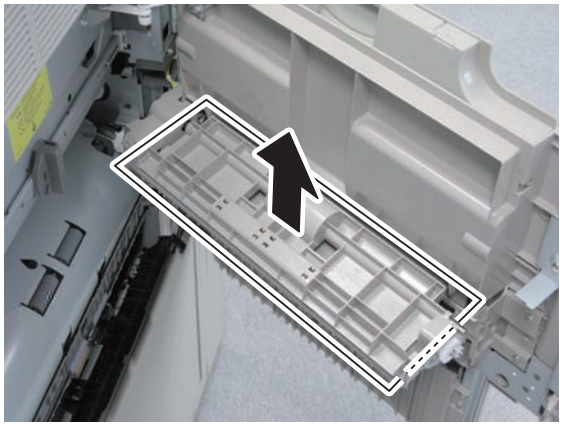
2) Remove the bushing.

- 1 E-ring



F-4-368

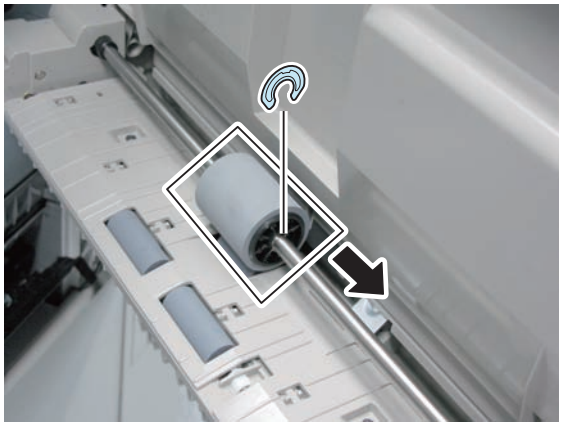
3) Remove the Multi-purpose Tray Pickup Guide.



F-4-369

4) Remove the Multi-purpose Tray Feed Roller.

- 1 E-ring



F-4-370

# Removing the Multi-purpose Tray Separation Roller

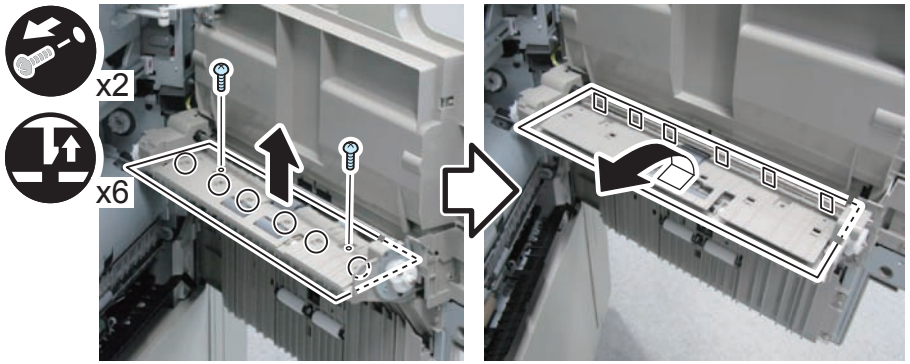
<Preparation>

1. Open the Inner Cover. (Refer to "Removing the Multi-purpose Tray Feed Roller")
2. Remove the Multi-purpose Tray Feed Roller. (Refer to page 4-198)

<Procedure>

1) Remove the Multi-purpose Tray Lower Guide.

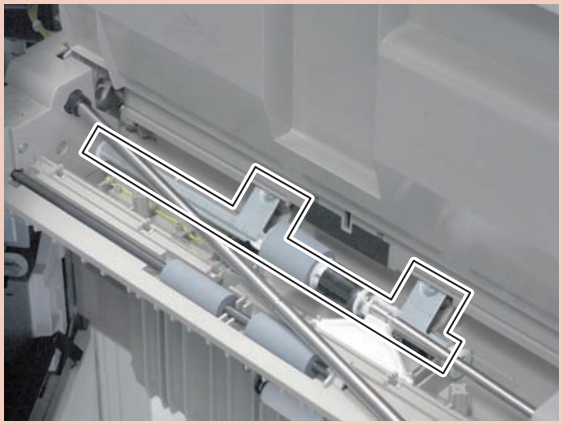
- 2 Screws
- 6 Claws
- 6 Protrusions




F-4-371

CAUTION:

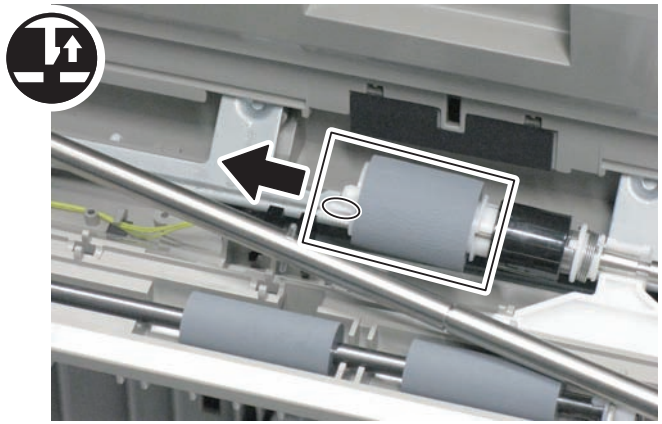
Installation work gets difficult if the plate and the spring (as shown in the figure) are removed when removing the cover; therefore, be careful not to remove them.



F-4-372

2) Remove the Multi-purpose Tray Separation Roller.

- 1 Claw



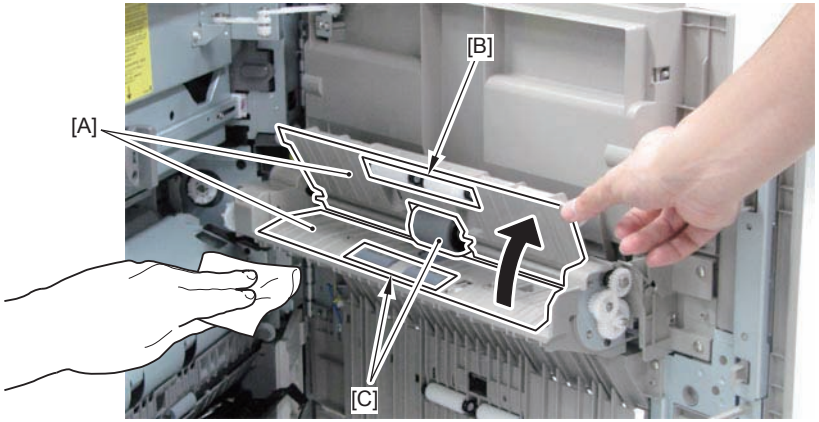
F-4-373

# Cleaning the Pickup and Fixing Feed Assembly

<Cleaning the Vertical Path Assembly>

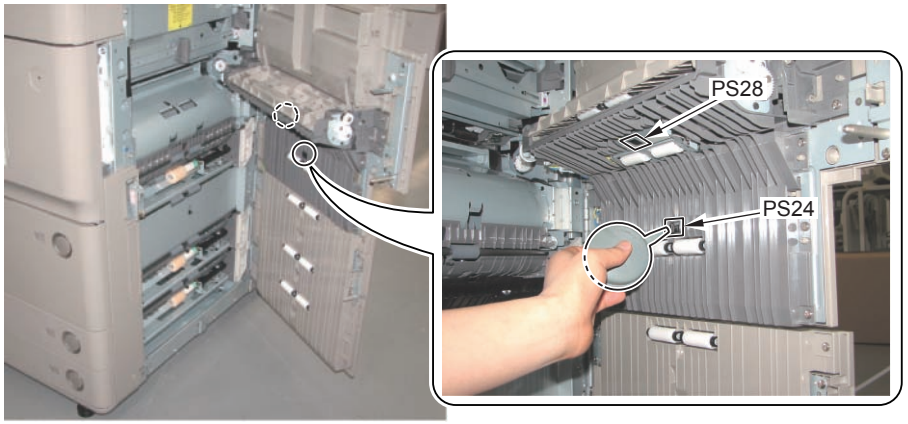
1) Open the Right Cover.
2) Open the Right Lower Cover.
3) Open the Multi-purpose Tray Pickup Guide Unit, and clean the 2 areas of the Feed Guide [A]. (Remove paper lint.)
4) Clean a whole circumference of 2 Rollers [B] and the 3 Rollers [C] by manually rotating them with lint-free paper moistened with alcohol.

CAUTION:
When rotating the Roller by hand, do not touch the surface of the Roller. Be sure to hold the side of the Roller to rotate manually.



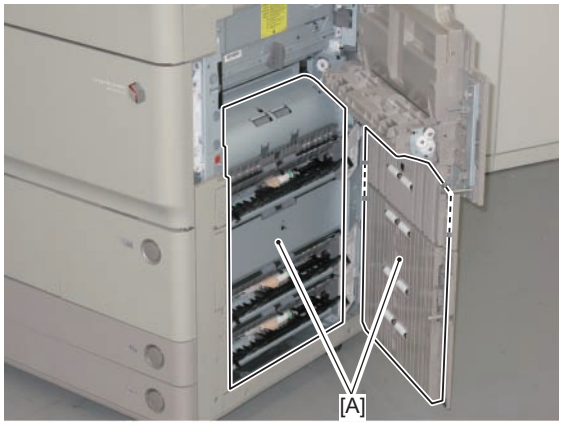

F-4-374

5) Clean paper dust on the Vertical Path Sensor 1 (PS24) and the Multi-purpose Tray Last Paper Sensor (PS28) with a blower.




F-4-375

6) Clean paper dust on the Feed Guide [A] with lint-free paper.




F-4-376

7) Clean a whole circumference of 10 Rollers by manually rotating them with lint-free paper moistened with alcohol.

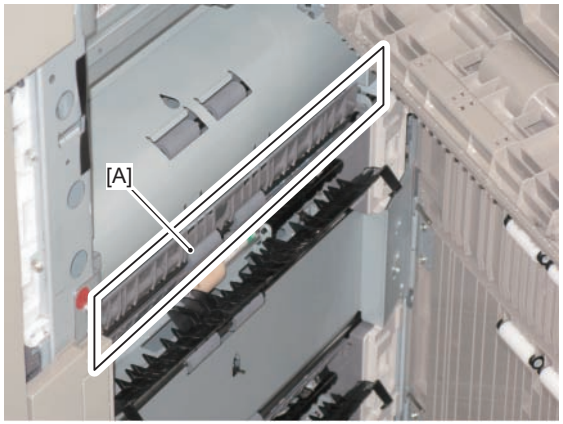
CAUTION:
When rotating the Roller by hand, do not touch the surface of the Roller. Be sure to hold the side of the Roller to rotate manually.

F-4-377

8) Clean a whole circumference of 10 Rollers by manually rotating them with lint-free paper moistened with alcohol.

F-4-378

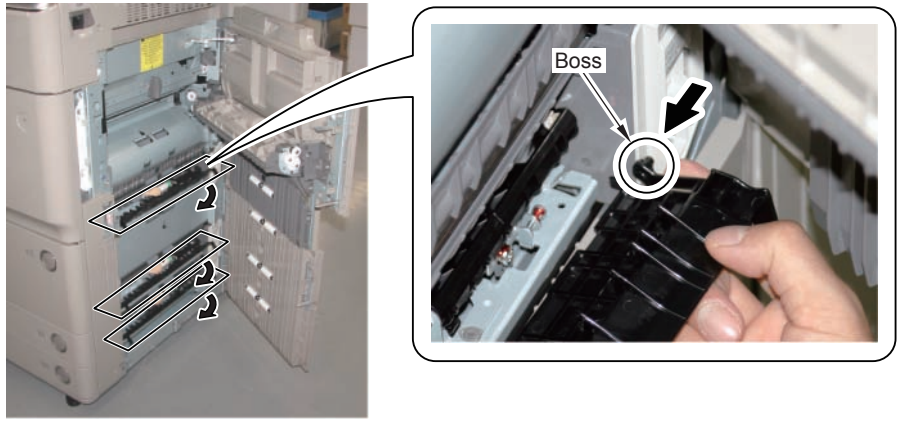
9) Open the Duplex Merging Guide and clean paper dust on the Feed Guide [A] with lint-free paper.




F-4-379

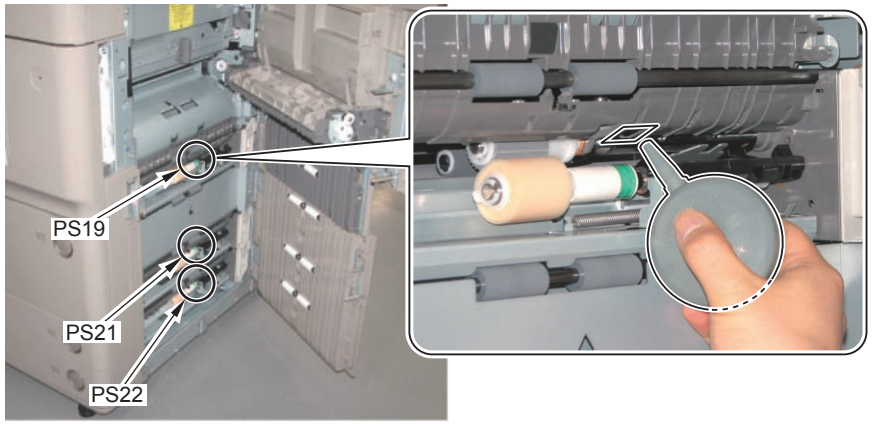
10) Remove the 3 Feed Guides.

- 1 Boss




F-4-380

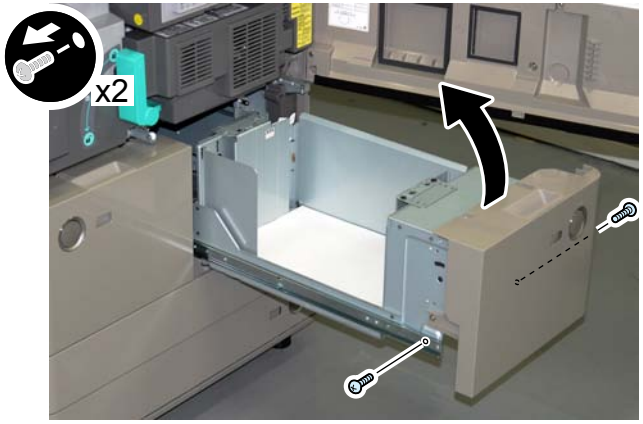
11) Clean paper dust on the Right Deck Pickup Sensor 2 (PS19), Cassette 3 Pickup Sensor 2 (PS21), and Cassette 4 Pickup Sensor 1 (PS22) with a blower.




F-4-381

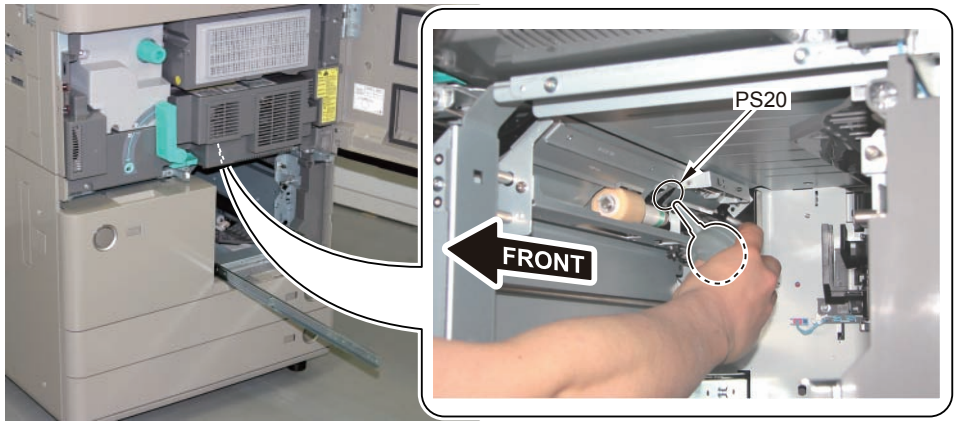
12) Install the 3 Feed Guides whom I excluded.
13) Close the Right Cover.
14) Close the Right Lower Cover.
15) Open the Front Cover.
16) Pull out the Right Deck to remove.

- 2 Screws




F-4-382

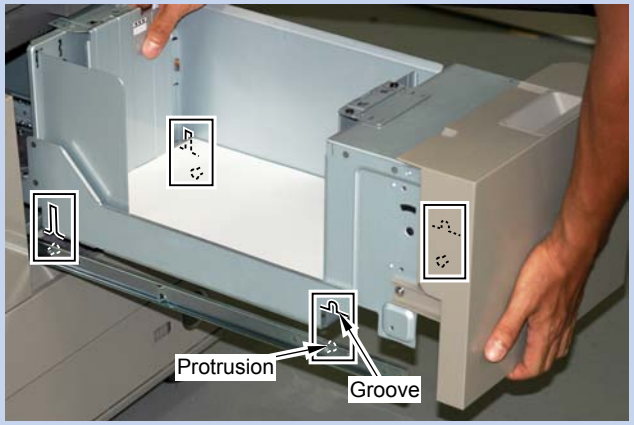
17) Clean paper dust on the Left Deck Pickup Sensor 2 (PS20) with a blower.




F-4-383

18) Install the Right Deck and place it inside the host machine.

NOTE:
When installing the Right Pickup Deck, be sure to fit the 4 protrusions on the Rail into the 4 grooves of the Right Pickup Deck to install.

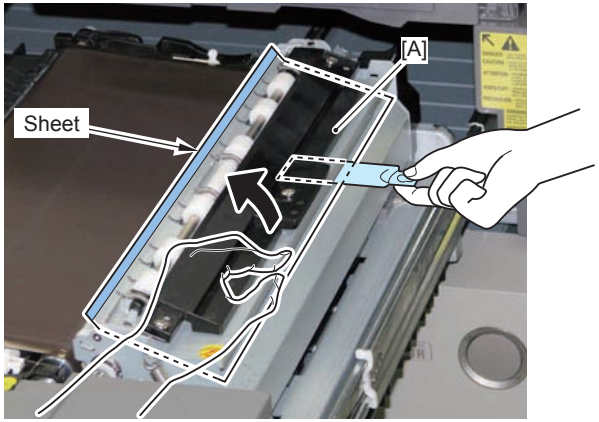



F-4-384

<Cleaning the Fixing Feed Assembly>

1) Open the Fixing Feed Unit fully.
2) Open the Registration Upper Guide, insert the paper lint cleaning tool into the clearance between the Registration Upper Guide and the Registration Lower Guide, and clean the feed area [A].

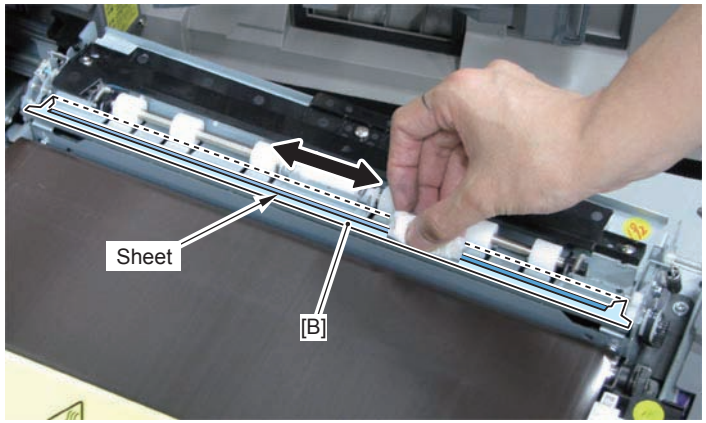
CAUTION:
Be careful not to damage the sheet on the edge of the Registration Upper Guide.




F-4-385

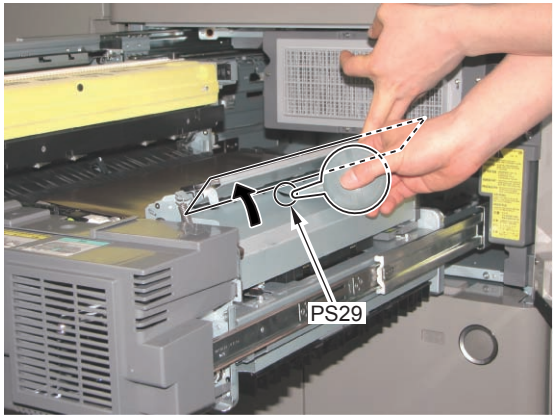
3) Insert lint-free paper into the clearance between the Registration Upper Guide and the Registration Lower Guide, and clean the feed area [B] and the sheet on the edge of the Registration Upper Guide.

CAUTION:
Be careful not to damage the sheet on the edge of the Registration Upper Guide.



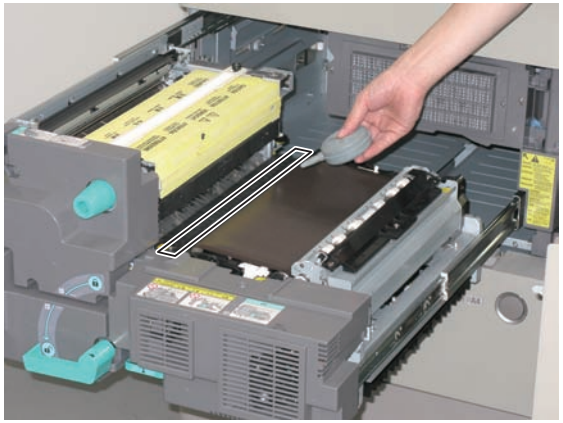

F-4-386

4) Open the Registration Upper Guide and clean paper dust on the Registration Sensor (PS29) with a blower.




F-4-387

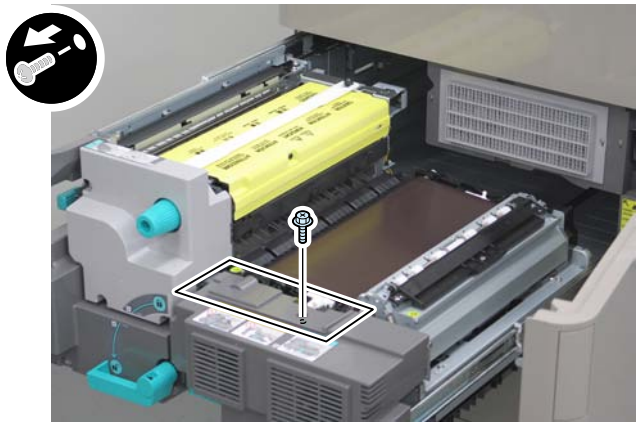
5) Point the leading edge of Blower to the Static Eliminator and clean adhered soiling.



F-4-388

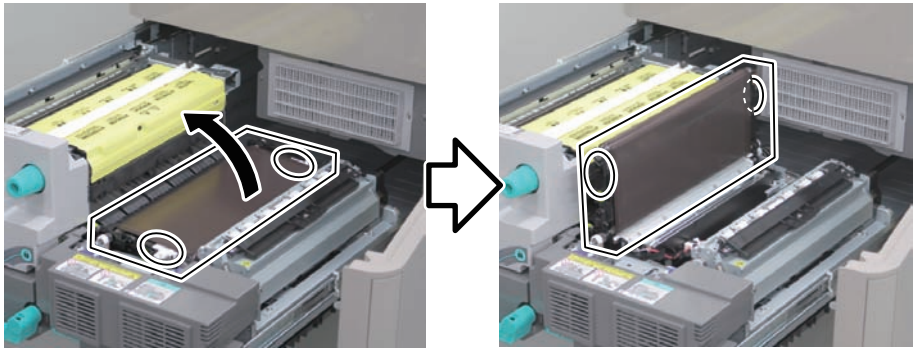
6) Remove the Fixing Feed Cover (Upper).

- 1 Screw



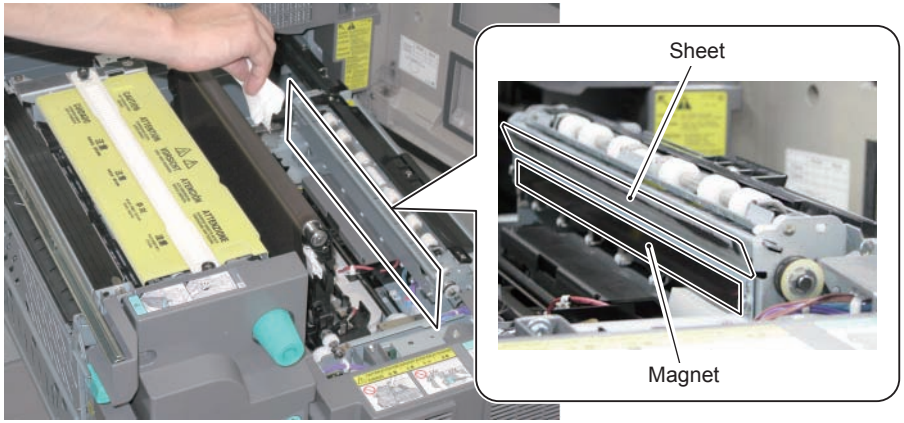
F-4-389

7) Hold the 2 handles to lift the ETB Unit in the direction of the arrow.



F-4-390

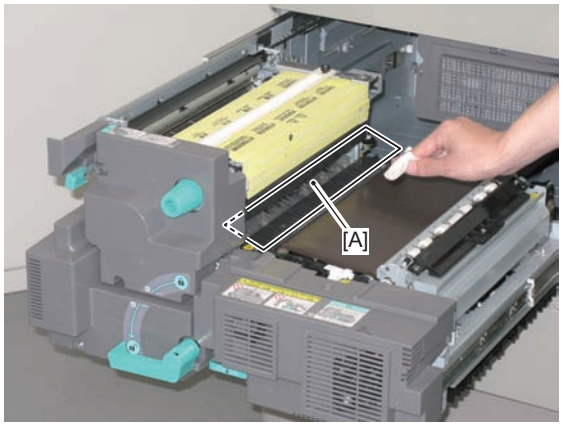
8) Clean the soiling adhered on the Magnet and the Sheet with lint-free paper moistened with alcohol.




F-4-391

9)I return an ETB unit to the original position.

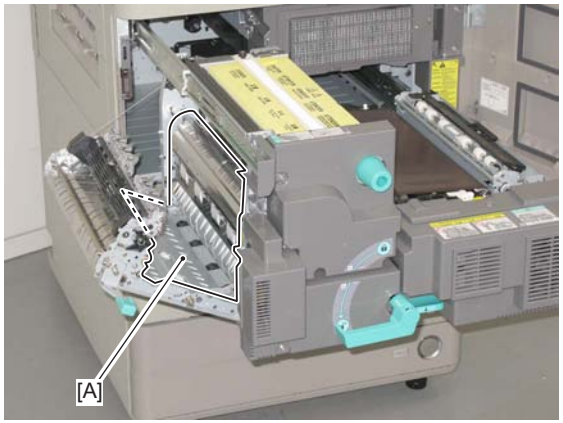
10) Clean the Fixing Inlet Guide [A] with lint-free paper moistened with alcohol.




F-4-392

11) Hold the lever of the Feed Unit to open the Feed Unit.

12) Clean paper dust on the Feed Guide [A] with lint-free paper.

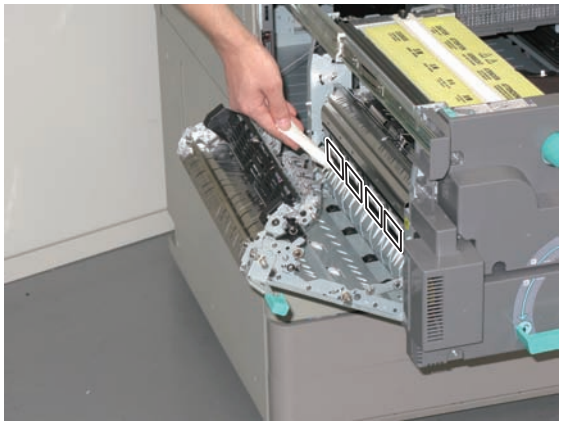



F-4-393

13) Clean a whole circumference of 4 Rollers by manually rotating them with lint-free paper moistened with alcohol.

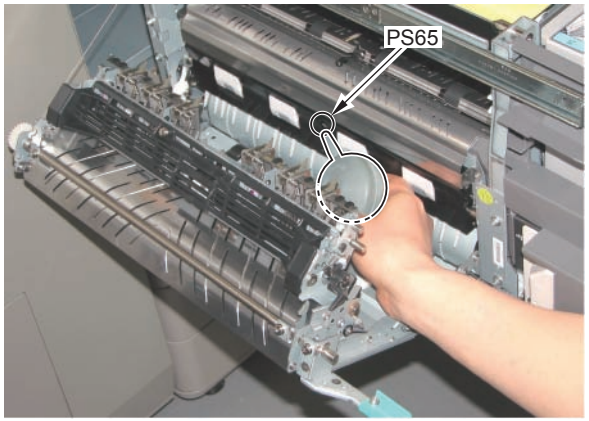
CAUTION:

When rotating the Roller by hand, do not touch the surface of the Roller. Be sure to hold the side of the Roller to rotate manually.



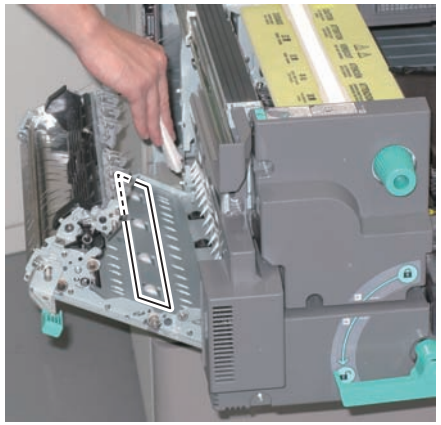
F-4-394

14) Clean paper dust on the Reverse Vertical Path Sensor (PS65) with a blower.




F-4-395

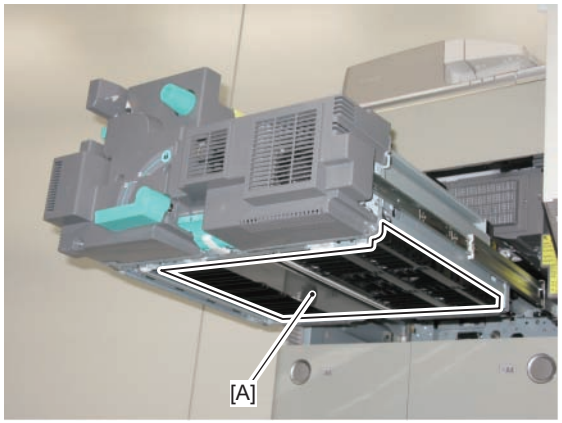
15) Clean a whole circumference of 4 Rollers by manually rotating them with lint-free paper moistened with alcohol.



F-4-396

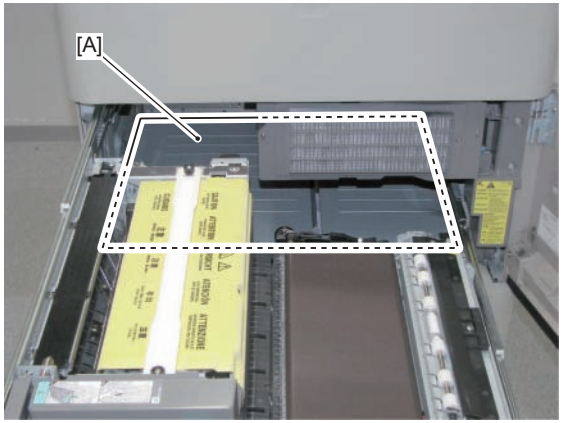
16) Hold the lever of the Feed Unit to close the Feed Unit.

17) Clean paper dust on the feed area [A] of the Reverse Path with lint-free paper.



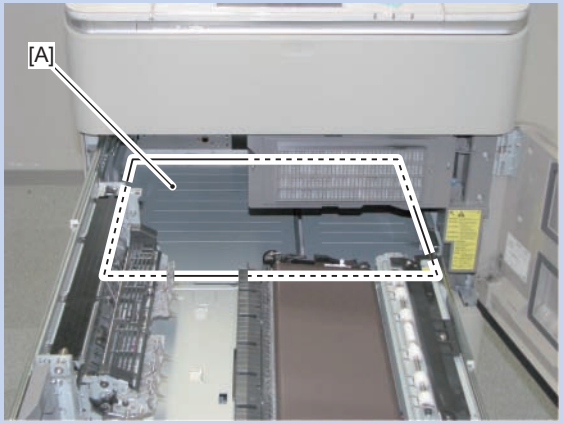

F-4-397

18) Clean paper dust on the feed area [A] inside the equipment with lint-free paper.



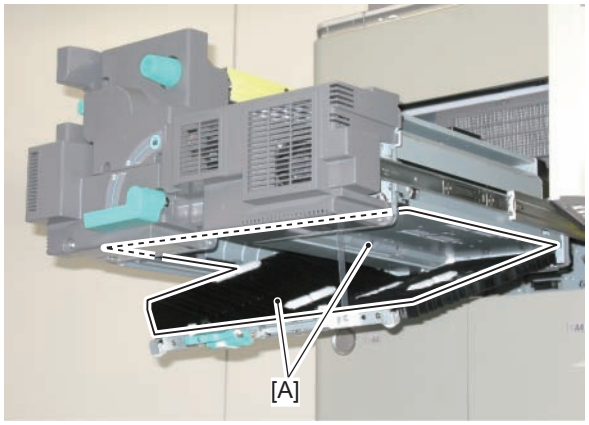

F-4-398

NOTE:
To clean the feed area [A] inside main body, removing the Fixing Assembly can improve the operability.




F-4-399

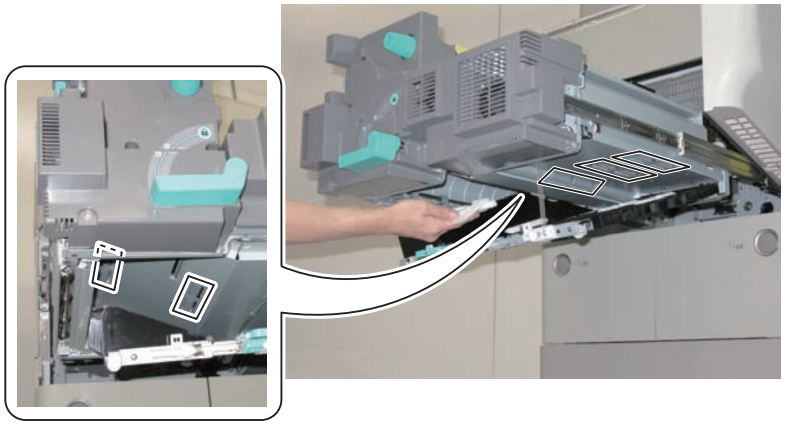
19) Open the Duplex Path.
20) Clean paper dust on the feed area [A] of the Duplex Path (Upper/Lower) with lint-free paper.




F-4-400

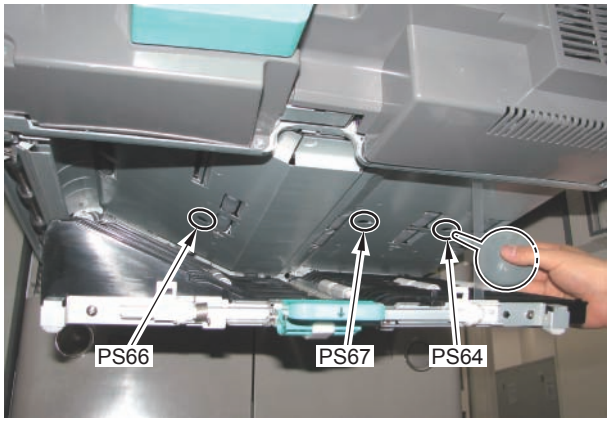
21) Clean a whole circumference of 10 Rollers by manually rotating them with lint-free paper moistened with alcohol.

CAUTION:
When rotating the Roller by hand, do not touch the surface of the Roller. Be sure to hold the side of the Roller to rotate manually.



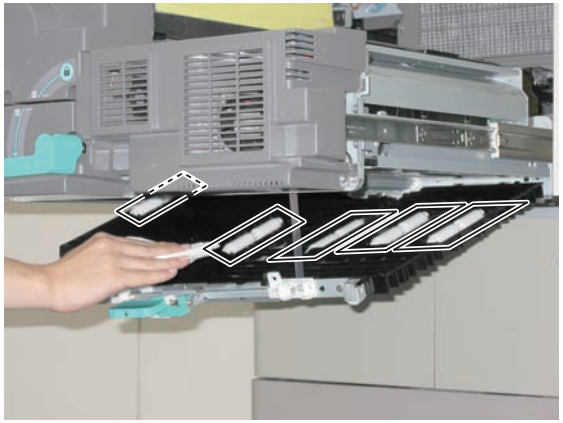
F-4-401

22) Clean paper dust on the Duplex Outlet Sensor (PS64), Duplex Merge Sensor (PS67), and Duplex Left Sensor (PS66) with a blower.




F-4-402

23) Clean a whole circumference of 5 Rollers by manually rotating them with lint-free paper moistened with alcohol.



F-4-403

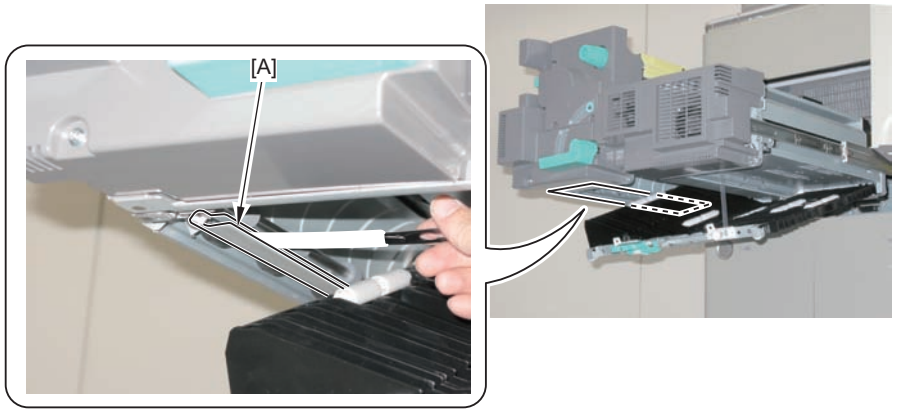
24) Place a paper on the Duplex Path. Then, point the leading edge of Blower to the Roller frame to remove paper lint.

NOTE:

The Cleaning Brush is engaged with 4 Rollers, causing accumulation of paper lint. By blowing air with the Blower, paper lint can be fallen down.

F-4-404

25) Insert the paper lint cleaning tool to the gap of Reverse Path [A] to remove paper lint.




F-4-405

26) Close the Duplex Path.
27) Install the Fixing Feed Cover (Upper).
28) Push in the Fixing Feed Unit.

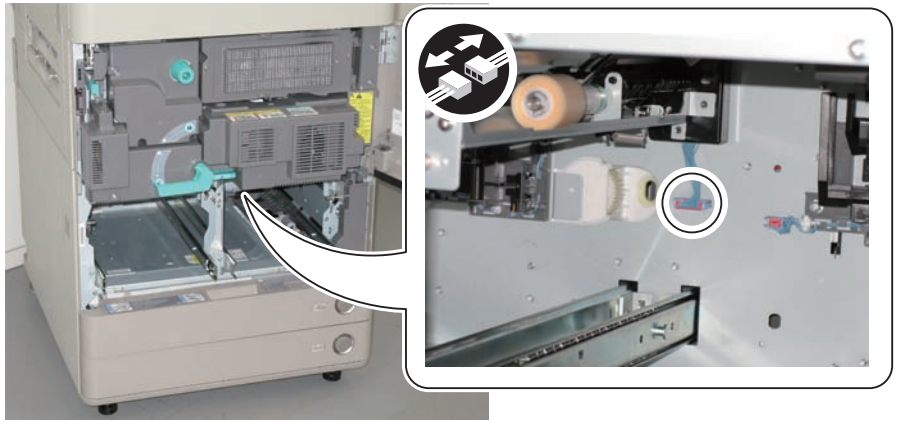
# Removing the Left Deck Pickup Unit

<Preparation>

1. Remove the Right Deck. (Refer to page 4-190)
2. Remove the Left Deck. (Refer to page 4-189)

<Procedure>

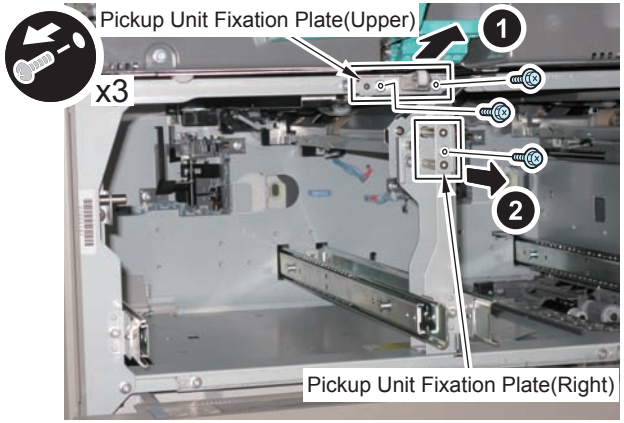
1) Disconnect the Connectors.



F-4-406

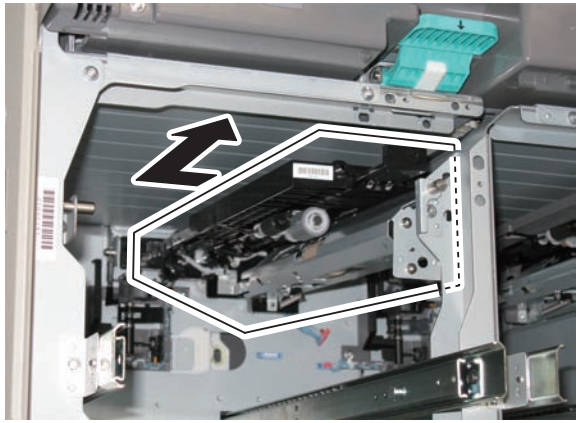
2) Remove the Pickup Unit Fixation Plate (Upper/Right).

- 3 Screws




F-4-407

3) Remove the Left Deck Pickup Unit.

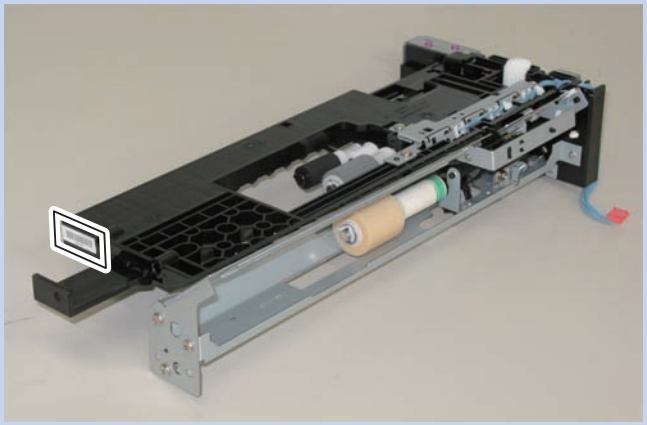


F-4-408

CAUTION:Points to Caution at Installation

When installing the Left Deck Pickup Unit, pull out the Fixing Feed Unit for approx. 10cm to install, and then return the unit to its original position after installation.

NOTE:
Be sure to check that the parts number of Pickup Unit is correct.



F-4-409

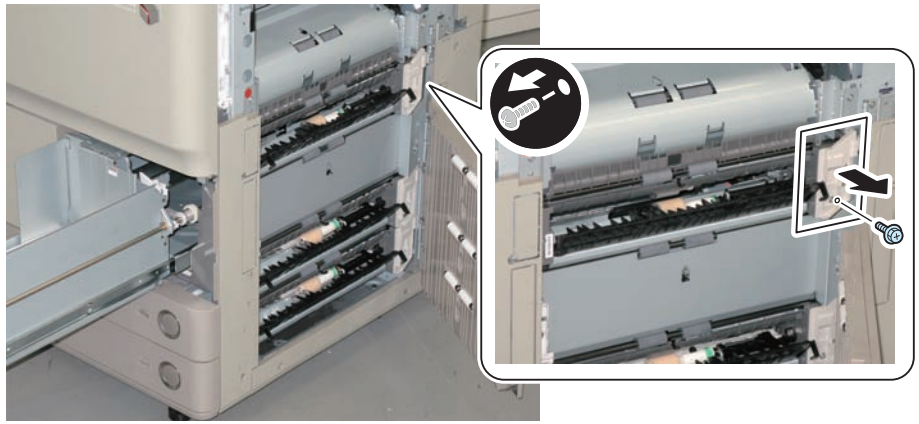
# Removing the Right Deck Pickup Unit

<Preparation>

1. Remove the Right Cover.(Refer to page 4-85)
2. Pull out the Right Deck.(Refer to page 4-190)

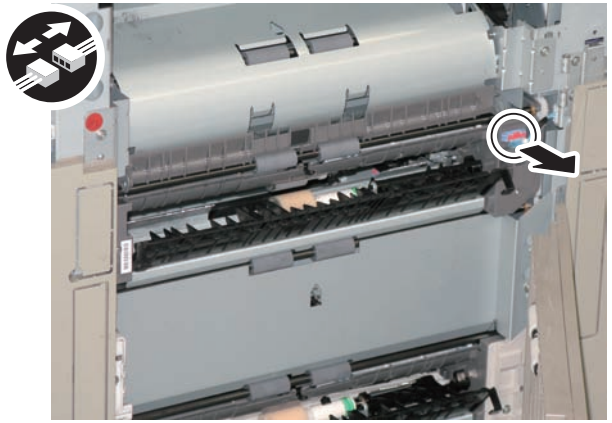
<Procedure>

1) Open the Right Lower Cover.
2) Remove the Connector Cover.
- 1 Screw



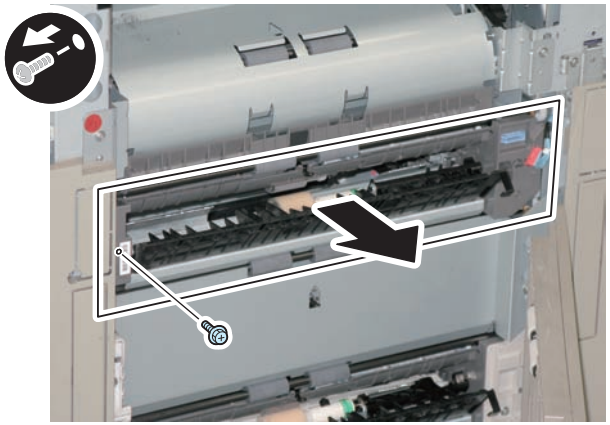
F-4-410

3) Disconnect the Connectors.



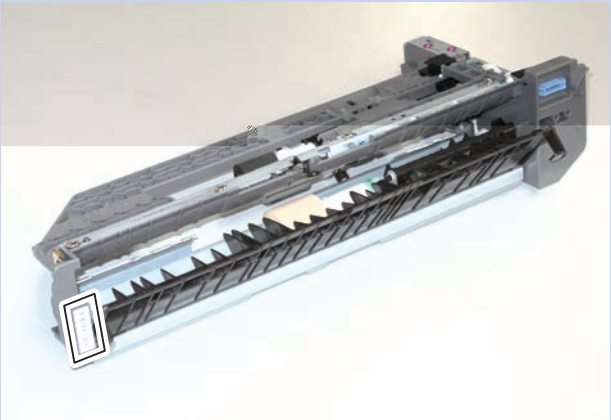
F-4-411

4) Remove the Right Deck Pickup Unit.
- 1 Screw



F-4-412

NOTE:
Be sure to check that the parts number of Pickup Unit is correct.



F-4-413

# Removing the Cassettes 3 and 4 Pickup Unit

<Preparation>

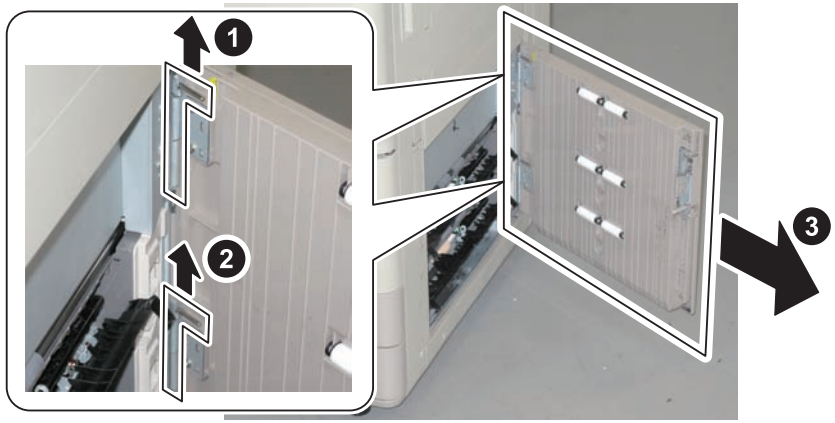
1. Remove the Right Lower Cover.

1-1) Open the Right Lower Cover.

F-4-414

1-2) Remove the Right Lower Cover.

- 2 Hinge Pins




F-4-415

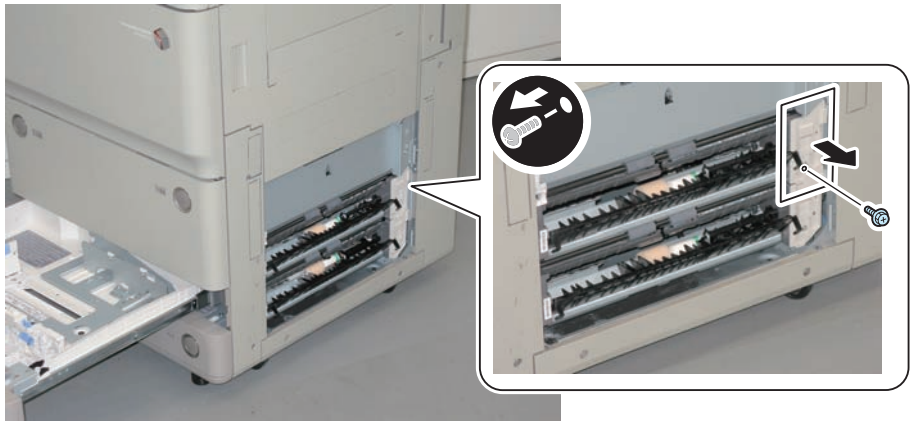
2. Pull out the Cassettes 3 and 4.

<Procedure>

NOTE:
This procedure explains the case for Cassette 3 Pickup Unit.
Be sure to perform the same procedure when the Cassette 4 Pickup Unit is used.

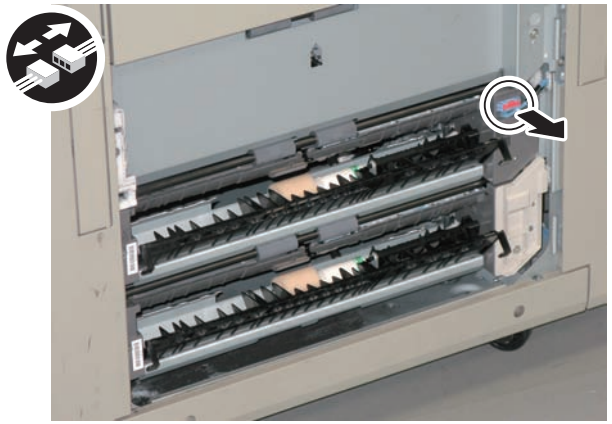
1) Remove the Connector Cover.

- 1 Screw



F-4-416

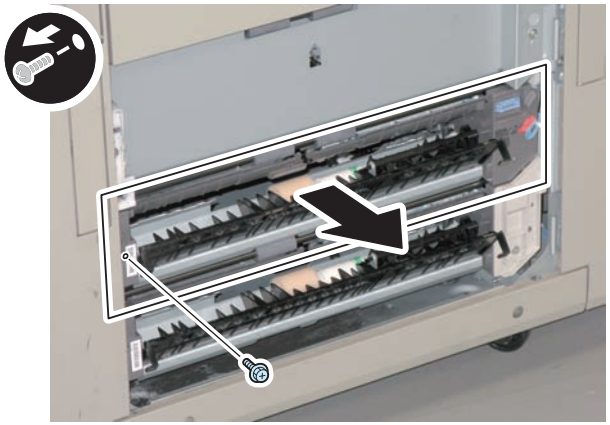
2) Disconnect the Connectors.



F-4-417

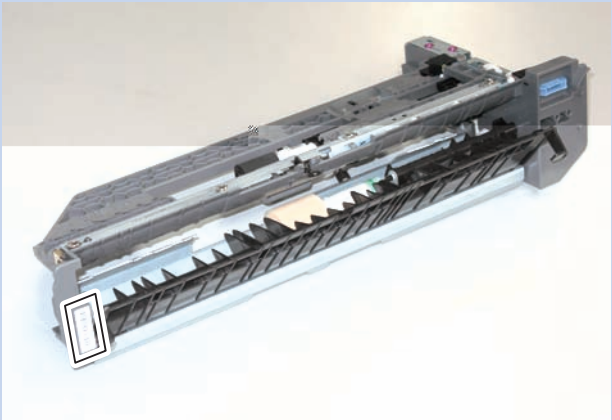
3) Remove the Pickup Unit.

- 1 Screw



F-4-418

NOTE:
Be sure to check that the parts number of Pickup Unit is correct.



F-4-419

## Removing the Vertical Path Cassette Pickup Drive Unit

<Preparation>

1. Remove the Box Cover (Left).

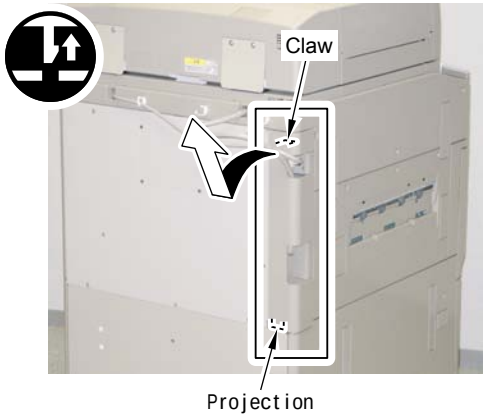
1-1) Remove the Harness.

- 2 Wire Saddles

F-4-420

1-2) Remove the Box Cover (Left).

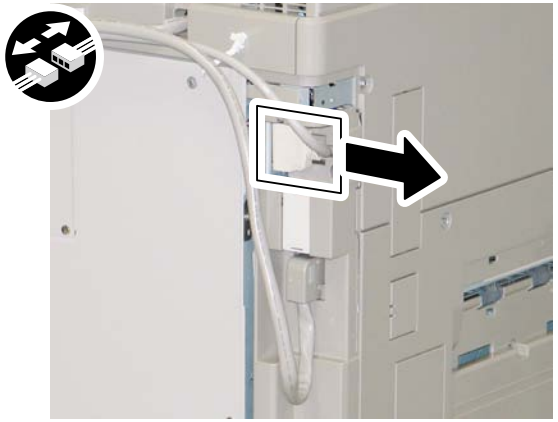
- 1 Claw
- 1 Protrusion




F-4-421

2. Open the Controller Box.

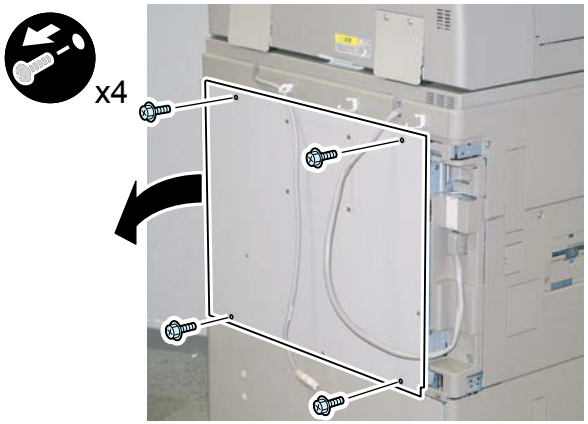
2-1) Disconnect the Reader Communication Cable.



F-4-422

2-2) Open the Controller Box in the direction of the arrow.

- 4 Screws

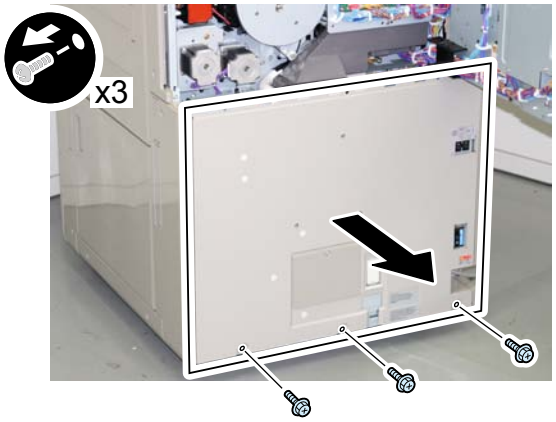



F-4-423

3. Remove the Rear Lower Cover.

3-1) Remove the Rear Lower Cover in the direction of the arrow.

- 3 Screws

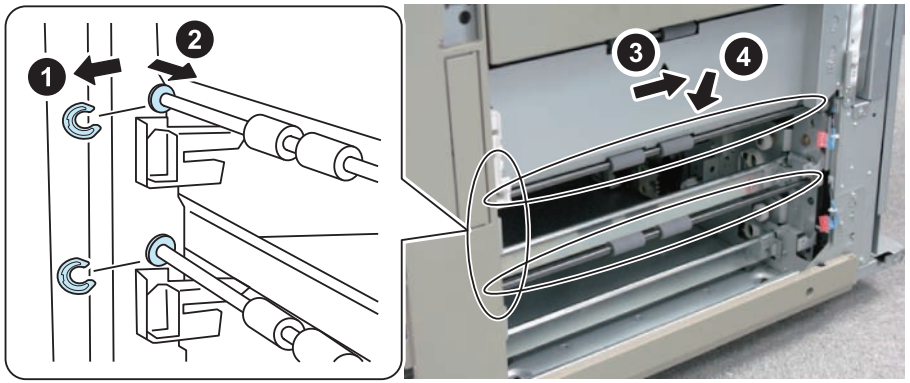



F-4-424

4. Remove the Waste Toner Container. (Refer to page 4-135)
5. Remove the Cassette 3 and Cassette 4 Pickup Units. (Refer to page 4-212)

<Procedure>

1) Remove the 2 E-rings and move the bushings to remove the Vertical Path Rollers 3 and 4 in the direction of the arrow.

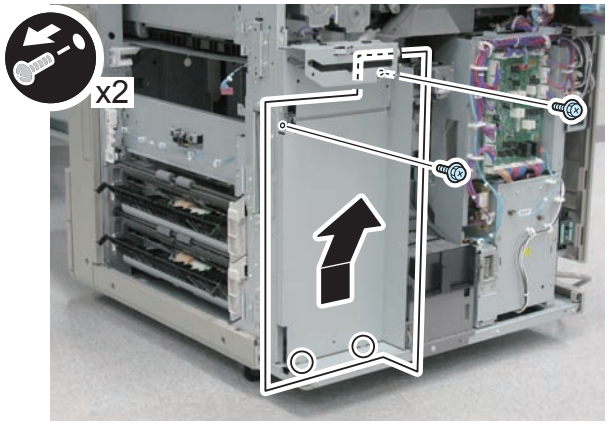



F-4-425

CAUTION:

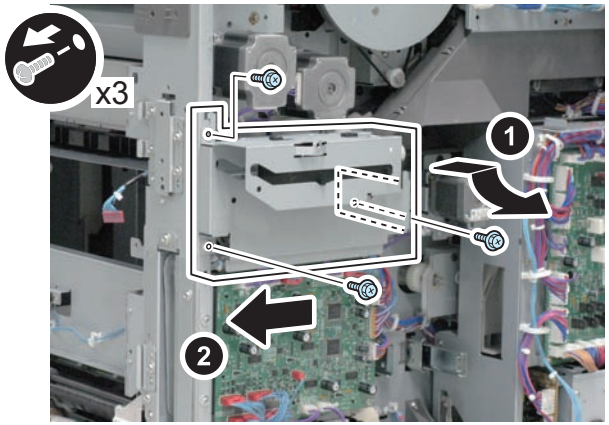
Do not lose the bushings when removing the Roller Shaft.

2) Remove the Shield Plate.
- 1 Screw
- 2 Protrusions



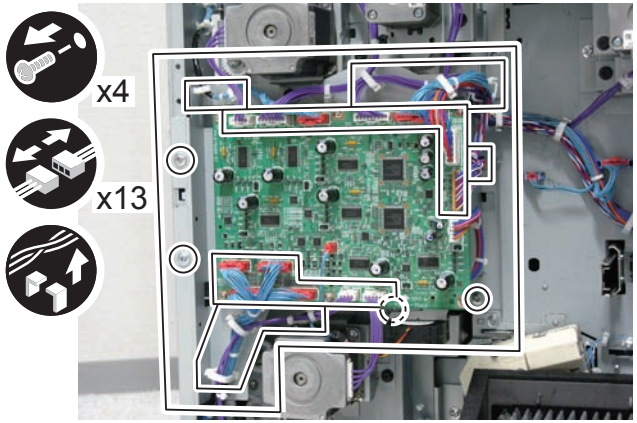

F-4-426

3) Remove the Waste Toner Container Shutter Unit.
- 3 Screws
- 1 Hook



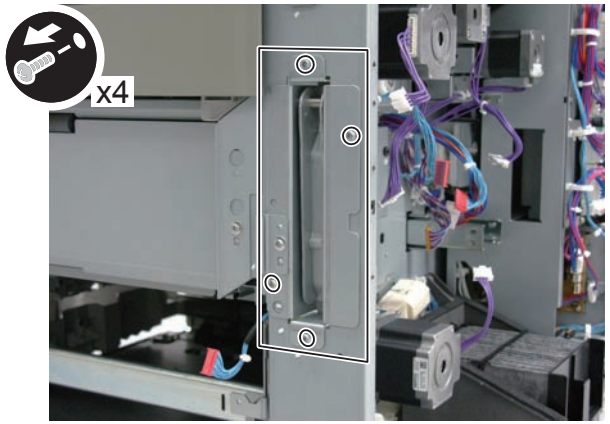

F-4-427

4) Remove the Feed Driver PCB Unit.
- 4 Screws
- 13 Connectors
- 9 Wire Saddles
- 1 Reuse Band
- Harness




F-4-428

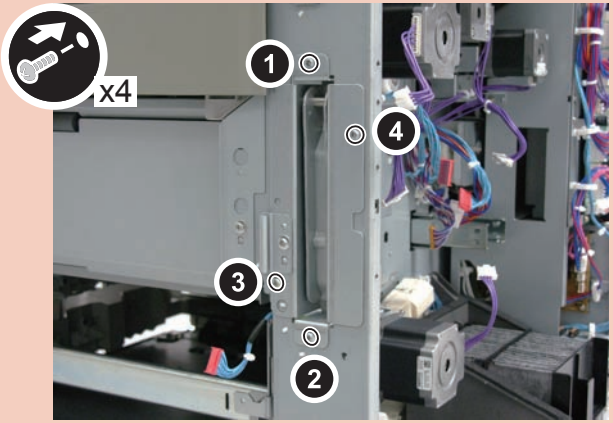
5) Remove the Right Rear Handle.
- 4 Screws




F-4-429

CAUTION:

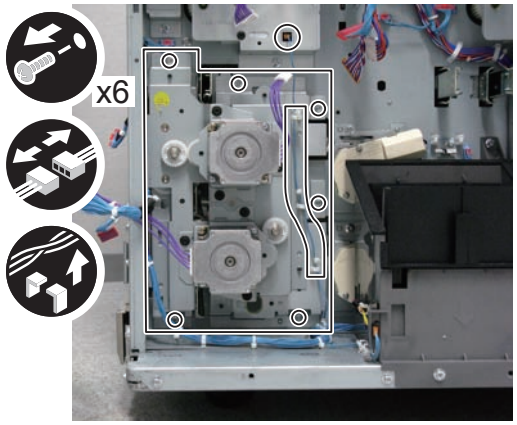
When installing the handle, be sure to follow the order as shown in the figure to tighten screws.




F-4-430

6) Free the harness and remove the Vertical Path Cassette Drive Unit.

- 1 Connector
- 3 Wire Saddles
- 6 Screws




F-4-431

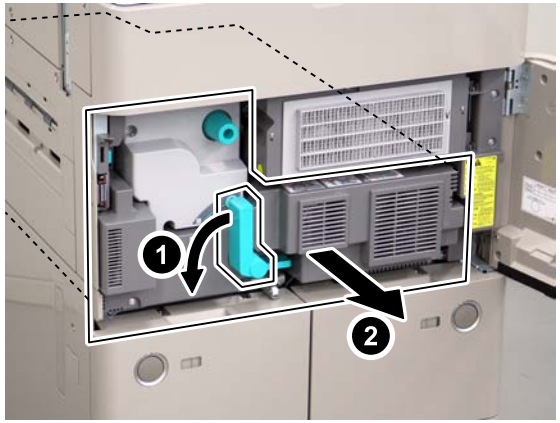
## Removing the Registration Unit

<Preparation>

1. Pull out the Fixing Feed Unit.

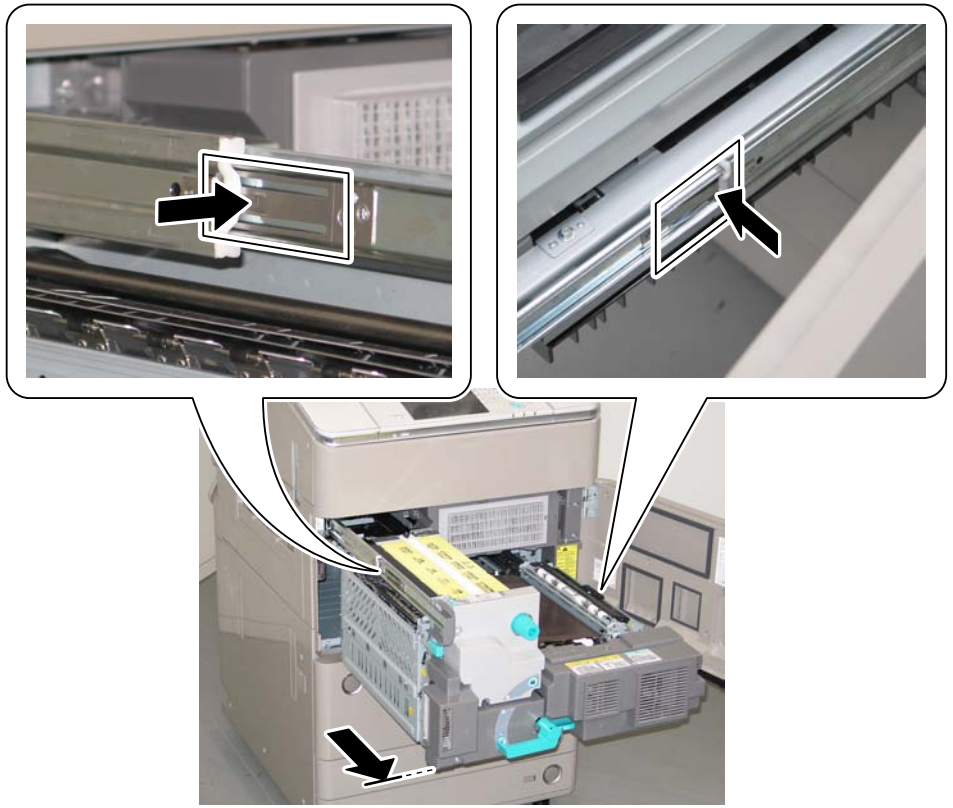
1-1) Open the Front Cover.

1-2) Turn the Fixing Feed Unit Pressure Release Lever in the direction of the arrow to pull out the Fixing Feed Unit.




F-4-432

1-3) Push to release the Release Springs at both sides of the Rail, and then further pull out the Fixing Feed Unit until it stops.

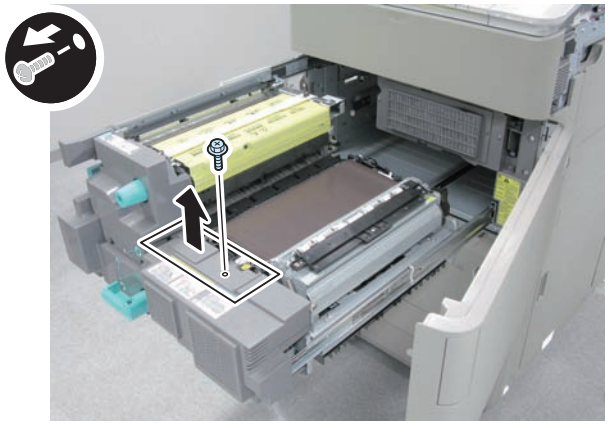


F-4-433

<Procedure>

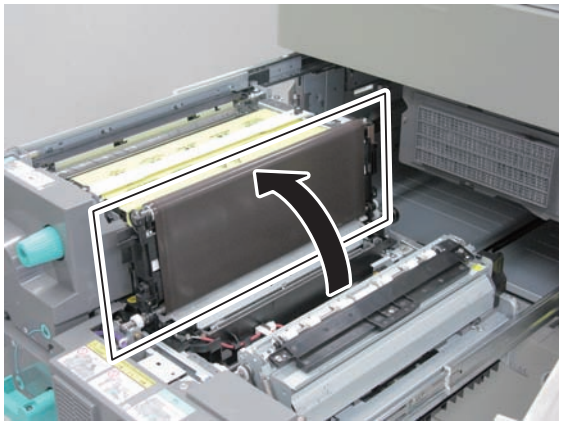
1) Remove the Fixing Feed Right Front Upper Cover

- 1 Screw



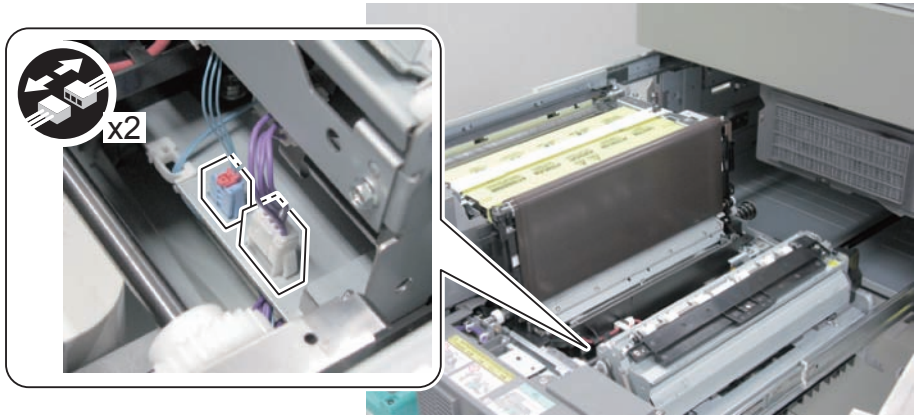
F-4-434

2) Lift the ETB Unit in the direction of the arrow.



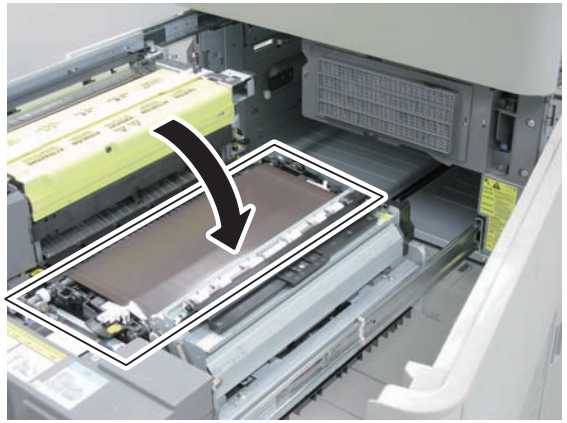
F-4-435

3) Disconnect the 2 connectors.




F-4-436

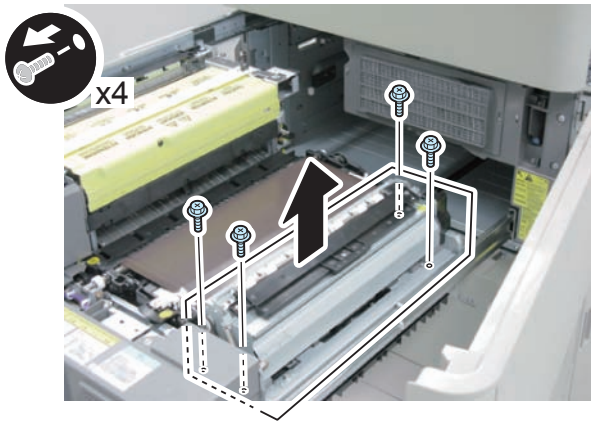
4) Set the ETB Unit back.



F-4-437

5) Remove the Registration Unit.

- 4 Screws



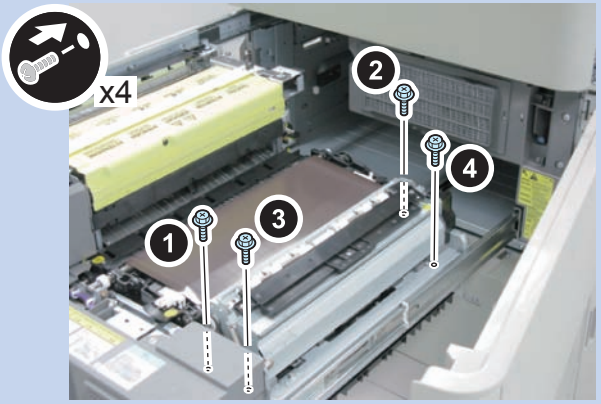

F-4-438

CAUTION:

When installing, be sure to check that the 2 Positioning Pins are secured.

F-4-439

NOTE:
When installing the Registration Unit, be sure to follow the order as shown in the figure to tighten screws.




F-4-440

## Removing the Left Deck Pickup Drive Unit

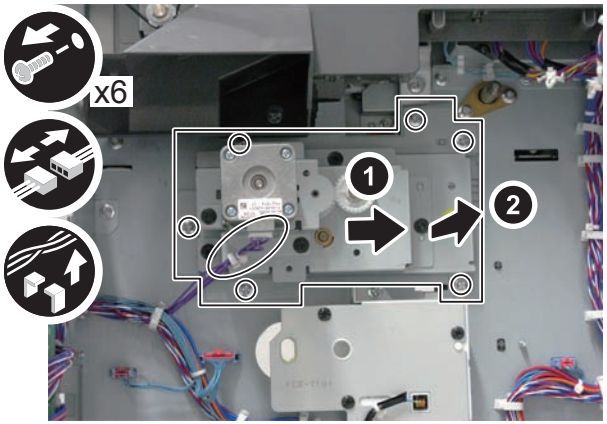
<Preparation>

1. Remove the Box Cover (Left). (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
2. Open the Controller Box. (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
3. Remove the Rear Lower Cover. (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
4. Remove the Power Supply Assembly.(Refer to page 4-229)
5. Remove the Left Deck Pickup Unit. (Refer to page 4-210)

<Procedure>

1) Remove the Left Deck Pickup Drive Unit in the direction of the arrow.

- 6 Screws
- 1 Connector
- 1 Wire Saddle




F-4-441

# Removing the Main Drive Unit

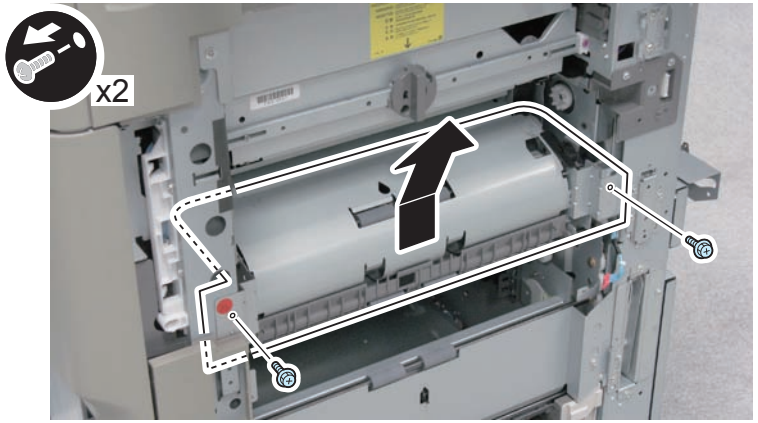
<Preparation>

1. Remove the Box Cover (Left). (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
2. Open the Controller Box. (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
3. Remove the Rear Lower Cover. (Refer to "Removing the Vertical Path Cassette Pickup Drive Unit")
4. Remove the Waste Toner Container. (Refer to page 4-135)
5. Remove the Right Lower Cover. (Refer to "Removing the Cassettes 3 and 4 Pickup Unit")
6. Remove the Right Deck Pickup Unit. (Refer to page 4-211)

<Procedure>

1) Remove the Pre-registration Guide Unit.

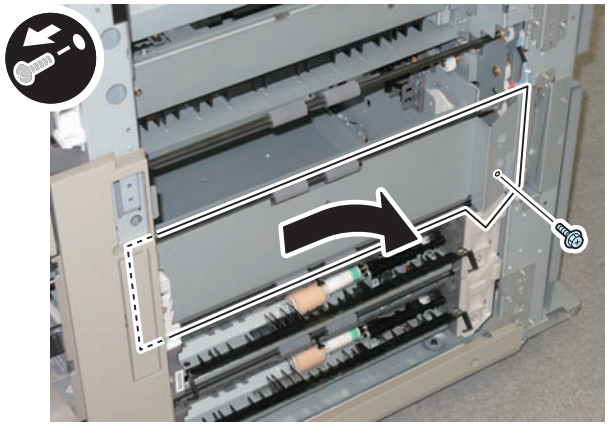
- 2 Screws




F-4-442

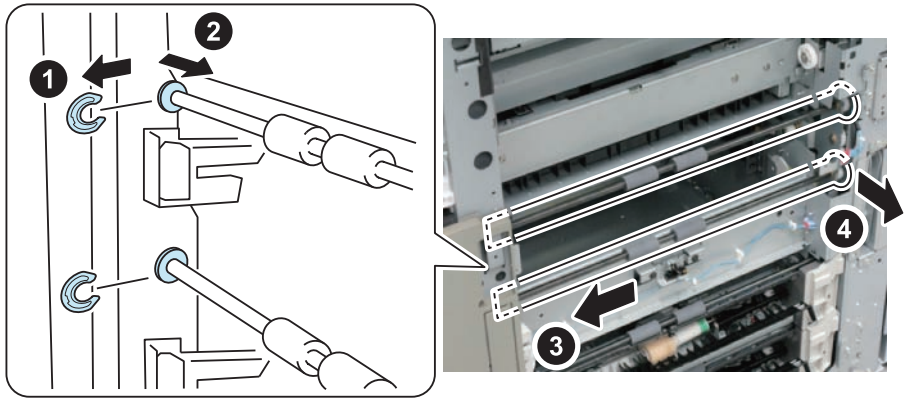
2) Remove the Middle Vertical Path Guide.

- 1 Screw



F-4-443

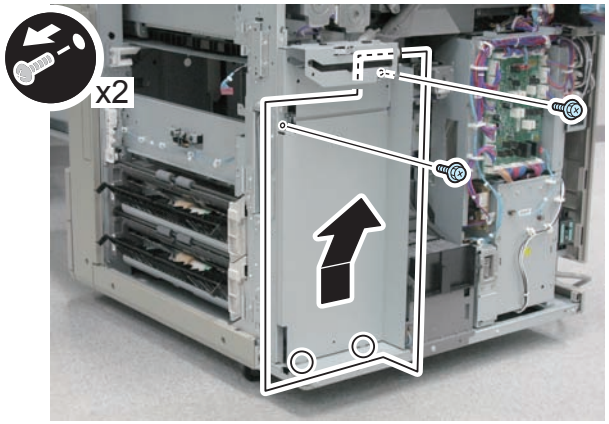
3) Remove the 2 E-rings and move the bushings to remove the Vertical Path Rollers 1 and 2 in the direction of the arrow.




F-4-444

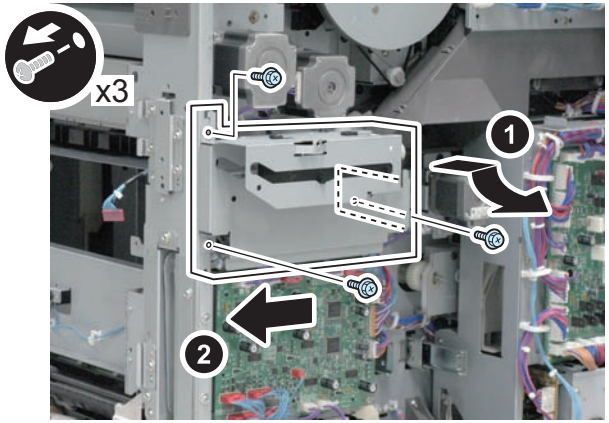
CAUTION:
Do not lose the bushings when removing the Vertical Path Rollers 1 and 2.

4) Remove the Shield Plate.
- 2 Screws
- 2 Protrusions




F-4-445

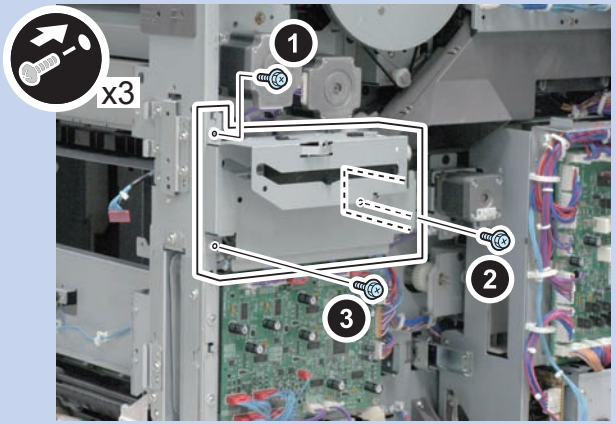
5) Remove the Waste Toner Container Shutter Unit.
- 3 Screws




F-4-446

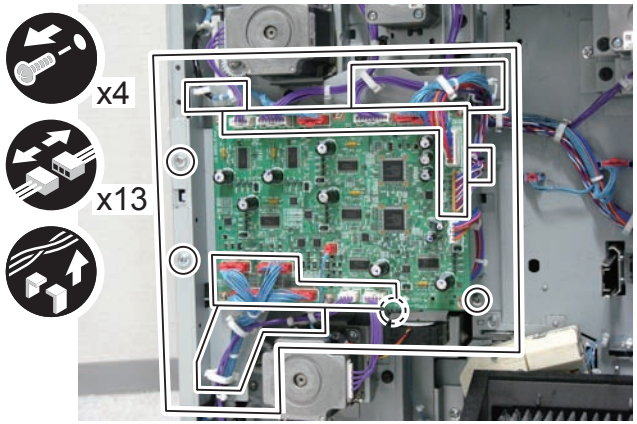
CAUTION:
When removing the Waste Toner Container Shutter Unit, be careful of toner scattering.

NOTE:
When installing the Waste Toner Container Shutter Unit, be sure to follow the order as shown in the figure to tighten screws.




F-4-447

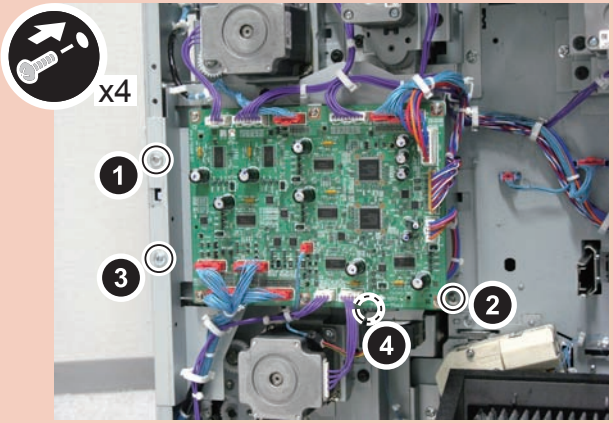
6) Remove the Feed Driver PCB Unit.
- 4 Screws
- 13 Connectors
- 9 Wire Saddles
- 1 Reuse Band
- Harness




F-4-448

CAUTION:

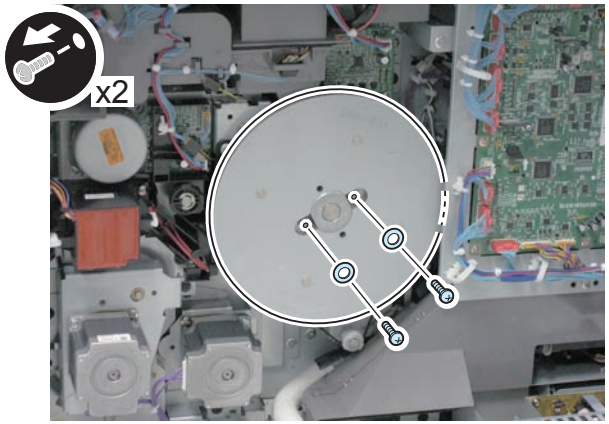
When installing the Feed Driver PCB Unit, be sure to follow the order as shown in the figure to tighten screws.




F-4-449

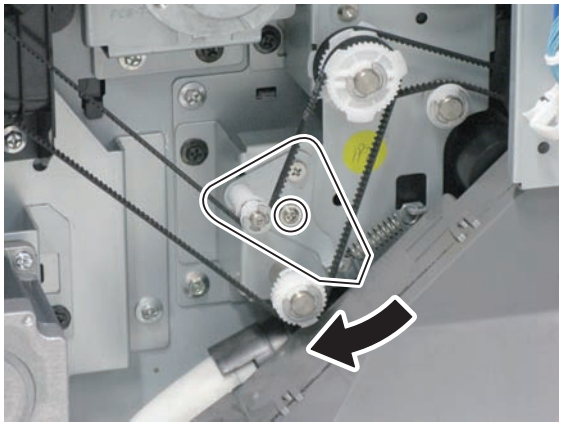
7) Remove the Flywheel.

- 2 Screws
- 2 Washers



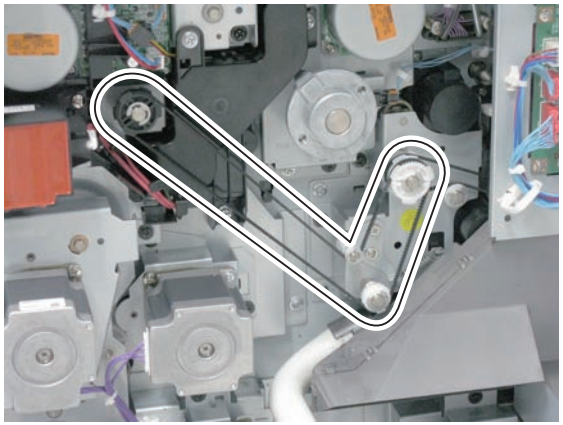

F-4-450

8) Loosen the screw and move the Belt Tensioner in the direction of the arrow, and then again tighten the screw.



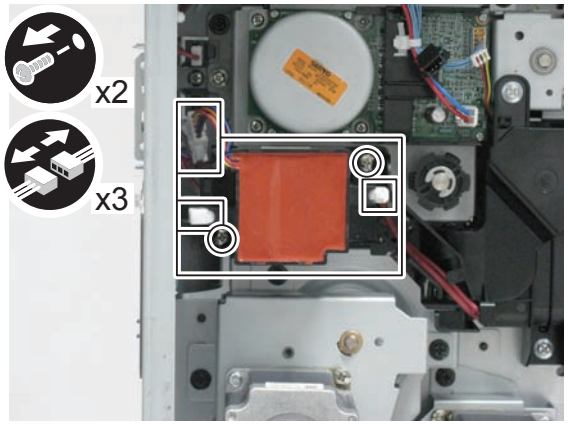
F-4-451

9) Remove the belt from the pully.



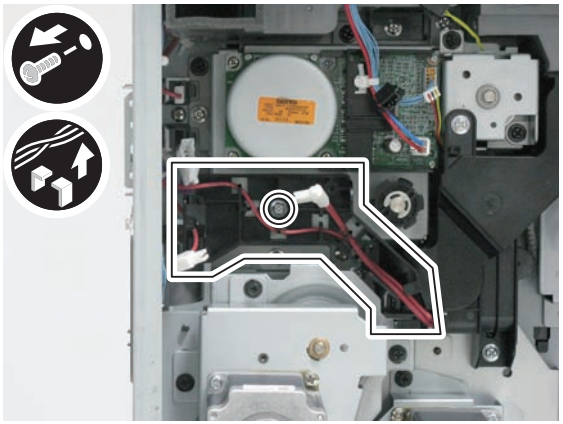
F-4-452

10) Remove the transformer.
- 2 Screws
- 3 Connectors



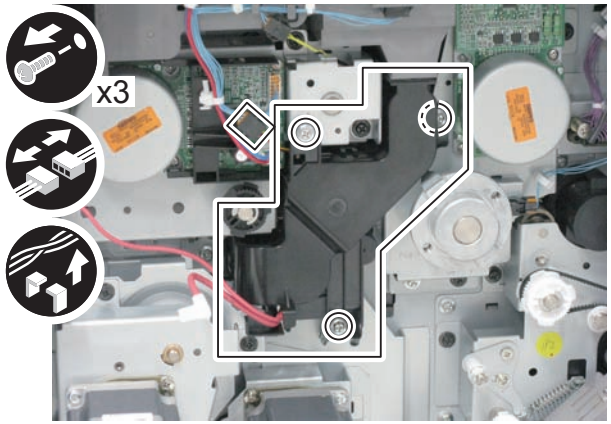

F-4-453

11) Free the harness and remove the Transformer Support Base.
- 1 Screw
- Harness



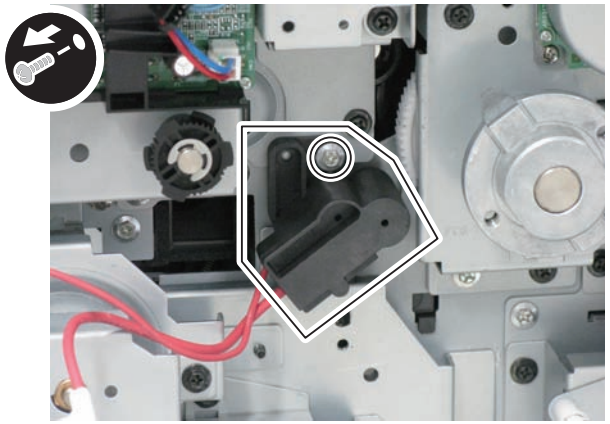
F-4-454

12) Remove the Duct Unit.
- 3 Screws
- 1 Connector
- Harness




F-4-455

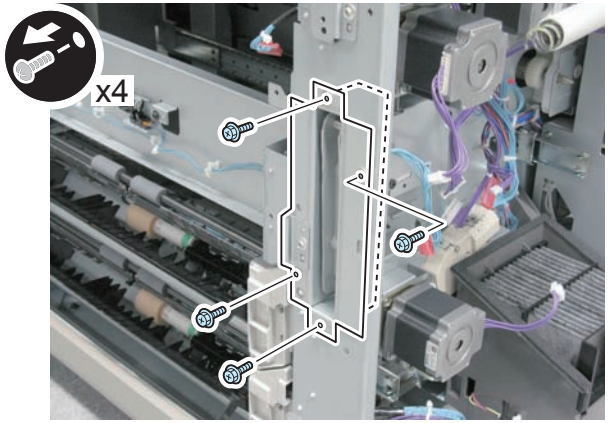
13) Disconnect the Pre-transfer Charging High Voltage Connector.
- 1 Screw



F-4-456

14) Remove the Right Rear Handle.

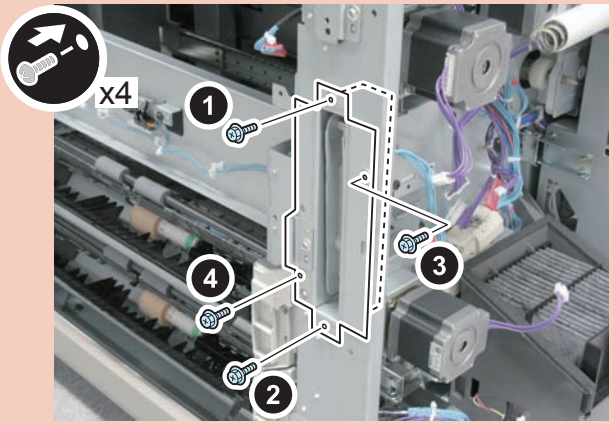
- 4 Screws




F-4-457

CAUTION:

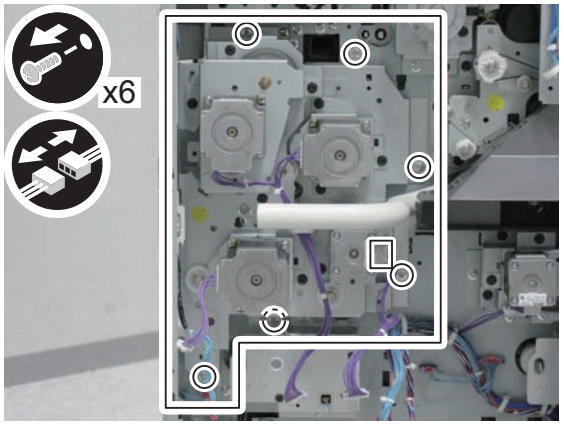
When installing the Right Rear Handle, be sure to follow the order as shown in the figure to tighten screws.




F-4-458

15) Remove the Main Drive Unit.

- 6 Screws
- 1 Connector

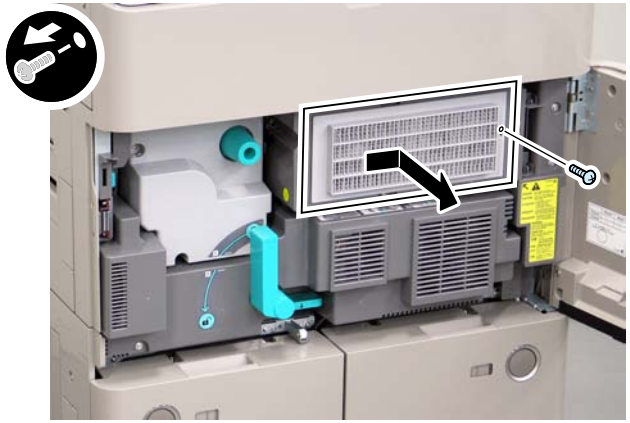



F-4-459

# External Auxiliary System

## Removing the Filter (for primary charging)

1) Open the Front Cover.
2) Remove the Filter (for primary charging).
- 1 Screw



F-4-460

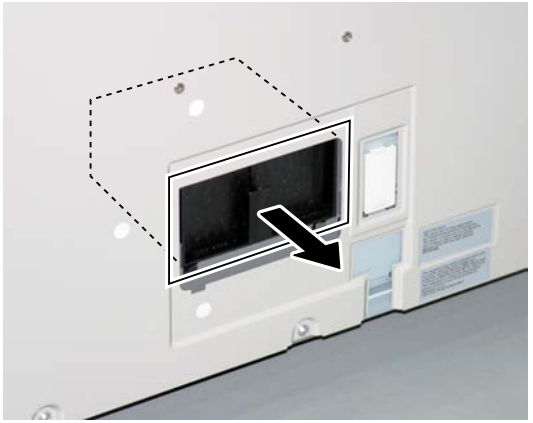
## Removing the Ozone Filter

1) Remove the Filter Cover.
- 1 Screw

F-4-461

NOTE:
To prevent falling of the Filter Cover, be sure to hold the Filter Cover to remove the screw.

2) Remove the Ozone Filter.



F-4-462

# Removing the DC Controller PCB

<Preparation>

1. Remove the Box Cover (Left).

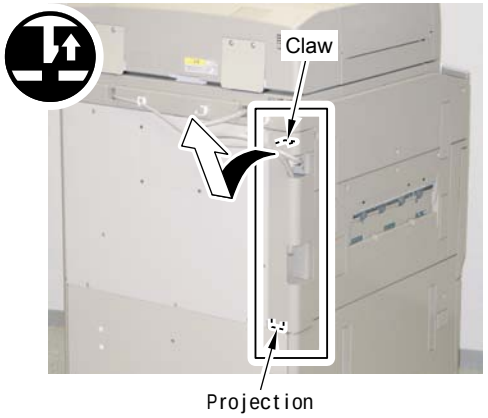
1-1) Remove the Harness.

- 2 Wire Saddles

F-4-463

1-2) Remove the Box Cover (Left).

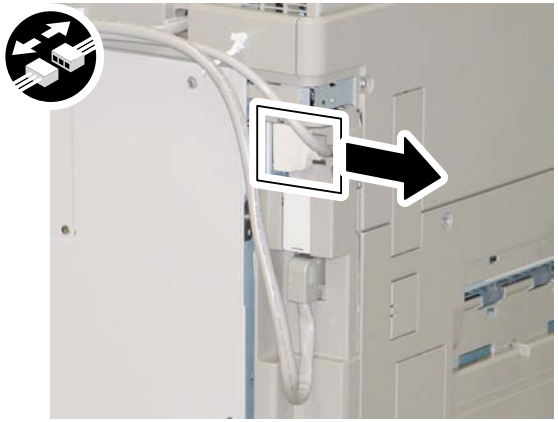
- 1 Claw
- 1 Protrusion




F-4-464

2. Open the Controller Box.

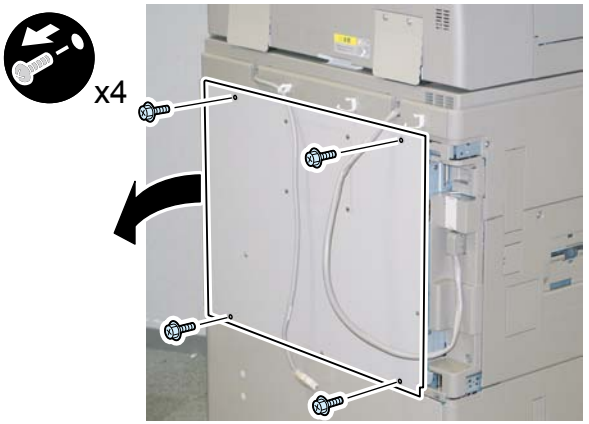
2-1) Disconnect the Reader Communication Cable.



F-4-465

2-2) Open the Controller Box in the direction of the arrow.

- 4 Screws

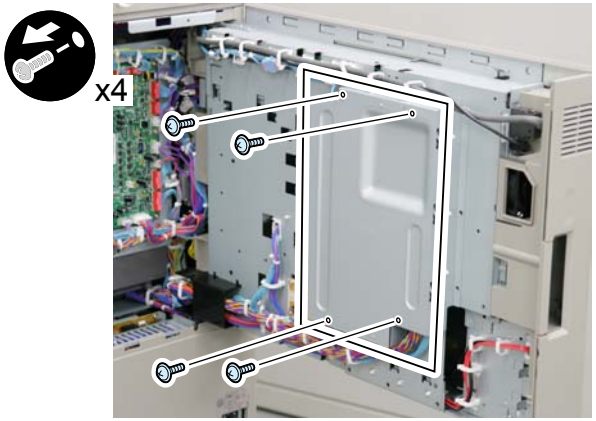



F-4-466

<Procedure>

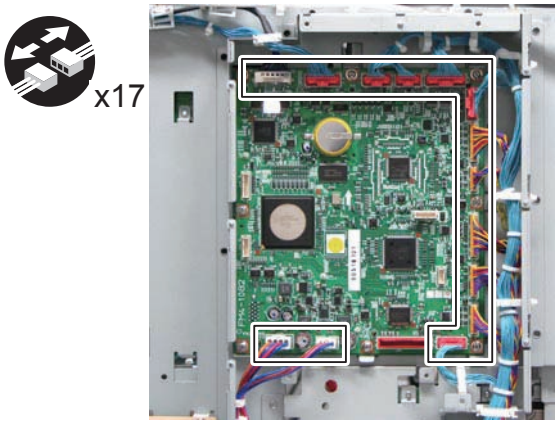
1) Remove the Controller Box Inner Cover.

- 4 Screws (TP)




F-4-467

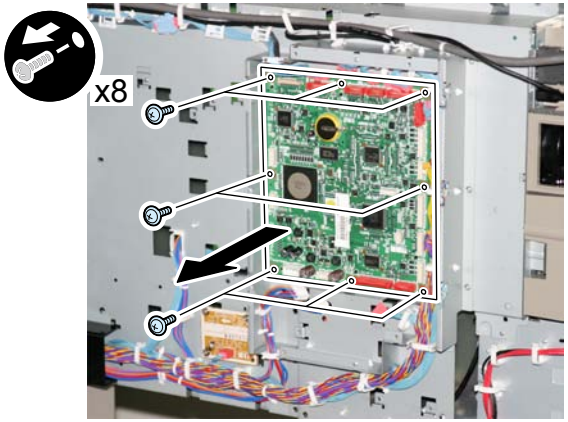
2) Disconnect the 17 Connectors.




F-4-468

3) Remove the DC Controller PCB in the direction of the arrow.

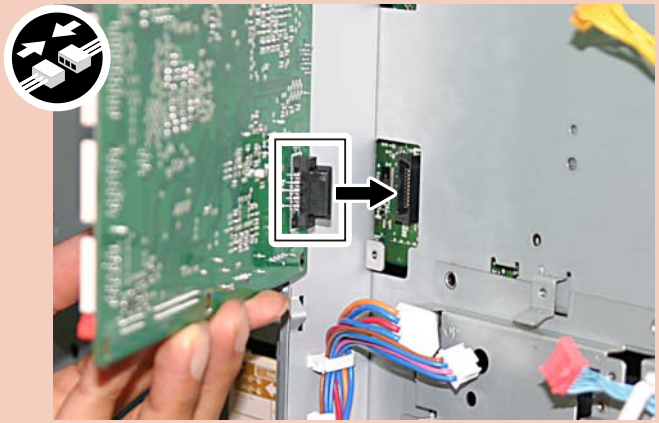
- 8 Screws




F-4-469

CAUTION:Points to Caution at Installation

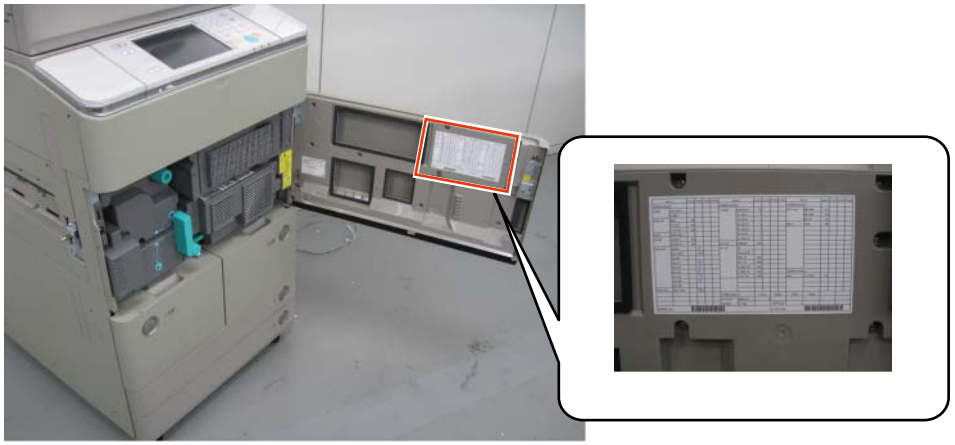
Be sure to securely connect the Connector at the back of the DC Controller PCB.



F-4-470

<Processing after replacing the parts>

- Get in service mode to enter all the latest service mode values written on the label at the back of the Front Cover.



F-4-471

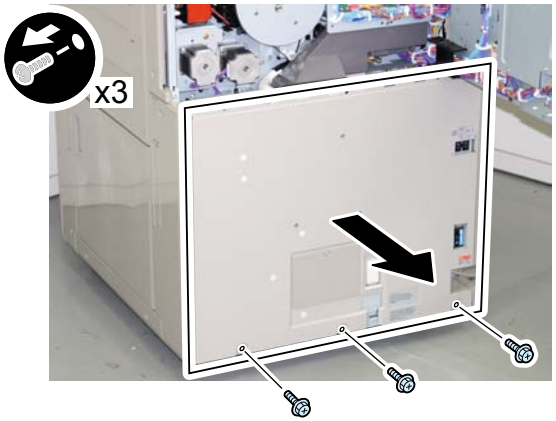
# Removing the Power Supply Assembly

<Preparation>

1. Remove the Box Cover (Left). (Refer to "Removing the DC Controller PCB")
2. Open the Controller Box. (Refer to "Removing the DC Controller PCB")
3. Remove the Rear Lower Cover.

3-1) Remove the Rear Lower Cover in the direction of the arrow.

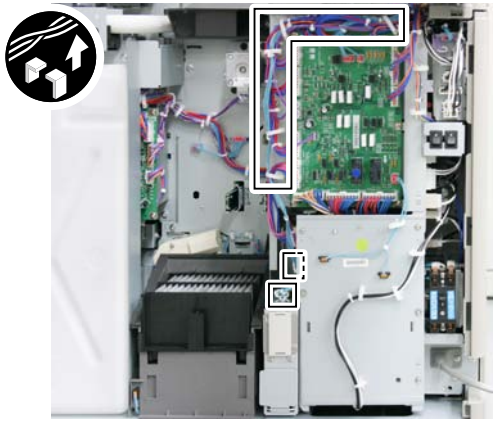
- 3 Screws




F-4-472

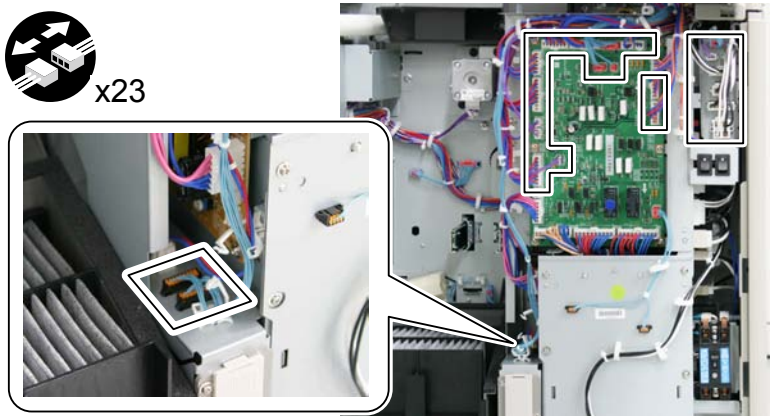
<Procedure>

1) Free the Harness from the Wire Saddle.



F-4-473

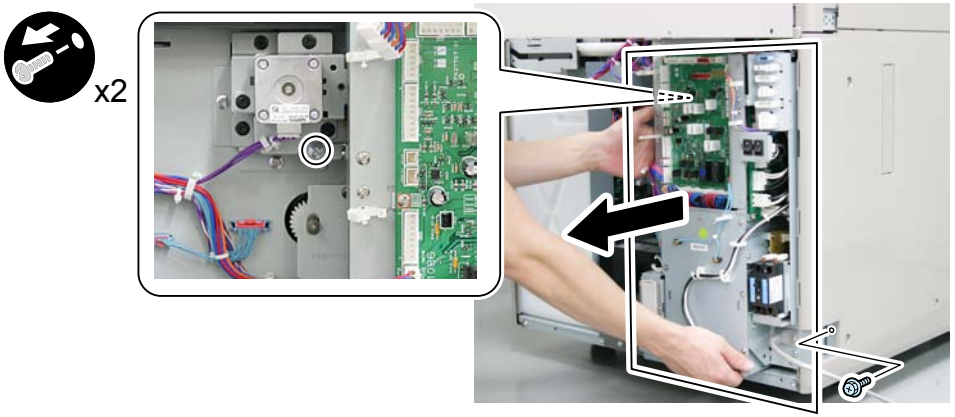
2) Disconnect the 23 Connectors and free the Harness to the top of the Power Supply Assembly.




F-4-474

3) Remove the Power Supply Assembly in the direction of the arrow.

- 2 Screws

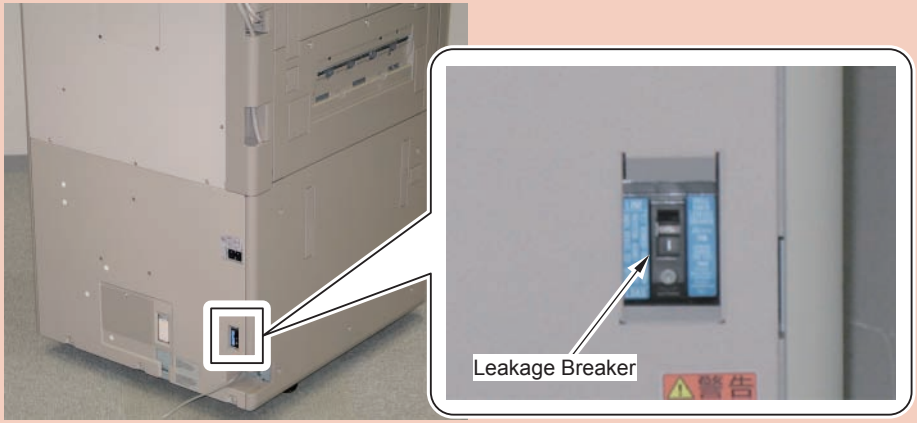



F-4-475

# Removing the Fixing Power Unit

CAUTION:Points to Caution before Operation

When executing this procedure, be sure to turn OFF the breaker beforehand.




F-4-476

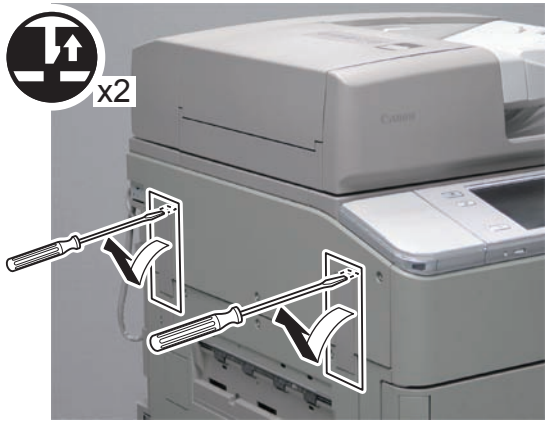
<Preparation>

1. Remove the Box Cover (Left). (Refer to "Removing the DC Controller PCB")

<Procedure>

1) Open the 2 Finisher Connector Covers.

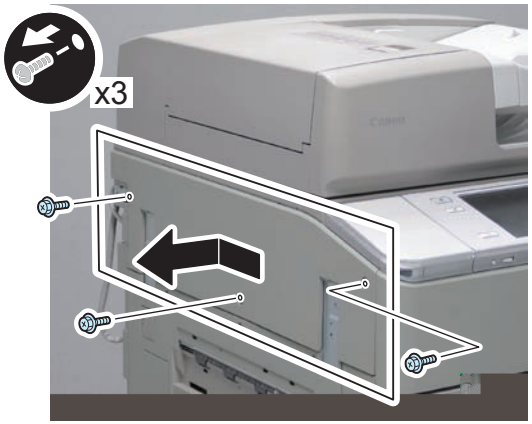
- 2 Claws




F-4-477

2) Remove the Left Upper Cover.

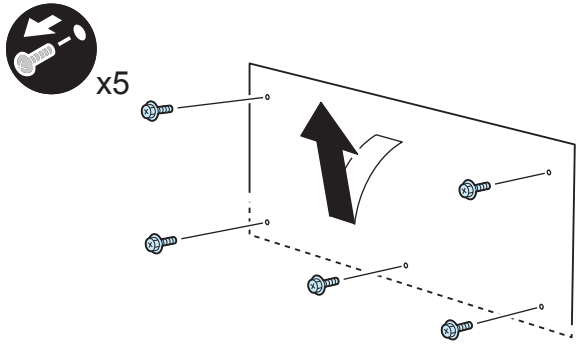
- 3 Screws




F-4-478

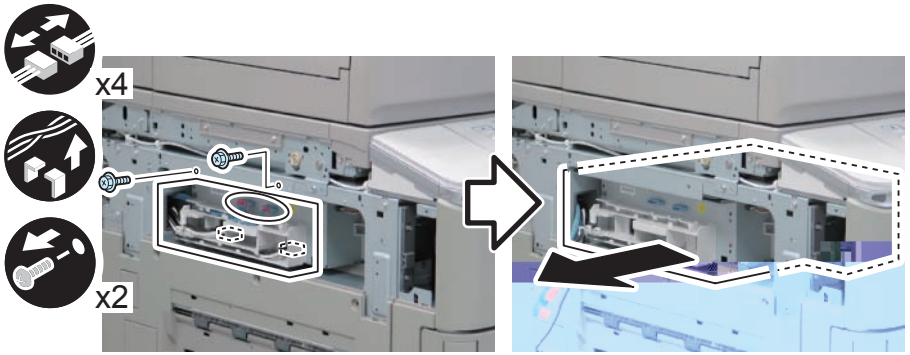
3) Remove the Left Upper Frame.

- 5 Screws



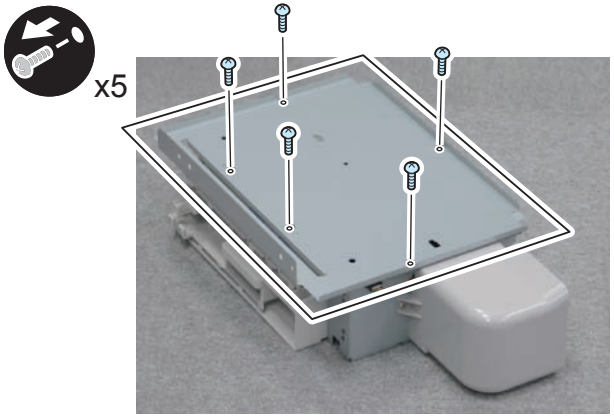

F-4-479

4) Free the harness and remove the Fixing Power Unit.
- 4 Connectors
- 2 Screws




F-4-480

5) Remove the Fixing Power Unit Plate.
- 5 Screws




F-4-481

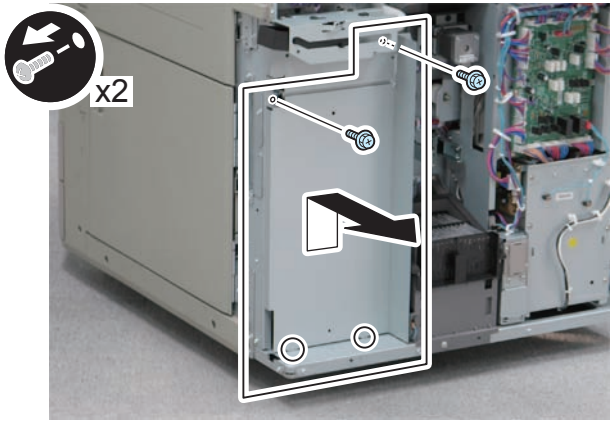
## Removing the Feed Driver PCB

<Preparation>

1. Remove the Waste Toner Container. (Refer to page 4-135)
2. Remove the Box Cover (Left). (Refer to "Removing the DC Controller PCB")
3. Open the Controller Box. (Refer to "Removing the DC Controller PCB")
4. Remove the Rear Lower Cover. (Refer to "Removing the Power Supply Assembly")

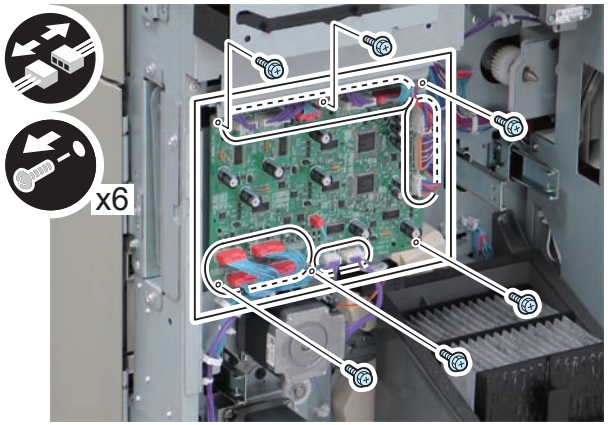
<Procedure>

1) Remove the frame of Waste Toner Container.
- 2 Screws
- 2 Protrusions




F-4-482

2) Remove the Feed Driver PCB.
- 6 Screws
- 15 Connectors

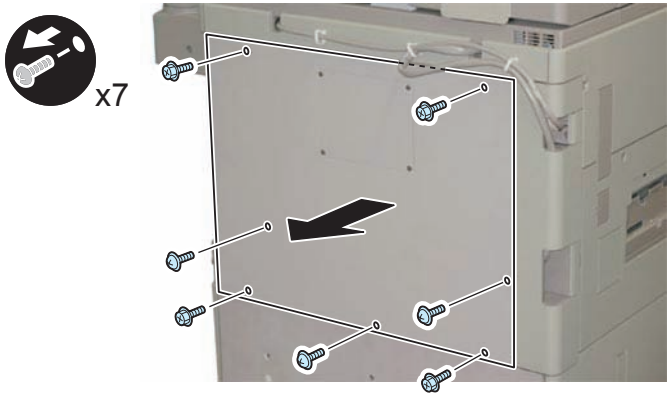



F-4-483

## Removing the ARCNET PCB

<Preparation>

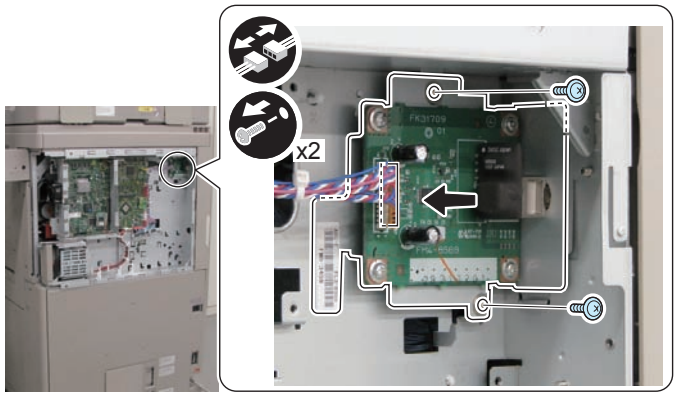
1. Remove the Left Rear Cover. (Refer to “Removing Main Controller PCB 2”.)
2. Remove the Rear Cover.
- 7 Screws




F-4-484

<Procedure>

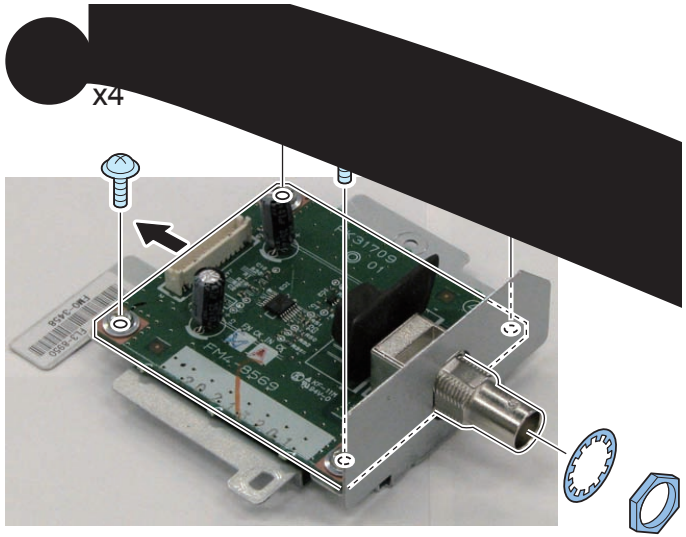
1) Remove the ARCNET PCB Fixation Plate.
- 2 Connectors
- 2 Screws




F-4-485

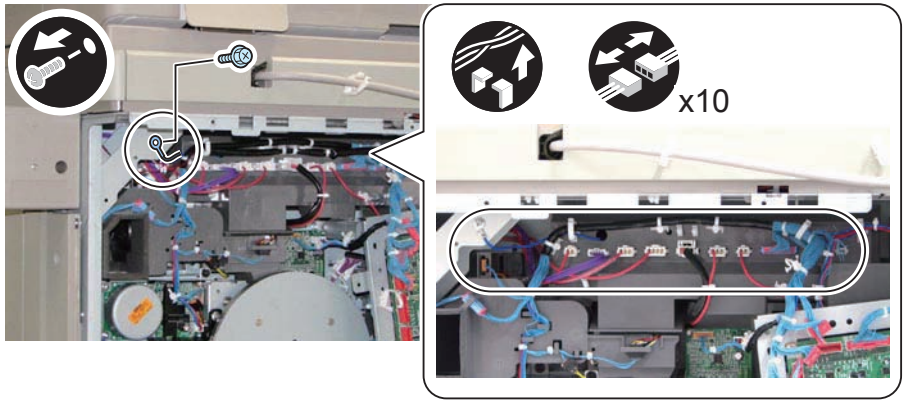
4) Remove the ARCNET PCB.
- 4 Screws

- Washer
- Nut



2) Disconnect the connector and Grounding Wire.

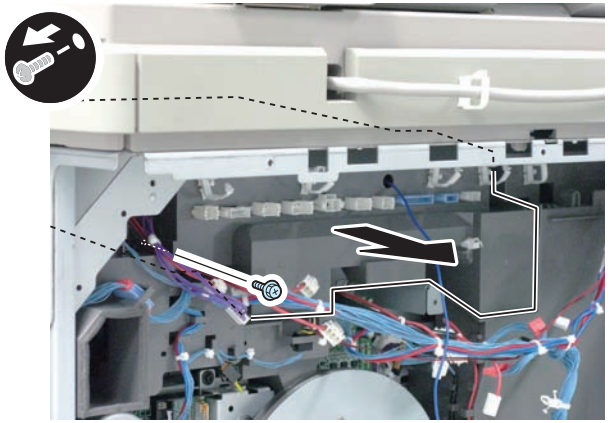
- 1 Screw




F-4-488

3) While avoiding the harness and Motor Driver PCB Unit, remove the Upper High Voltage Unit.

- 1 Screw

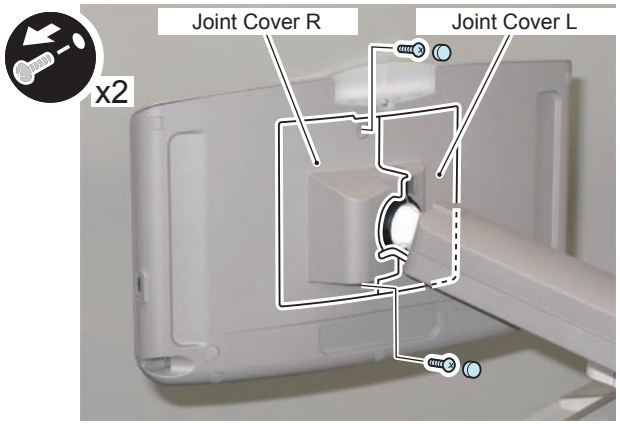


F-4-489

## Removing the Upright Control Panel

1) Remove the Joint Cover L and Joint Cover R.

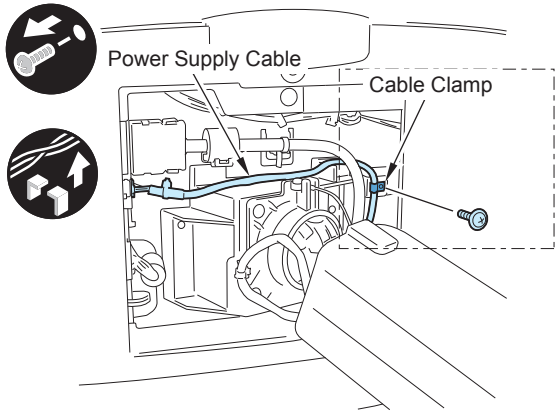
- 2 Screws




F-4-490

2) Free the Power Supply Cable from the Clump.

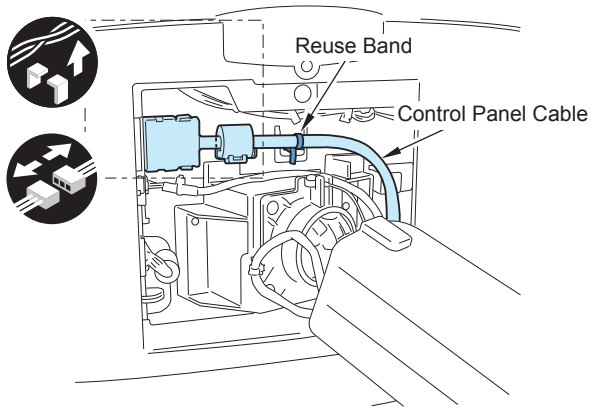
- 1 Screw




F-4-491

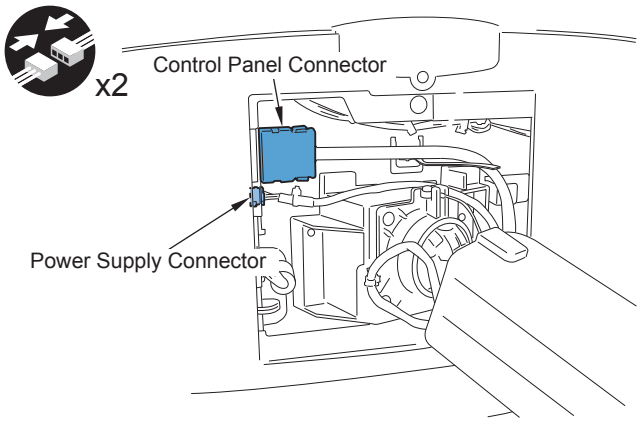
3) Disconnect the Control Panel Cable.

- Reuse Band




F-4-492

4) Disconnect the Control Panel Connector and Power Supply Connector.

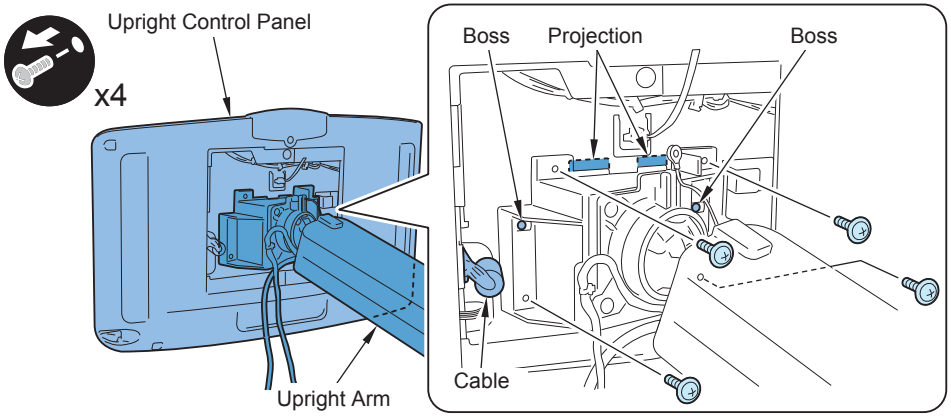



F-4-493

5) Remove the Upright Control Panel.

- 4 Screws
- 2 Bosses
- 2 Protrusions

NOTE:
When installing the Upright Control Panel, be sure to tighten the screws from the upper part.




F-4-494

# 5 Adjustment

- Overview
- When replacing parts

# Overview

In this chapter, measures of adjustment when replacing parts in servicing operation are mentioned. Parts to be replaced are categorized into 4 blocks based on their related technology as shown below.

| Parts Name | Actions at Parts Replacement | |
|---|---|---|
| Controller System | HDD | p. 5-2 |
| | Main Controller PCB1 | p. 5-4 |
| | Main Controller PCB2 | p. 5-5 |
| | TPM PCB | p. 5-7 |
| Image Formation System | Primary Charging Wire | p. 5-7 |
| | Primary Charging Assembly | p. 5-7 |
| | Pre-Transfer Charging Assembly | p. 5-9 |
| | Pre-Transfer Charging Wire | p. 5-9 |
| | Drum | p. 5-10 |
| | Drum Side Seals (Front and Rear) | p. 5-11 |
| | Developing Assembly | p. 5-11 |
| | Potential Sensor / Potential Control PCB | p. 5-11 |
| | ETB | p. 5-11 |
| | Patch Sensor | p. 5-11 |
| | Waste Toner Container | p. 5-11 |
| Fixing System | Fixing Roller | p. 5-12 |
| External Auxiliary System | DC Controller PCB | p. 5-12 |

T-5-1

# When replacing parts

## Controller System

### HDD

<Procedure of parts replacement>

Refer to Removing HDD

<Procedure of adjustment>

1. Before Replacing

Perform the following operations. Be sure to get an approval from the user beforehand.

1) Backup of the set/registered data

Use the Remote UI.

Management Settings > Data Management > Import/Export

Target data:

- Address List
- Forwarding Settings
- Settings/Registration
- Web Access Favorites
- Printer Settings
- Paper Information

2) Printing the set/registered data

Use the service mode.

(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT

List of the set/registered data which cannot be backed up is printed.

2. After Replacing

1) HDD format

1-1) Start with the safe mode. (While pressing 2 and 8 keys simultaneously, turn ON the main powerswitch.)

1-2) Use SST to format all partitions.

2) Downloading system software

2-1) Use SST to download the system software (System, LANG, RUI and others).

3) Initializing the key, certificate and CA certificate

(Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY

4) Turning OFF and ON the main power switch

5) Restoring the backup data

Use the Remote UI.

Management Settings > Data Management > Import/Export

6) Resetting/registering the data

While referring to the list of set/registered data which was printed before replacement, reset/register the data.

7) When the user generates and adds the encryption key, certificate and/or CA ertificate, request the user to generate them again.

8) Executing “Auto Adjust Gradation (Full Adjust)”

Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

When using the Card Reader and imageWARE Accounting Manager

Card ID used for imageWARE Accounting Manager is stored in the HDD, so NSA collection control is not enabledafter the HDD replacement. After the HDD is replaced, reinstall the card ID from imageWARE Accounting Manager using the following procedures.

1) Go to COPIER > FUNCTION> INSTALL > CARD and enter the numerical value of the leading card which is used for Department ID. Then, press “OK” button.(e.g.: If No.1 to No.1000 cards are used for Department ID, enter “1” of the leading card.)

2) After turning OFF and ON the main power switch, perform the following operations from Settings/Registration mode.
In Management Settings > User Management > Department ID Management > Page Totals, be sure that “ID00000001” to “ID00001000” are created.
Set the following: Preferences > Network > TCP / IP Settings > IPv4 Settings> IP Address Settings > IP Address, Gateway Address, Subnet Mask
In Management Settings > User Management> System Manager Information Settings> System Manager ID and System PIN, register any number for them. Then, turn OFF and ON the main power switch.
If “System Manager ID” and “System PIN” are not registered, “card registration to device” cannot be executed for the imageWARE Accounting Manager setting operation.

3) Download the card ID from imageWARE Accounting Manager to the Main Body again.

4) After downloading is completed, go to Management Settings > User Management > Department ID Management > Page Totals. Be sure that only the downloaded card ID is displayed.

5) Print using the user card registered from imageWARE Accounting Manager. Be sure that the card information used for the target devices of imageWARE Accounting Manager is collected.

CAUTION:Points to Caution when Using the System Software-installed HDD

When using the HDD which was installed the system software of the other achine (different serial number), be sure to format the HDD after the installation. If the HDD is not formatted, the operation cannot be guaranteed.

## Main Controller PCB 1

<Procedure of parts replacement>

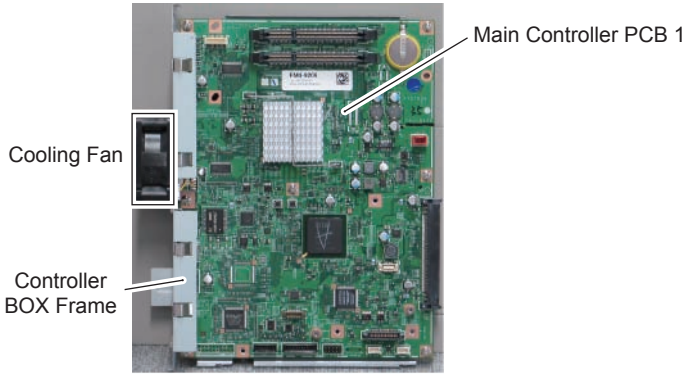
see "Removing Main Controller PCB 1," on p. 4-80.

<Procedure of adjustment>

Service part:

Setting unit: Main Controller PCB 1 + Controller Box Frame + Cooling Fan

Parts number differs on a model basis (speed basis).

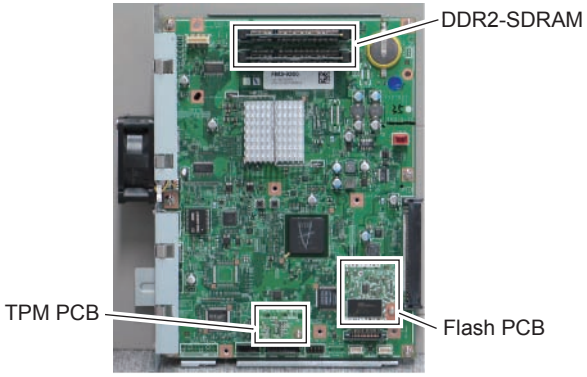



F-5-1

In order to secure the accuracy of connector connection when slotting in, this service part is provided with the PCB being installed to the frame.

1) Transferring the parts from old PCB to new PCB

- DDR2-SDRAM (2 pc.)
- Flash PCB
- TPM PCB




F-5-2

NOTE:
Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.

## Main Controller PCB 2

<Procedure of parts replacement>

see "Removing Main Controller PCB 2," on p. 4-82.

<Procedure of adjustment>

Service part:

Setting unit: Main Controller PCB 2 + Controller Box Frame

F-5-3

1. Before Replacing

Perform the following operations. Be sure to get an approval from the user beforehand.

1) Backup of the set/registered data

Use the Remote UI.

Management Settings > Data Management > Import/Export

Target data:

- Address List
- Forwarding Settings
- Settings/Registration
- Web Access Favorites
- Printer Settings
- Paper Information

2) Printing the set/registered data Use the service mode.

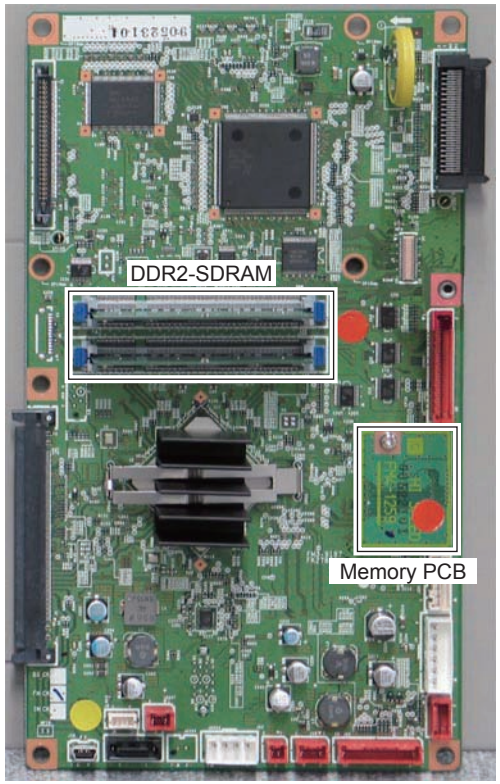
(Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT

List of the set/registered data which cannot be backed up is printed.

2. When Replacing

1) Transferring the parts from old PCB to new PCB

- DDR2-SDRAM (1 pc.) (When option DDR2-SDRAM is installed: 2 pc.)
- Memory PCB




F-5-4

Prohibited Operation:

Do not transfer the following parts to another model (which has a different serial number).If you fail to do so, the Main Body does not activate normally and this might cause to fail the restoration.

- Main Controller PCB 1
- Main Controller PCB 2 (with Memory PCB installed)
- Memory PCB

3. After Replacing

1) After installing the parts, turn ON the main power switch.

2) Restoring the backup data

Use the Remote UI.

Management Settings > Data Management > Import/Export

3) Resetting/registering the data

While referring to the list of set/registered data which was printed out before replacement, reset/register the data.

4) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again

## TPM PCB

<Procedure of parts replacement>

see "Removing Main Controller PCB 1," on p. 4-80.

<Procedure of adjustment>

When TPM setting is “OFF”

Any operation is not necessary at replacement.

When TPM setting is “ON”

It is necessary to restore the TPM key which was backed up after changing the setting to “ON”.

1) Removing the network cable
   Until the TPM key is restored, information might be leaked due to the inappropriate access via network, so be sure to perform this operation appropriately.
2) Connecting the USB Memory after turning ON the main power switch
3) Restoring the TPM key
   Management Settings > Data Management >TPM Settings> Restore of TPM Key
4) Turning OFF and ON the main power switch

# Image Formation System

## Primary Charging Wire

<Procedure of parts replacement>

see "Replacing the Primary Charging Wire," on p. 4-96.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PRM-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)
3) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
4) Execute the potential control (COPIER>FUNCTION>DPC>DPC). Turn OFF and then ON the main power. (The potential control is executed at startup.)
5) Execute the potential control. (COPIER>FUNCTION>DPC>DPC)

## Primary Charging Assembly

<Procedure of parts replacement>

see "Removing the Primary Charging Assembly," on p. 4-89.

<Procedure of adjustment>

1) Output a halftone image using the service mode.
   - TEST > PG > TYPE : 5
2) Execute the following procedure according to the density difference on the front and rear sides of the test print image.
   - When the front side test print image is dark, execute step 3.
   - When the rear side test print image is dark, execute step 4.
   - When there is no uneven density, execute step 5 and the following.

When the front side test print image is dark

NOTE:
- When the front side test print image is dark [1], execute step 3 until the density becomes even. When the density becomes even, execute step 5 and the following.
- When the adjustment screw is turned clockwise, the Charging Wire goes down and up (gap between grid and Charging Wire becomes narrow and wide). As a result, the density of output image becomes light.

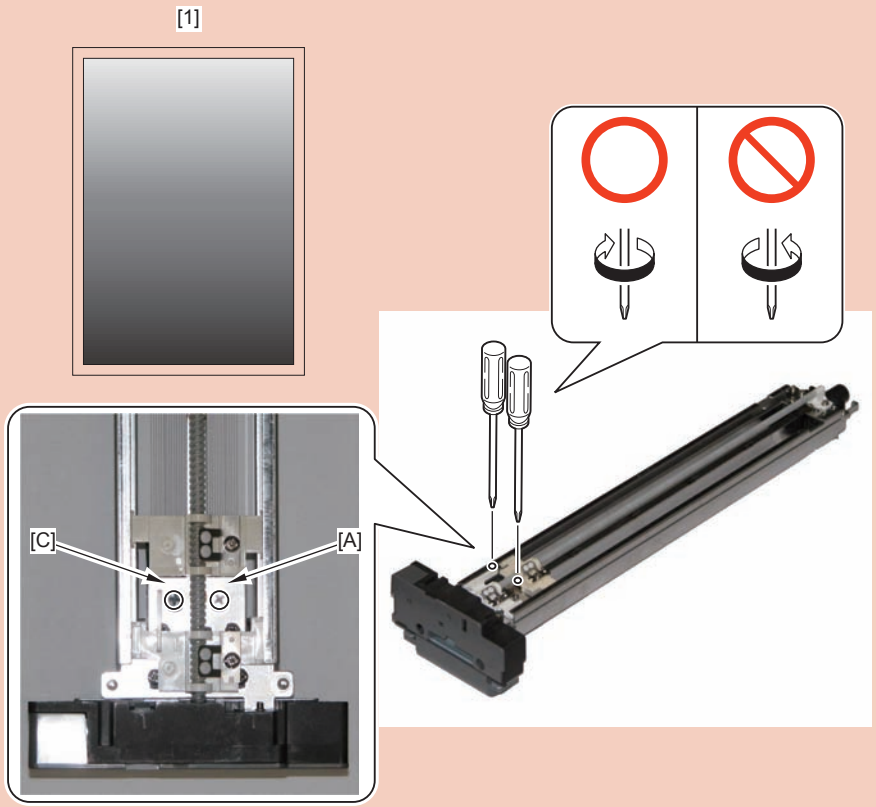
CAUTION:

Be sure to adjust the dark side (density of the test print image) to be the light side.

3) Make the resin screws [A] and [C] a full turn clockwise. While referring to the replacement procedure of the Primary Charging Assembly, install it to the main body, output a test print and check the image.

CAUTION:

Since uneven density might occur, be sure to adjust by turning the 2 adjustment screws with the same amount.




F-5-5

When the rear side test print image is dark

NOTE:

- When the rear side test print image is dark [2], execute step 4 until the density becomes even. When the density becomes even, execute step 5 and the following.
- When the adjustment screw is turned clockwise, the Charging Wire goes down and up (gap between grid and Charging Wire becomes narrow and wide). As a result, the density of output image becomes light.

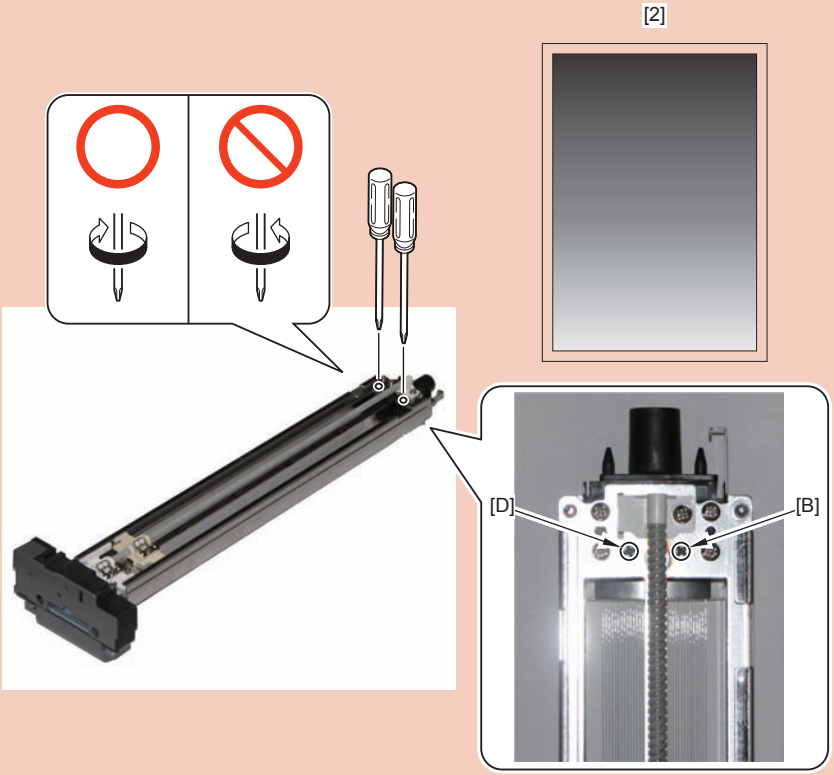
CAUTION:

Be sure to adjust the dark side (density of the test print image) to be the light side.

4) Make the resin screws [B] and [D] a full turn clockwise. While referring to the replacement procedure of the Primary Charging Assembly, install it to the main body, output a test print and check the image.

CAUTION:

Since uneven density might occur, be sure to adjust by turning the 2 adjustment screws with the same amount.




F-5-6

5) Clean the Charging Wire using the service mode.
(FUNCTION > CLAENING > WIRE-CLN) Time required: Approx. 30 sec.
6) Init of Primary Charging Wire current VL(COPIER>ADJUST>HV-PRI>PRI-GRID)
7) Execute the potential control. (COPIER>FUNCTION>DPC>DPC
8) Execute the density correction using the user mode.
("Settings/Registration" > "Adjustment/Maintenance" > "Adjust Image Quality" > "Correct Density")

## Pre-transfer Charging Assembly

<Procedure of parts replacement>

see "Removing the Pre-transfer Charging Assembly," on p. 4-100.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>PO-UNIT)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)

## Pre-transfer Charging Wire

<Procedure of parts replacement>

see "Replacing the Pre-transfer Charging Wire," on p. 4-104.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>PRDC-1>PO-WIRE)
2) Clean the Charging Wire. (COPIER>FUNCTION>CLEANING>WIRE-CLN)

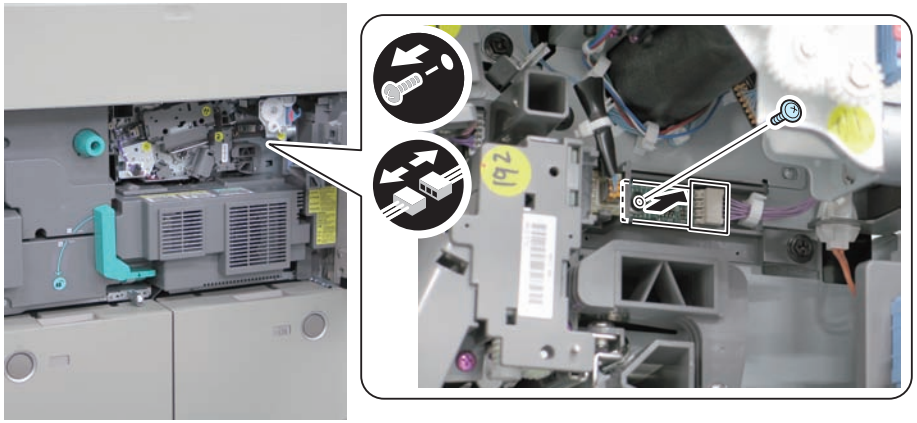
## Photosensitive Drum

<Procedure of parts replacement>

see "Removing the Photosensitive Drum," on p. 4-116.

<Procedure of adjustment>

1) Remove the EEROM.
   - 1 Screw
   - 1 Connector

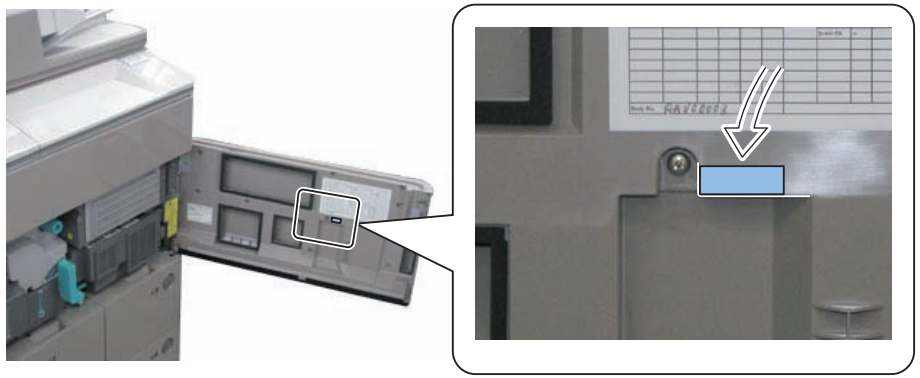


F-5-7

3) Replace the ROM connected to the host machine with the drum ROM included in the drum.

> CAUTION:
> If the ROM is not replaced, the replaced drum and the drum-unique data stored in the ROM are not matched. As a result, the 2D shading is not functioned normally.

4) Affix the ID Label included in the drum to the inside of the Front Cover.



F-5-8

5) Activate the drum replacement mode. (COPIER>FUNCTION>INSTALL>DRM-INIT)
6) Check the 2-dimensional shading ROM. (COPIER>FUNCTION>2D-SHADE>2D-READ)
6) Execute Auto Adjust Gradation.

## Drum Side Seals (Front and Rear)

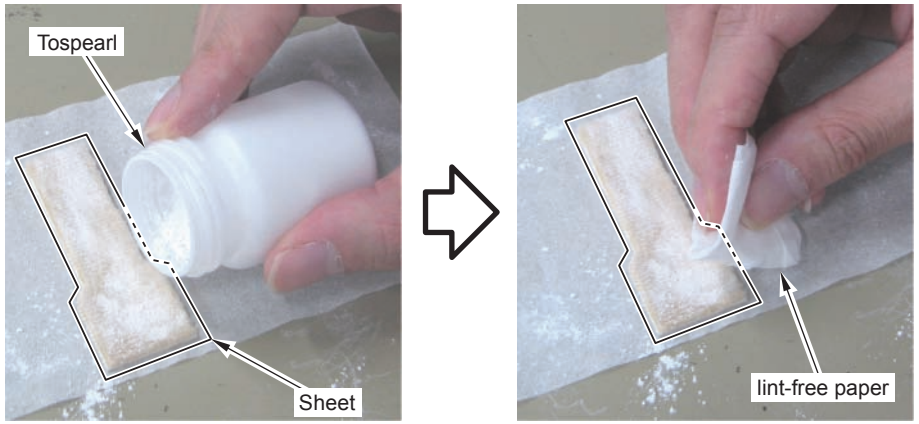
<Procedure of parts replacement>

see "Removing the Side Seal," on p. 4-121.

<Procedure of adjustment>

1) Applying Tospearl

Apply Tospearl on the surfaces of the Drum Side Seals (Front and Rear) and adhere it uniformly with lint-free paper. In order to reduce adhesion of toner at both ends of the Photosensitive Drum




F-5-9

## Developing Assembly

<Procedure of parts replacement>

see "Removing the Developing Assembly," on p. 4-122.

<Procedure of adjustment>

1) Clear the parts counter. (COPIER>COUNTER>DRBL-1>DVG-CYL)
2) Supplying Developing Assembly toner (COPIER>FUNCTION>INSTALL>TONER-S)

## Potential Sensor / Potential Control PCB

<Procedure of parts replacement>

see "Removing the Potential Control PCB Unit," on p. 4-157.

<Procedure of adjustment>

1) Adjust the Potential Sensor offset. (COPIER > FUNCTION > DPC > OFST)

## ETB Unit / ETB

<Procedure of parts replacement>

- see "Removing the ETB Unit," on p. 4-127.
- see "Removing the ETB," on p. 4-129.

<Procedure of adjustment>

1) Clear the ETB control counter. (COPIER>FUNCTION>CLEAR>TR-BLT)
Parts counter (COPIER>COUNTER>DRBL-1>TR-BLT) is also cleared coincidentally.

## Patch Sensor

<Procedure of parts replacement>

see "Removing the Patch Sensor," on p. 4-143.

<Procedure of adjustment>

1) Adjust the intensity of the Patch Sensor. (COPIER>FUNCTION>MISC-P>P-LED)

## Waste Toner Container

<Procedure of parts replacement>

see "Removing the Waste Toner Container," on p. 4-135.

<Procedure of adjustment>

1) Set the new Waste Toner Container.
2) Clear the waste toner counter. (COPIER>COUNTER>MISC>WST-TNR)

# Fixing System

## Fixing Roller

<Procedure of parts replacement>

see "Removing the Fixing Roller, Insulating Bush and Thrust Stopper," on p. 4-177.

<Procedure of adjustment>

1) Grease Application
   Apply approx. 20mg of grease (MOLYKOTE HP-300; CK-8012) to inner circumference and outer circumference of the Bushing so that all circumferences are covered with white film; otherwise, abnormal noise can occur (squeaking).
2) Clear the counter
   COPIER >COUNTER > DRBL-1 > FX-UP-RL

# External Auxiliary System

## DC Controller PCB

<Procedure of parts replacement>

see "Removing the DC Controller PCB," on p. 4-226.

<Procedure of adjustment>

1. Before Replacing
   1)Backup of the Service Mode data
   COPIER>FUNCTION>SYSTEM>DSRAMBUP

2. After Replacing
   1)Restoring the backup data
   COPIER>FUNCTION>SYSTEM>DSRAMRES
   2)Switch OFF and then ON the main power.
   3)Execute auto gradation adjustment.
   4)Test print

# 6 Troubleshooting


- Test Print
- Image Faults
- Feed Faults
- Other
- Version upgrade
- Making Initial Checks
- Error Messages
- Error Codes

# Test Print

## Overview

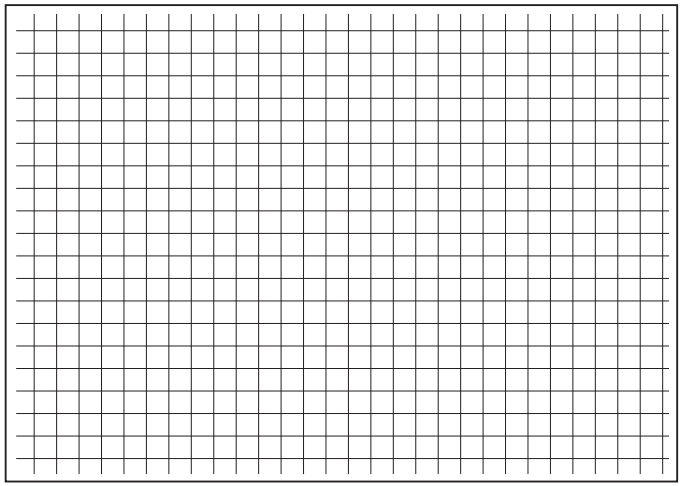
| PG TYPE | Pattern | Image check item | | | | | | | | | | | PCB to generate PG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gradation | Fogging | Transfer failure | Black line | White line | Uneven pitch | Uneven density (rear/ front) | Right angle accuracy Straight line accuracy | Side registration | Shock | Magnification ratio | |
| 0 | Normal copy/print | | | | | | | | | | | | --- |
| 1 | Grid | | | | | | | | Yes | Yes | | Yes | Main Controller PCB 2 |
| 2 | 17 gradations Tbic rank 2 | Yes | | | Yes | Yes | | | | | | | Main Controller PCB 2 |
| 3 | 17 gradations 600dpi (134-line screen or 141-line screen) | Yes | | | Yes | Yes | | | | | | | Main Controller PCB 2 |
| 4 | Solid white | | Yes | | | | | | | | | | Main Controller PCB 2 |
| 5 | Halftone (density: 80H, Tbic rank 2, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | | Yes | | Main Controller PCB 2 |
| 6 | Halftone (density: 80H, 134-line screen or 141-line screen, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | | Yes | | Main Controller PCB 2 |
| 7 | Solid black | | | Yes | | Yes | Yes | Yes | | | | | Main Controller PCB 2 |
| 8 | Horizontal line (4 dots, 27 spaces) | | | | Yes | Yes | Yes | Yes | | | | | Main Controller PCB 2 |
| 9 | Horizontal line (6 dots, 50 spaces) | | | | Yes | Yes | Yes | Yes | | | | | Main Controller PCB 2 |
| 10 | Horizontal line (2 dots, 3 spaces) | | | | Yes | Yes | Yes | Yes | | | | | Main Controller PCB 2 |
| 11 | Halftone (density: 60H, Tbic rank 2, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | | Main Controller PCB 2 |
| 12 | Halftone (density: 60H, 134-line screen or 141-line screen, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | | Yes | | Main Controller PCB 2 |
| 13 | Halftone (density: 30H, Tbic rank 2, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | | Yes | | Main Controller PCB 2 |
| 14 | Halftone (density: 30H, 134-line screen or 141-line screen, without image correction) | | | Yes | Yes | Yes | Yes | Yes | | | Yes | | Main Controller PCB 2 |
| 15 | 15 to 50: For development | | | | | | | | | | | | --- |

T-6-1

NOTE:
When outputting a halftone test print, be sure to use PG TYPE:6 except in the following cases.
1. When checking the image of side registration adjustment, use PG TYPE:11.
2. When the setting value of the following service mode is "2" (TBIC is used for both the photo part and the text part), use PG TYPE:5.
COPIER > OPTION > USER > PH-D-SL2

# How to View the Test Print

## Grid (TYPE=1)

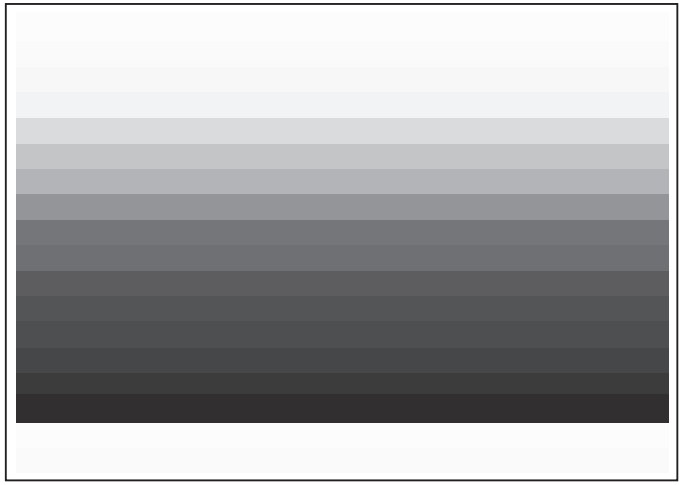


F-6-1

| Check item | Check method | Assumed cause |
|---|---|---|
| Right angle accuracy/ Straight line accuracy | Check whether lines in the horizontal/ vertical scanning directions are paralleled to the paper and these lines are at right angles to one another. | Feed system failure or Laser Scanner Unit failure is considered. |
| Side registration | Check the left margin. | Floor at the installation site is extremely distorted, or the feed system failure is considered. |
| Magnification ratio | Check whether the grid is printed at 9.99mm intervals. (Check the image on the second side at duplex printing.) | ETB and rollers' feed system failure or laser exposure system failure (drum, Laser Scanner) is considered. |

T-6-2

## 17 gradations (TYPE=2/3)

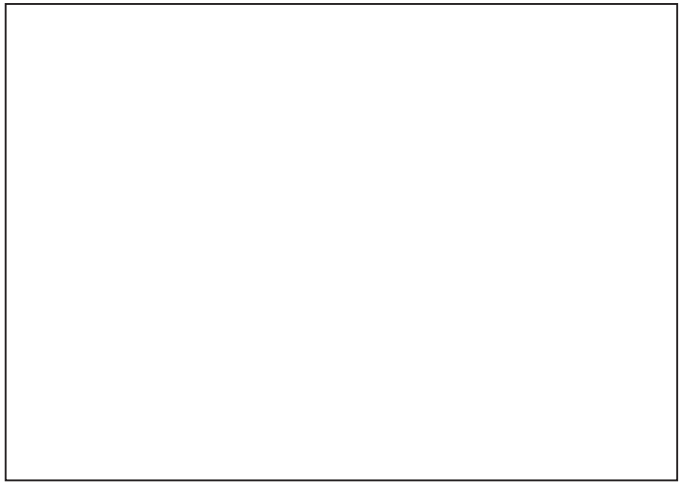


F-6-2

| Check item | Check method | Assumed cause |
|---|---|---|
| Gradation | Check whether gradation in density is made appropriately. | Drum failure, laser exposure system failure or developing system failure is considered. |
| Black line | Check whether black lines appear on the image. | Laser light path failure, grid failure, developing system failure, cleaning (drum, ETB) failure or Pre-transfer Charging Assembly failure is considered. |
| White line | Check whether white lines appear on the image. | Primary Charging Wire failure or developing system failure is considered. |

T-6-3

## Solid white (TYPE=4)



F-6-3

| Check item | Check method | Assumed cause |
|---|---|---|
| Fogging | Check whether foggy image appears in the blank area. | Drum failure, laser exposure system failure or developing system failure is considered. |

T-6-4

## Halftone (TYPE=5/6/11/12/13/14)

F-6-4

NOTE:
- When outputting a halftone test print, be sure to use PG TYPE:6 except in the following cases.
  1. When checking the image of side registration adjustment, use PG TYPE:11.
  2. When the setting value of the following service mode is "2"
     (TBIC is used for both the photo part and the text part), use PG TYPE:5.
     COPIER > OPTION > USER > PH-D-SL2
- When changing the density of the test print, use the following service mode to change the density: TEST>PG>K.

| Check item | Check method | Assumed cause |
|---|---|---|
| Transfer failure | Check the evenness of halftone density. Check whether uneven image or foggy image appears. | Transfer system failure or Pre-transfer Charging Assembly failure is considered. |
| Black line | Check whether black lines appear on the image. | Laser light path failure, grid failure, developing system failure, cleaning (drum, ETB) failure or Pre-transfer Charging Assembly failure is considered. |
| White line | Check whether white lines appear on the image. | Primary Charging Wire failure or developing system failure is considered. |
| Uneven pitch | Check whether lines appear on the image in the horizontal scanning direction. | Drum failure, developing system failure, laser exposure system failure or drive-related failure is considered. |
| Uneven density (rear/front) | Check the density difference between the front and rear sides. | Primary Charging Assembly failure, drum failure or developing system failure is considered. |
| Side registration | Check the left margin. | Floor at the installation site is extremely distorted, or the feed system failure is considered. |
| Shock | Check whether horizontal lines appear on the image. | ETB and rollers' feed system failure or laser exposure system failure (drum, Laser Scanner) is considered. |

T-6-5

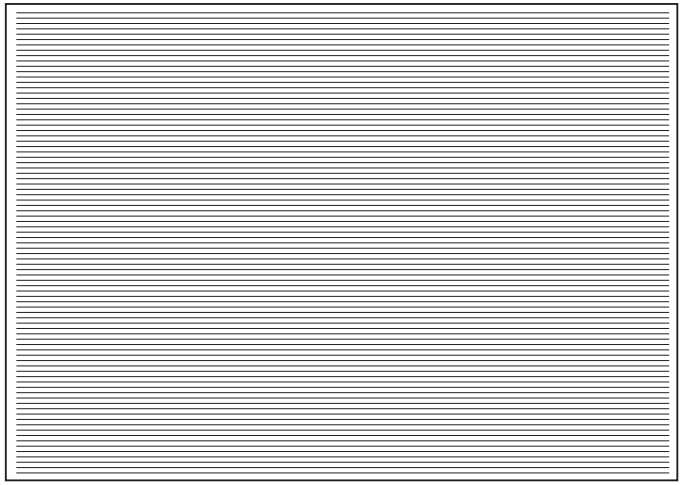
## Solid black (TYPE=7)

F-6-5

| Check item | Check method | Assumed cause |
|---|---|---|
| Transfer failure | Check the evenness of halftone density. Check whether uneven image or foggy image appears. | Transfer system failure or Pre-transfer Charging Assembly failure is considered. |
| Uneven pitch | Check whether lines appear on the image in the horizontal scanning direction. | Drum failure, developing system failure, laser exposure system failure or drive-related failure is considered. |
| Uneven density (rear/front) | Check the density difference between the front and rear sides. | Primary Charging Assembly failure, drum failure or developing system failure is considered. |

T-6-6

## Horizontal line (TYPE=8/9/10)



F-6-6

| Check item | Check method | Assumed cause |
|---|---|---|
| Black line | Check whether black lines appear on the image. | Laser light path failure, grid failure, developing system failure, cleaning (drum, ETB) failure or Pre-transfer Charging Assembly failure is considered. |
| White line | Check whether white lines appear on the image. | Primary Charging Wire failure or developing system failure is considered. |
| Uneven pitch | Check whether lines appear on the image in the horizontal scanning direction. | Drum failure, developing system failure, laser exposure system failure or drive-related failure is considered. |
| Uneven density (rear/front) | Check the density difference between the front and rear sides. | Primary Charging Assembly failure, drum failure or developing system failure is considered. |

T-6-7

# Image Faults

## Trailing Edge Shock Imaget

[Location]
.ETB

[Cause]
Lines occur on the image due to shock when distortion on the belt is released while rotation speed between the ETB and drum differs

[Condition]
When replacing the ETB

[Field Remedy]
1) Output a halftone image with the following conditions and check the output image
   COPIER>TEST>PG>TYPE 6
   Select the cassette which the following paper is set: COPIER>TEST>PG>PG-PICK A3 (LDR) or larger.

   With shock image: go to step 2
   Without shock image: End

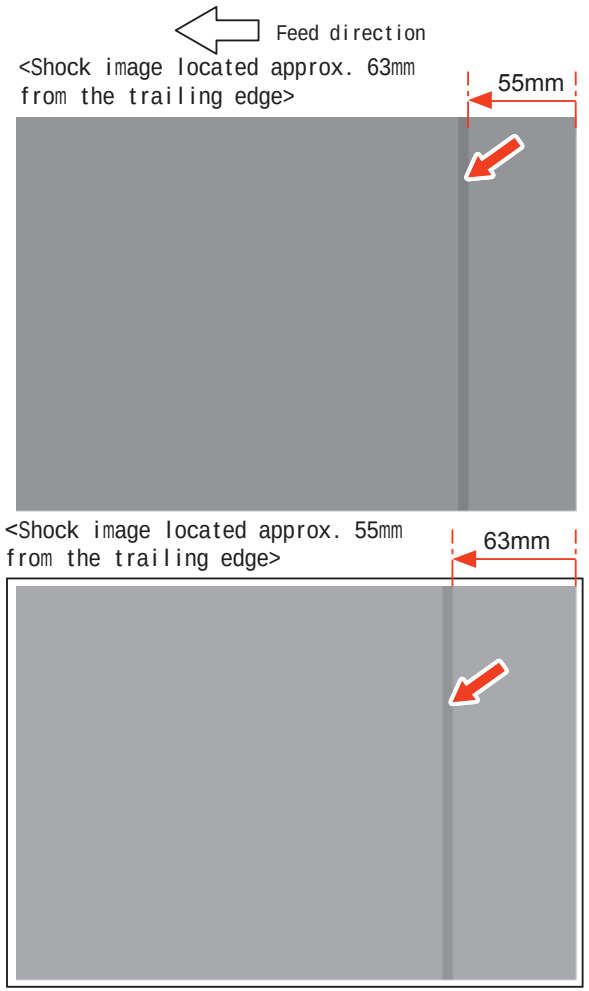
2) Measure a distance from the trailing edge of the shock image.

3) Adjust using the following service mode. COPIER > ADJUST > FEED-ADJ > TBLT-SPD: Adjust the Transfer Belt speed

   Shock image is located approx. 55mm from the trailing edge: Adjust the value by +10 gradually.
   Shock image is located approx. 63mm from the trailing edge: Adjust the value by -10 gradually

4) Output a halftone image with the condition described in step 1 again and check the image.
   With shock image: go to step 3.
   Without shock image: End

[Image Sample]




F-6-7

# Uneven density correction by 2D shading

To correct uneven image density caused by uneven potential on the surface of the Drum.

NOTE:
This machine performs two dimensional shading which replaces uneven potential of the Photosensitive Drum to the exposure amount to correct. (Default: two dimensional shading is disabled.) As the data of Drum's uneven potential, the data measured at the shipment of the Drum is used. Therefore, as the life of the Photosensitive Drum advances, it gets deteriorated, so the uneven potential becomes different from the one at the shipment of the Drum. Although the uneven potential of the Drum is changed due to the deterioration, the data can be corrected per horizontal/vertical scanning direction line by outputting a test pattern image with the following procedure.

CAUTION:
This adjustment is executed when the preferred image is not output even if the Primary Charging Wire height adjustment and secure watermark adjustment * are performed.
* Secure watermark adjustment: Function Settings>Common>Print Settings>Secure Watermark Settings>Adjust Background/Character Contrast

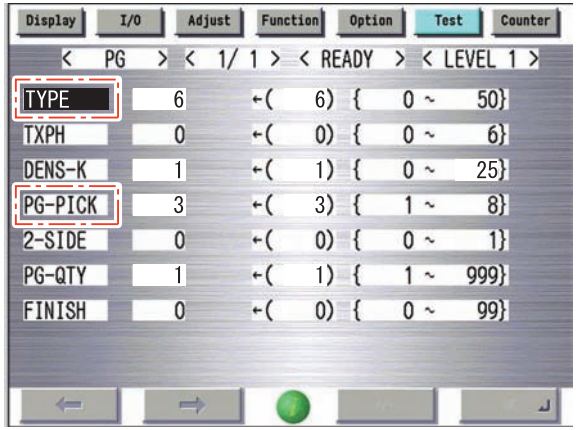
1) Check that the two dimensional shading is enabled.
COPIER>OPTION>IMG-LSR>2D-SHADE 1: Enabled

2) Read the two dimensional shading ROM data.
COPIER>FUNCTION>2D-SHADE>2D-READ

3) Turn OFF and then ON the main power switch.

CAUTION:
Be sure to turn OFF and then ON the main power switch after step 2. Uneven density may be reduced by the two dimensional shading correction at the startup.

4) Output a halftone image with the following conditions and check if uneven density occurs.
COPIER>TEST>PG>TYPE 6
Select the cassette which the following paper is set: COPIER>TEST>PG>PG-PICK A3 (LDR) or larger.
When uneven density is seen: Go to step 5.
When uneven density is not seen: Procedure is ended.

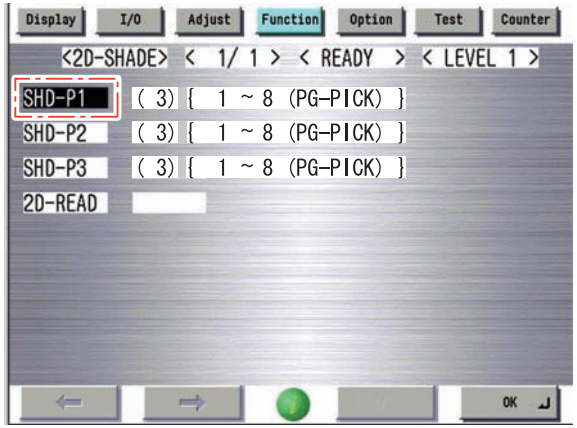



F-6-8

5) Output a test pattern for two dimensional shading.
COPIER>FUNCTION>2D-SHADE>SHD-P1

5-1) Set the cassette.Select the cassette which A3 (LDR) or larger paper is set.
Select "SHD-P1" and cassette using "numeric keypad".

5-2) Output 3 sheets of the test pattern.



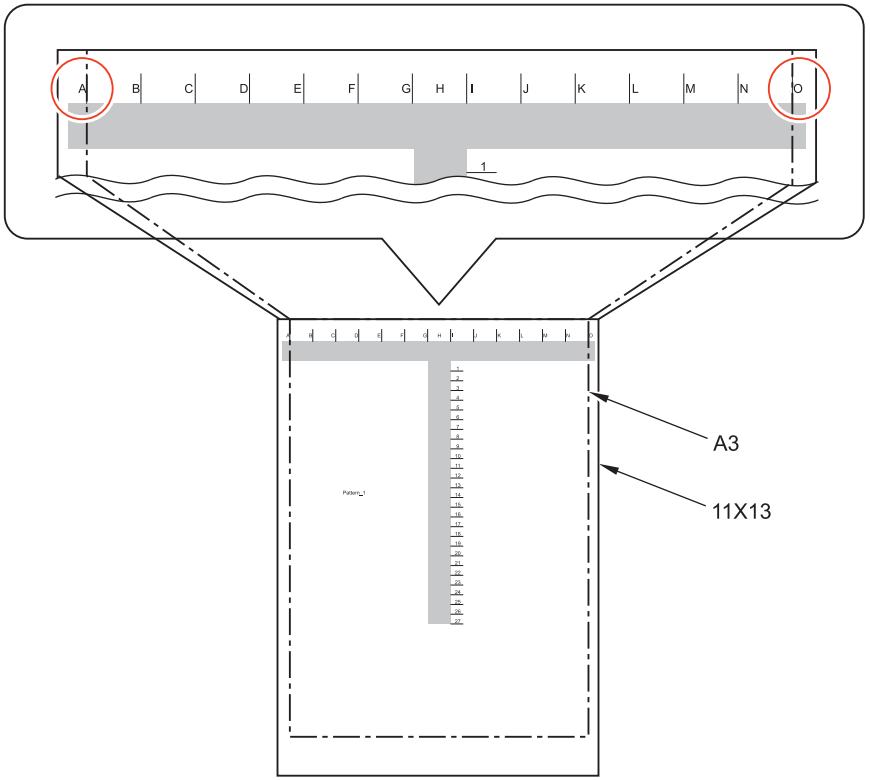

F-6-9

CAUTION:

It is difficult to judge whether uneven potential of the Photosensitive Drum causes uneven density of the output image, so output 3 sheets of the test print and adjust the area where all.

(If the same symptom is seen on the same spot of all 3 sheets, it is possibly caused from the Drum.)

<Test pattern>




F-6-10

NOTE:
For the test print, the following 3 types can be output, but basically set SHD-P1 to output. The following shows the use case of each test print.
COPIER>FUNCTION>2D-SHADE>SHD-P1
: When the image which uneven density occurs is the halftone image with light density
COPIER>FUNCTION>2D-SHADE>SHD-P2
: When the image which uneven density occurs is the halftone image with dark density
COPIER>FUNCTION>2D-SHADE>SHD-P3
: In case of the secure watermark image with uneven density

6) Check (T-shaped) halftone area of the output test print visually and adjust the area of uneven density.

6-1) Take a note to write down the values of the following service mode.
When the adjustment cannot be performed appropriately, these values are required to return to the initial values.

COPIER>FUNCTION>2D-SHADE>M-LINE1 (Level 2)
COPIER>FUNCTION>2D-SHADE>M-LINE2 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE1 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE2 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE3 (Level 2)
COPIER>FUNCTION>2D-SHADE>S-LINE4 (Level 2)

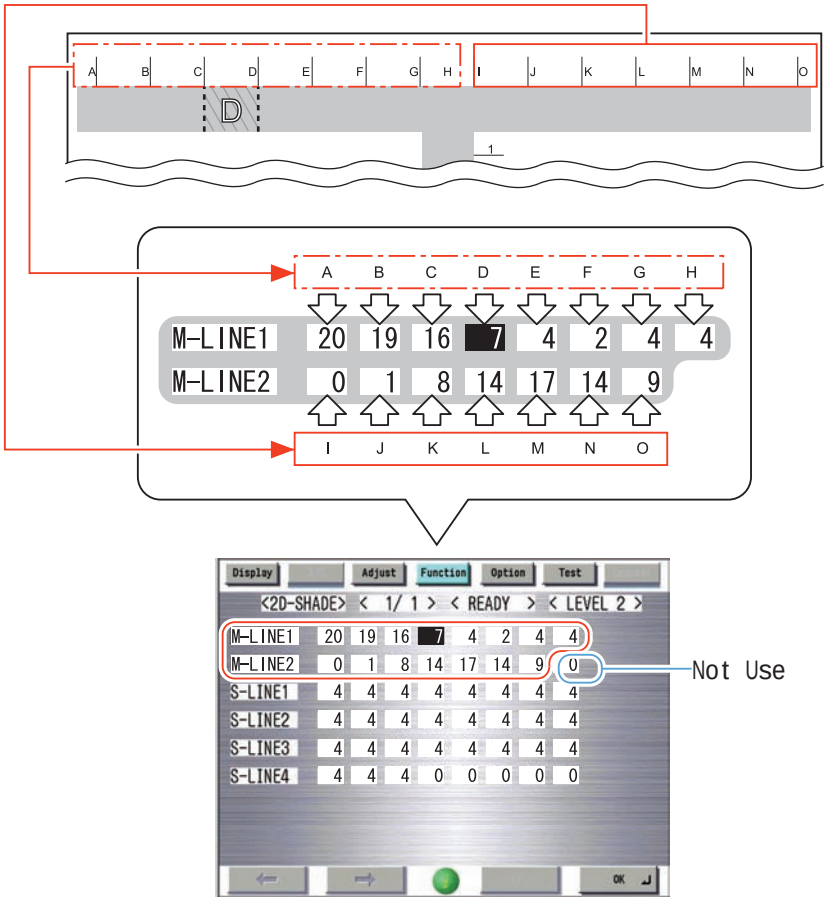
6-2) Adjust the target horizontal scanning direction (A to O) which uneven density is seen.
After selecting "M-LINE1/M-LINE2", select the target horizontal scanning window (A to O), and enter the numerical value using "numerical keypad".

COPIER>FUNCTION>2D-SHADE>M-LINE1 (Level 2) Horizontal scanning direction A to H
COPIER>FUNCTION>2D-SHADE>M-LINE2 (Level 2) Horizontal scanning direction I to O

CAUTION:

- Be sure to switch the screen after entering the value. Unless the screen is switched, the numerical value is not reflected. (Actually, the value is not reflected on the screen, but it is retained internally.)
- When the horizontal scanning direction (H line) is adjusted, the adjustment value of the vertical scanning direction (1 to 27) is also changed.
- Be sure to make adjustment in order of horizontal and vertical scanning directions. If the adjustment is executed in the inverse order, it may not be executed correctly.
- Entering 96 or larger value can generate an error in potential control (E061). In the case of an error, adjust the setting value between 0 and 95.

As the value is larger, the density becomes lighter. As the value is smaller, the density becomes darker.
Enter the adjustment value in a unit of +/- 30 gradually, output the test pattern and make adjustment while checking the test pattern. If the value is changed dramatically, the image error (while line) may occur.




F-6-11

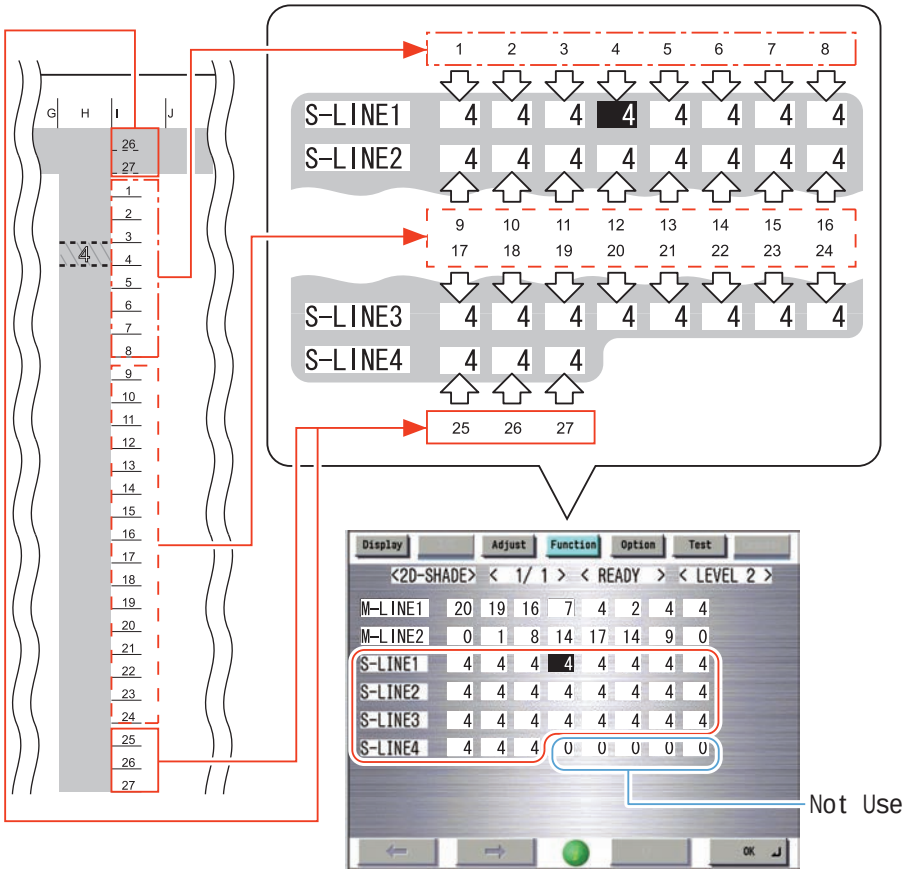
6-3) After the adjustment, output a test print and check the image.
When uneven density is seen: Go to 6-4).
When uneven density is not seen: Procedure is ended.

6-4) Adjust the target vertical scanning direction (1 to 27) which uneven density is seen.
After selecting "S-LINE1 to 4", select the target vertical scanning window (1 to 27), and enter the numerical value using "numerical keypad".

COPIER>FUNCTION>2D-SHADE>S-LINE1 (Level 2) Vertical scanning direction 1 to 8
COPIER>FUNCTION>2D-SHADE>S-LINE2 (Level 2) Vertical scanning direction 9 to 16
COPIER>FUNCTION>2D-SHADE>S-LINE3 (Level 2) Vertical scanning direction 17 to 24
COPIER>FUNCTION>2D-SHADE>S-LINE4 (Level 2) Vertical scanning direction 25 to 32

CAUTION:
- Be sure to switch the screen after entering the value. Unless the screen is switched, the numerical value is not reflected. (Actually, the value is not reflected on the screen, but it is retained internally.)
- When the vertical scanning direction (25 and 26 lines) is adjusted, the adjustment value of the horizontal scanning direction (A to P) is also changed.

As the value is larger, the density becomes lighter. As the value is smaller, the density becomes darker.
Enter the adjustment value in a unit of +/- 30 gradually, output the test pattern and make adjustment while checking the test pattern. If the value is changed dramatically, the image error (while line) may occur.



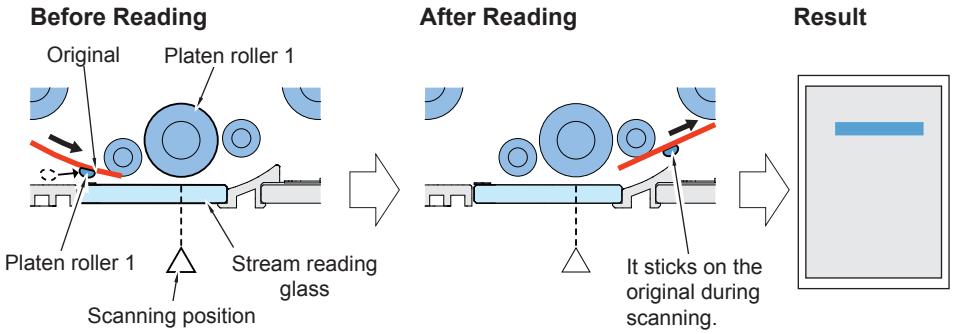

F-6-12

6-5) After the adjustment, output a test print and check the image to complete the procedure.

CAUTION:
If the image cannot be adjusted correctly even with this adjustment procedure, reenter the values written in step 6-1.

# ADF black line

Image processing has been improved with this equipment, which applies optimal image processing to the text part and the photo part respectively. Improvement in image processing, however, highlights imperceptible dusts at the original scanning position, which may appear as a line on the image.




F-6-13

[Location]
ADF

[Cause]
At stream reading with the ADF, imperceptible dusts (paper dust, toner, dust, etc.) adhere and remain at the original scanning position, which causes a black line on the original image. (Occurrence frequency is roughly 3/10,000 of scanning documents)
The dusts causing a black line are delivered outside the ADF together with the scanning original; therefore, there will be no black line with the next original.

[Remedy]
Changing the setting value in the following service mode improves the problem of a black line.

COPIER > ADJUST > AE > AE-TBL: Text density adjustment when adjusting image density
Setting value: Change the default (5) to 3

COPIER > OPTION > IMG-MCON > SHARP: Setting of the sharpness level on the image
Setting value: Change the default (3) to 1

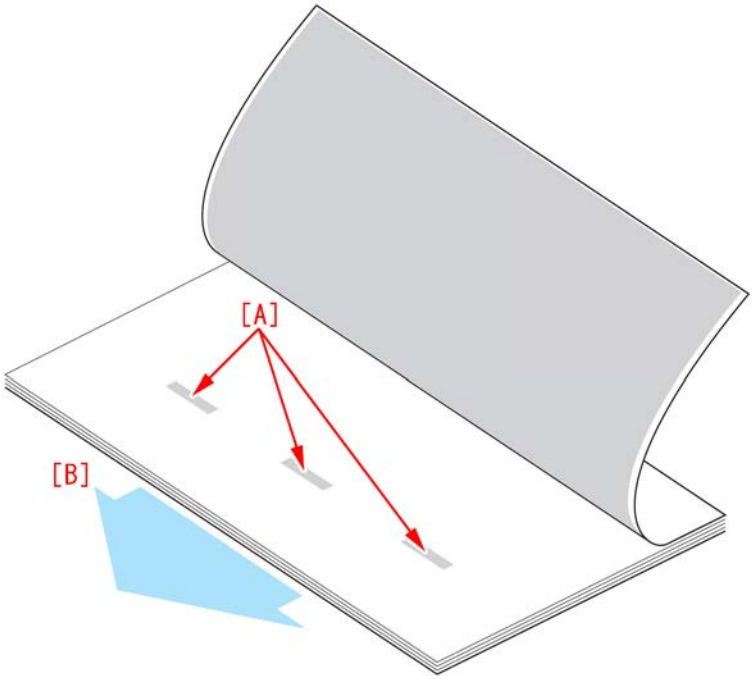
COPIER > OPTION > USER > PH-D-SL2: Setting of the halftone processing in text/photo mode
Setting value: Change the default (0) to 2

CAUTION:
When performing a field remedy, remind that the scan result changes as follows:

- Scanning of light halftone base is skipped (to be scanned as white color)
- Blur text outline due to reduced edge emphasis level with the text
- Photo part appears coarsely

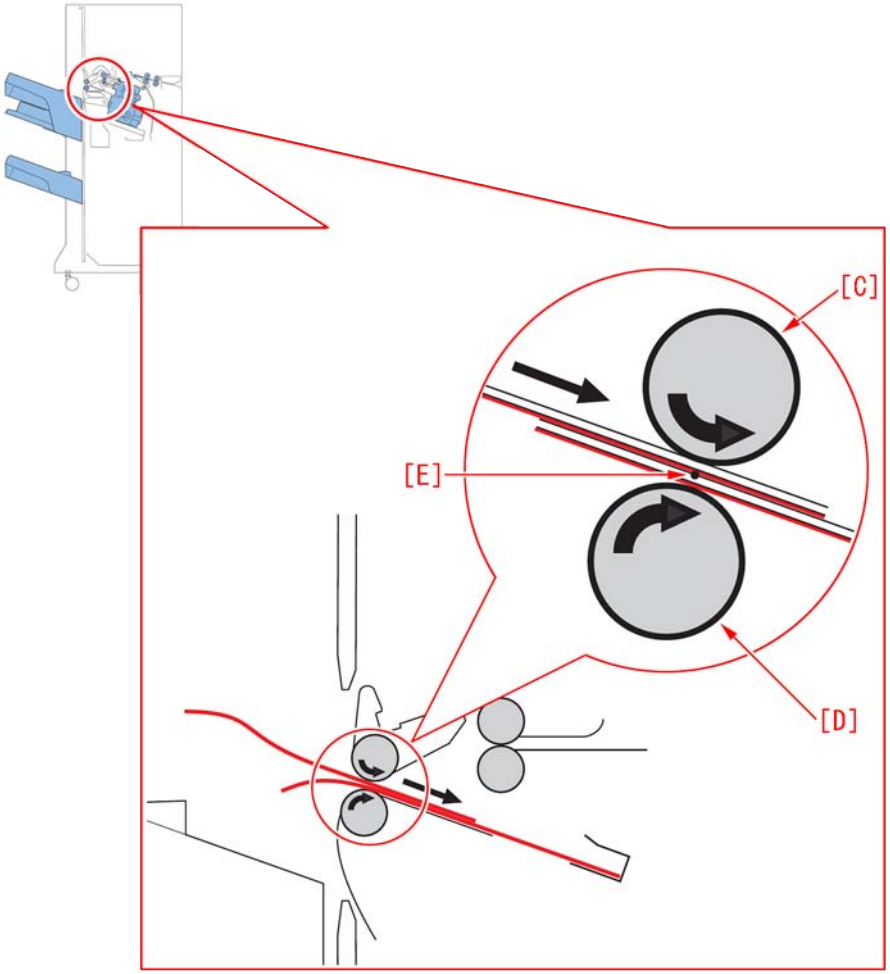
## Bleed-thru/Soil appeared on the back of the paper (Staple Finisher D1/Booklet Finisher D1)

Soil [A] can appear on the back of the sheet in the shift mode/staple mode with Staple Finisher D1/Booklet Finisher D1.




P-1

F-6-14




P-2

F-6-15

[Cause]

While the paper is stacked to the Process Tray Assembly, two sheets are rubbed at where the sheets are nipped between the Stack Delivery Upper Roller [C] and the Stack Delivery Lower Roller [D], which results in soil on the paper.

This symptom can occur with all paper types because soil on the back of the paper (bleed-thru) is caused by the rubbing of sheets, however, bleed-thru is likely to occur in the case of using “coated paper”, which has high friction coefficient.

This symptom is expected to occur when using coated paper together with plain paper; soil appears on the coated paper because the image on the plain paper is transferred to the coated paper.

[Remedy]

Bleed-thru is improved by changing the setting value in the following service mode:

SORTER > OPTION > SLD-BCK: ON/OFF the mode to prevent bleed-thru

Setting value:

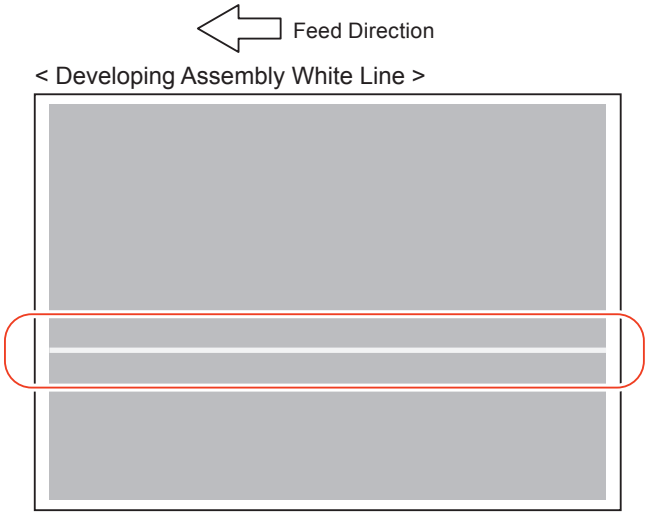
0: OFF (default)

1: ON (coated paper + recycled paper)

2: ON (coated paper + plain paper)

# White line (foreign matter between Developing Sleeves)

Sample image



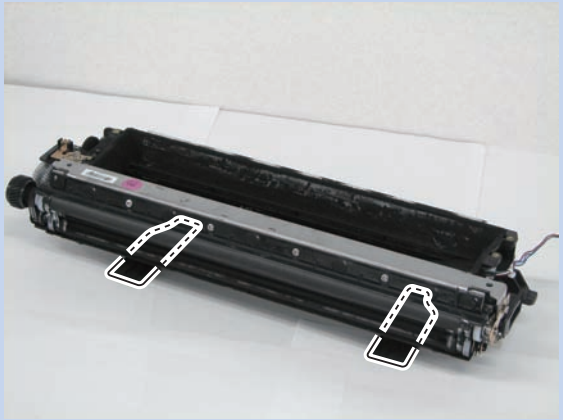

F-6-16

[Location]
Developing Assembly

[Cause]
A line appears in toner coating when imperceptible foreign matter is caught between the 2 sleeves of the Developing Assembly. This can cause image failure of a white line in vertical scanning direction.

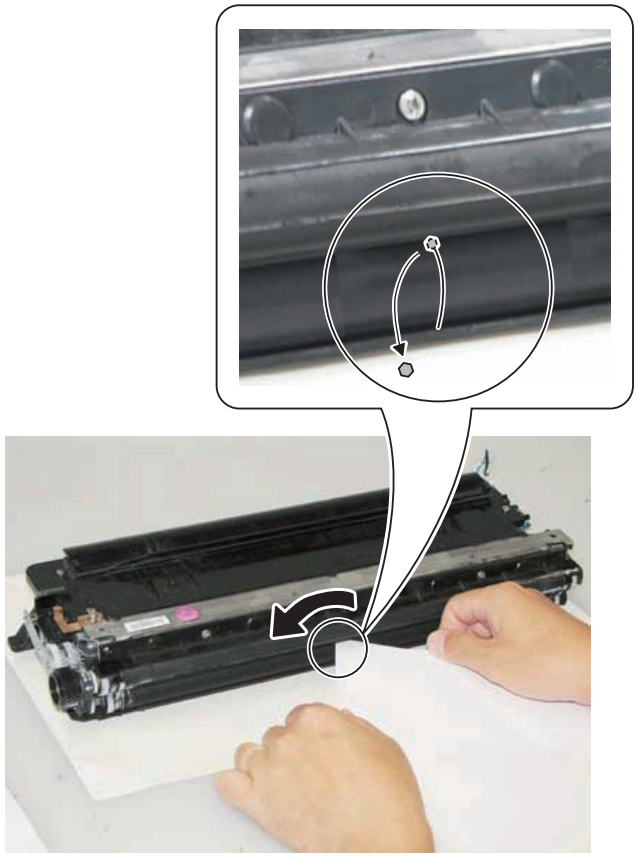
[Field Remedy]
1) Remove the Developing Assembly.

NOTE:
Be sure to place paper on a clean place and take out the foot of the Developing Assembly before placing the Developing Assembly.



F-6-17

2) Remove foreign matter caught between the sleeves.
Insert a corner of the paper between the sleeves and scrape out and remove foreign matter from the side.

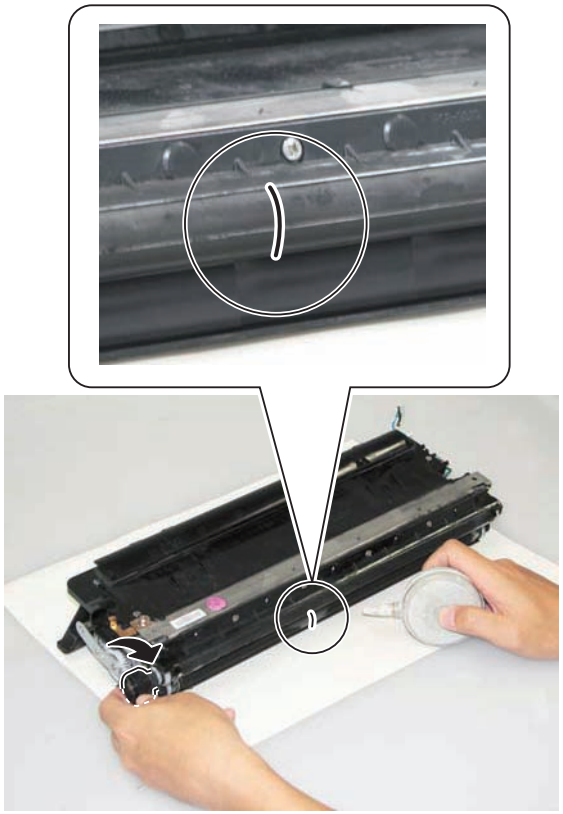


F-6-18

NOTE:
The location of foreign matter can be easily identified by using a blower to blow excess toner between the sleeves.
Be sure to use plain paper with around 75 g/m$^2$. (Too thick paper may not be fit into the gap. Too thin paper can be folded or ripped.)
If it is difficult to insert paper, turn the gear clockwise and counterclockwise for 2 teeth so that it gets easier to insert paper between the sleeves. Do not turn the gear counterclockwise for half round or more (otherwise, it can cause image failure due to collected toner between the sleeve and the blade or between the sleeves)

3) Clean excess toner on the upper and lower sleeves.
Toner can be excessively attached because the toner is pushed to the sleeve when scraping out the foreign matter. Perform cleaning in the following steps because excess toner can cause uneven density.

3-1) While rotating the sleeve, blow the toner with the blower and then check for excess toner.

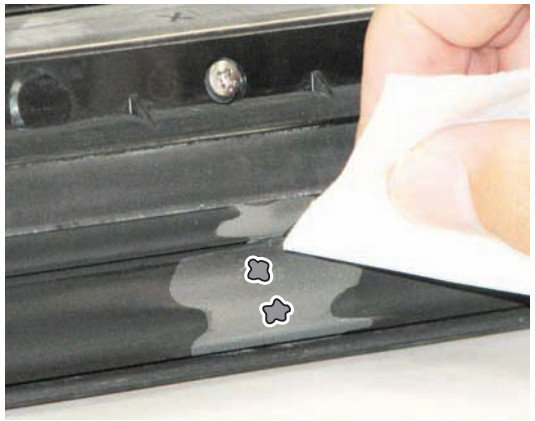


F-6-19

3-2) Pile up 3 sheets of lint-free paper and clean excess toner with the lint-free paper.

NOTE:
Do not apply force and lightly wipe out the excess toner. Rubbing the toner part can cause the rubbed part to be dark image.

3-3) Check if the toner blown by the blower is attached to the Developing Roller; if the toner is attached, wipe it with lint-free paper.
(Otherwise, the toner is fused to the Roller that causes banding)



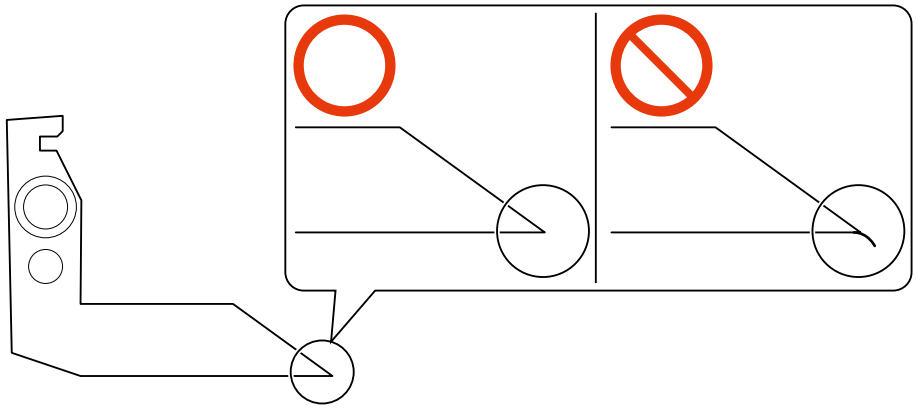
F-6-20

4) Execute service mode > COPIER > FUNCTION > MISC-P > DEV-ROT.
If the white spots persist, execute the service mode again.

CAUTION:
Heavy use can result in deterioration of developer or toner scattering.

## Separation Failure Jam due to Deformation of Separation Claw

[Location]
Drum Separation Claw
[Cause]
When the paper enters to the drum at separation failure, the Separation Claw may be deformed. When the Separation Claw is deformed, the paper is easily caught by the leading edge of the Separation Claw when the paper (especially curled paper) is fed, and a jam (Jam Code: 0205) is likely to occur.



F-6-21

[Condition]
Job after a jam which occurs when the paper enters to the drum
When using curled paper (when using backside of printed paper, etc.)

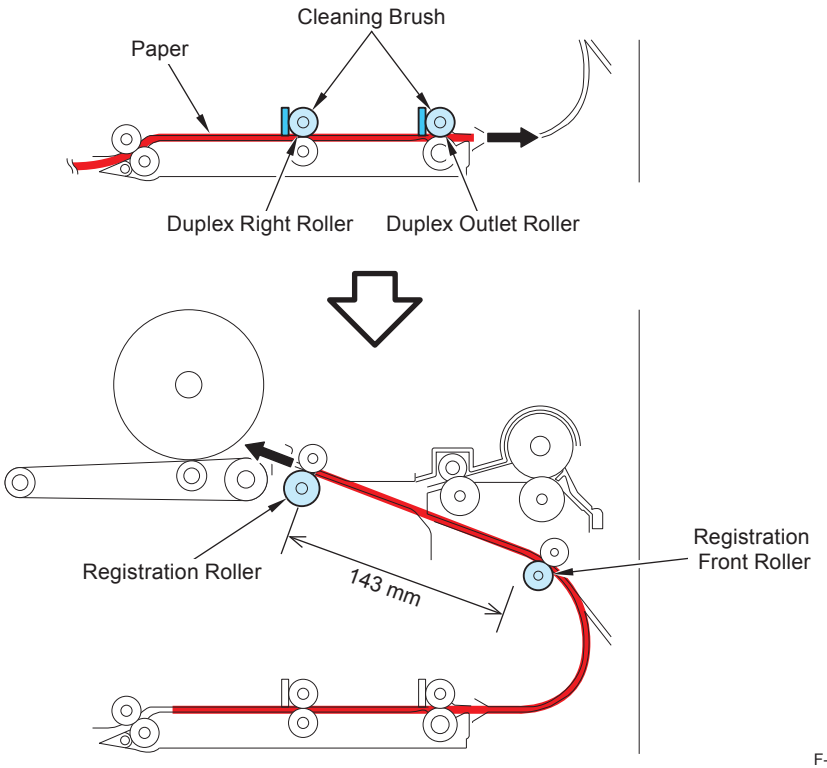
[Field Remedy]
Replace the Separation Claw.

NOTE:
Replace the Separation Claw when a separation failure jam occurs even once..

# Image error due to soil attached to the Cleaning Brushes for the Duplex Right Roller and the Duplex Outlet Roller

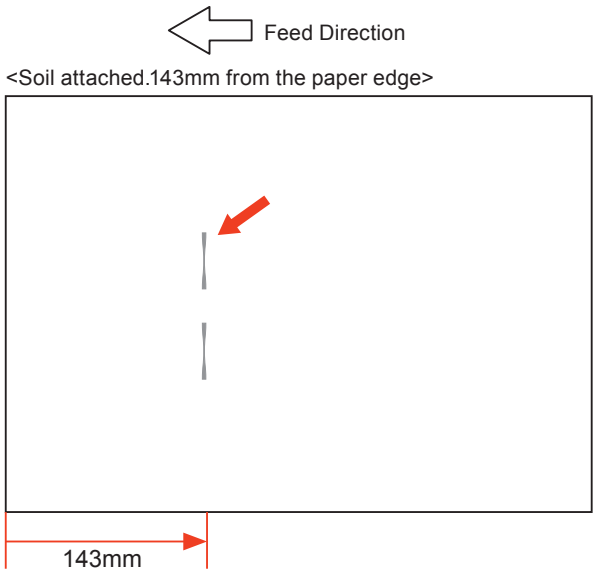
[Location]
Fixing Feed Unit
[Cause]
Soil attached to the 4 Cleaning Brushes contacting the Duplex Right Roller and the Duplex Outlet Roller

[Condition]
When soil is attached to the 4 Cleaning Brushes contacting the Duplex Right Roller and the Duplex Outlet Roller, paper is fed with minor soil (paper dust and toner) attached to it, and the soil is gradually attached to the Registration Front Roller. When the paper stops at the time of registration, the rotating Registration Front Roller contacts the paper, which causes two trails of soil of the roller width at 143mm from the paper edge.




F-6-22

[Image Sample]




F-6-23

[Field Remedy]
Follow the following procedure to replace the Cleaning Brushes contacting the Duplex Right Roller and the Duplex Outlet Roller and clean the relevant parts.

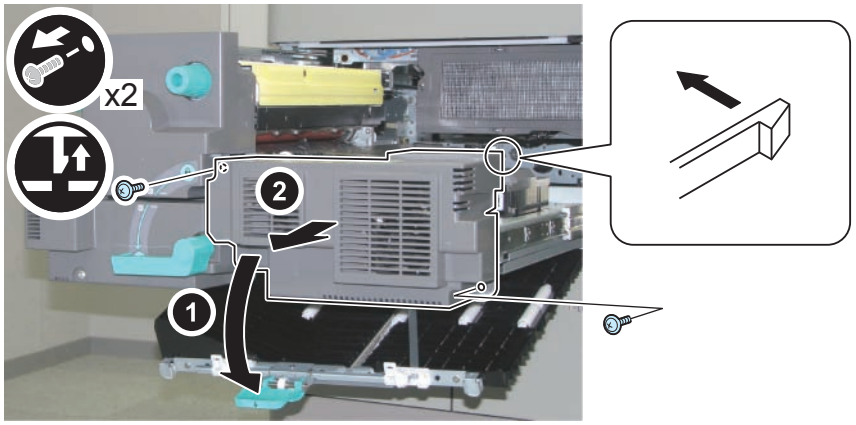
<Preparation>
Remove the Registration Unit. (See Chapter 4, "Removing the Registration Unit.")

<Procedure>

1) Open the Duplex Path.

2) Remove the Fixed Feed Cover 1.

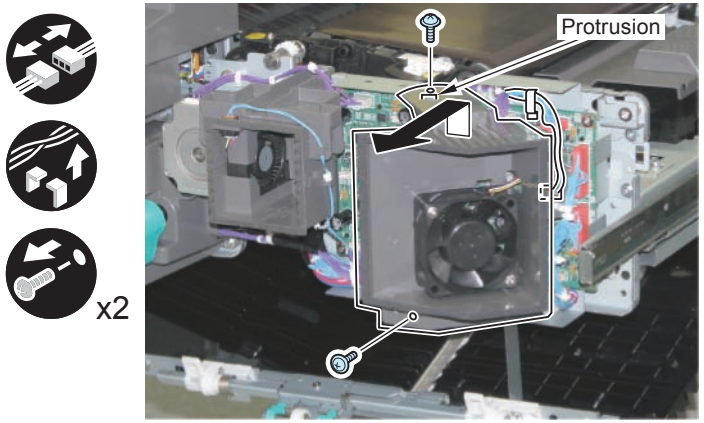
- 2 Screws
- 1 Claw




F-6-24

3) Remove the right side Duct.

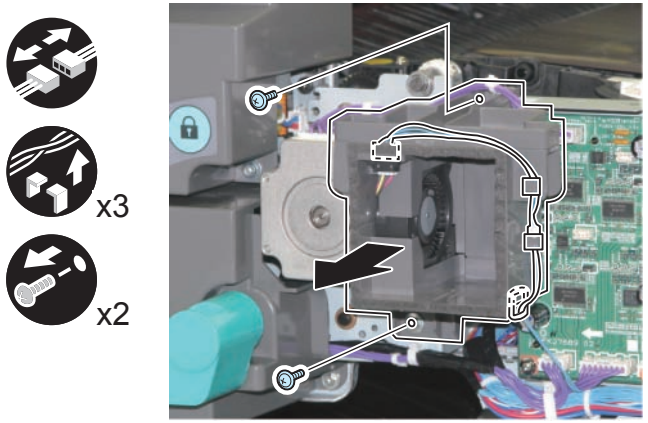
- 1 Connector
- 1 Wire Saddle
- 2 Screws
- 1 Protrusion




F-6-25

4) Remove the left side Duct.

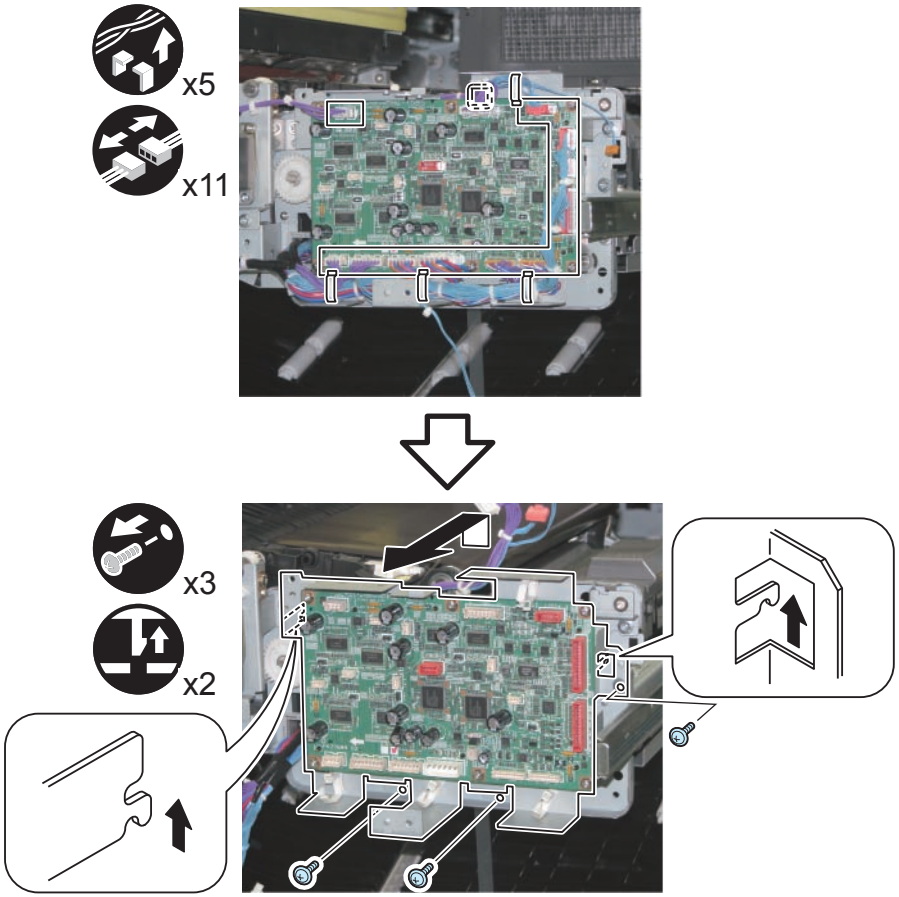
- 1 Connector
- 2 Harness Guide
- 1 Wire Saddle
- 2 Screws




F-6-26

5) Remove the Duplex Driver PCB and the Mounting Base.

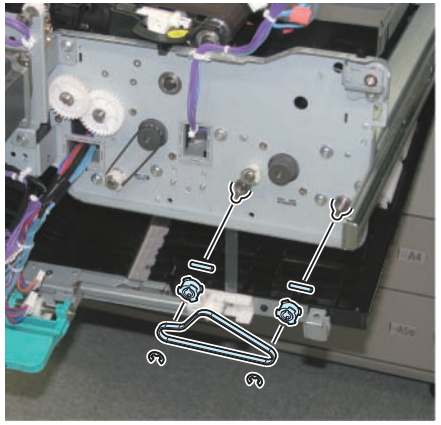
- 4 Wire Saddles
- 1 Edge Saddle
- 11 Connectors
- 3 Screws
- 2 Claws




F-6-27

6) Remove the following parts.

- 2 E-rings
- 1 Timing Belt
- 2 Pulleys
- 2 Parallel Pin

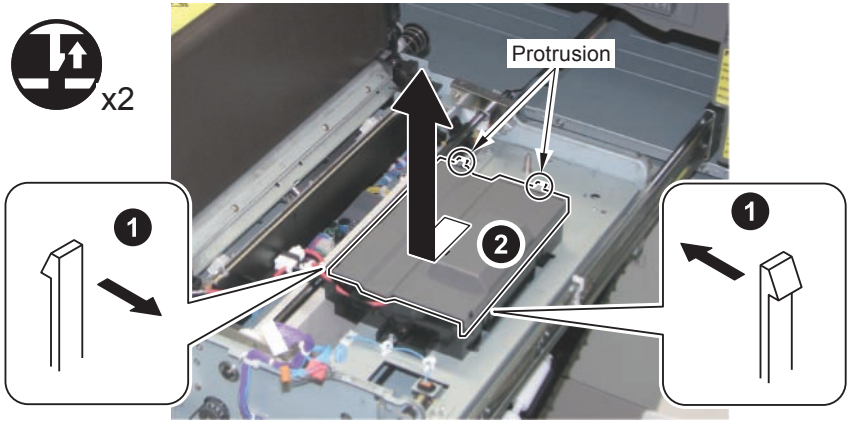


F-6-28

7) Lift the ETB Unit in the direction of the arrow.

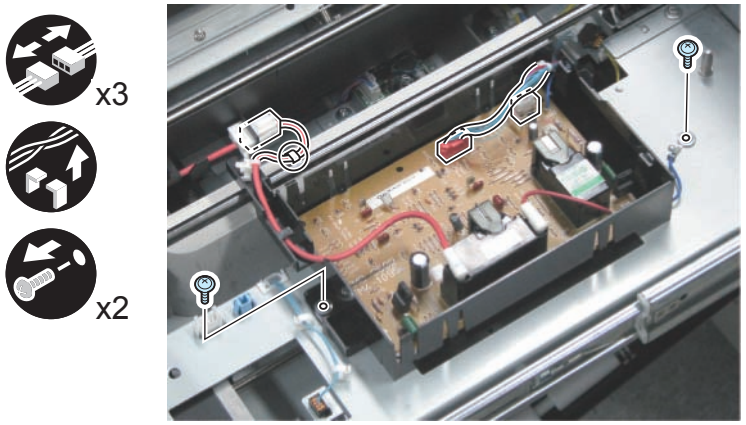
8) Free the 2 claws, and remove the Transfer High Voltage PCB Unit Upper Cover in the direction of the arrow.

- 2 Protrusions



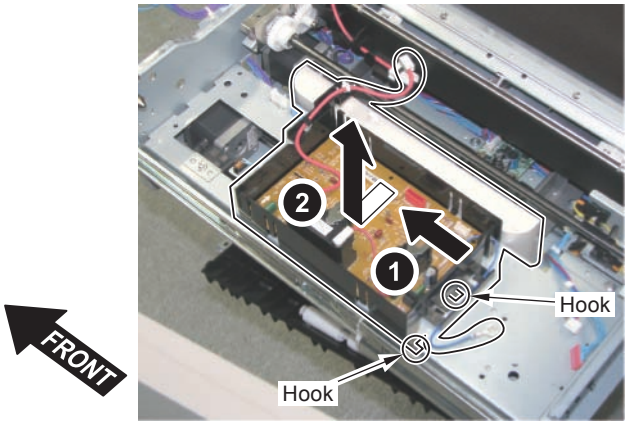

F-6-29

9) Remove the following parts.
- 3 Connectors
- 1 Wire Saddle
- 2 Screws




F-6-30

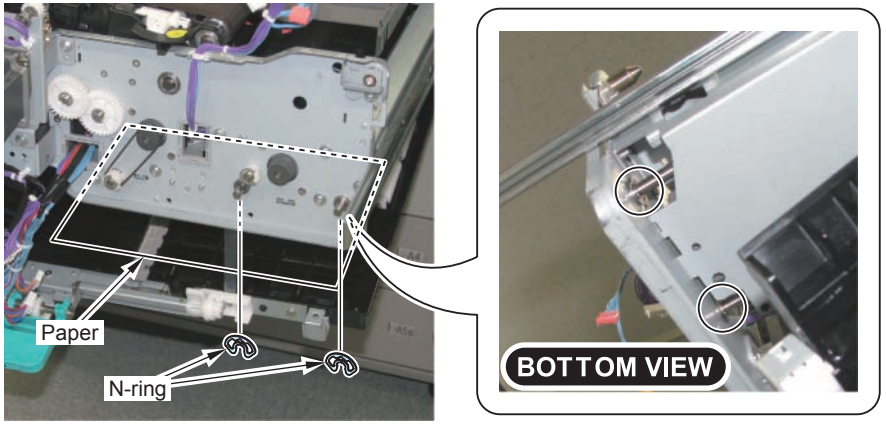
10) Remove the Transfer High Voltage PCB Unit in the direction of the arrow.
- 2 Hooks




F-6-31

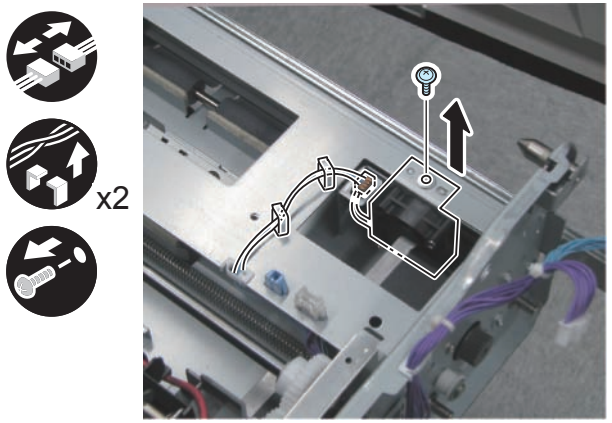
11) Place a sheet of paper on the Duplex Path, and remove a N-ring each from the Duplex Right Roller and the Duplex Outlet Roller.

CAUTION:
Be sure to place a sheet of paper on the Duplex Path because paper dust drops during the following work.




F-6-32

12) Remove the Fan Unit.
- 2 Wire Saddles
- 1 Connector
- 1 Screws



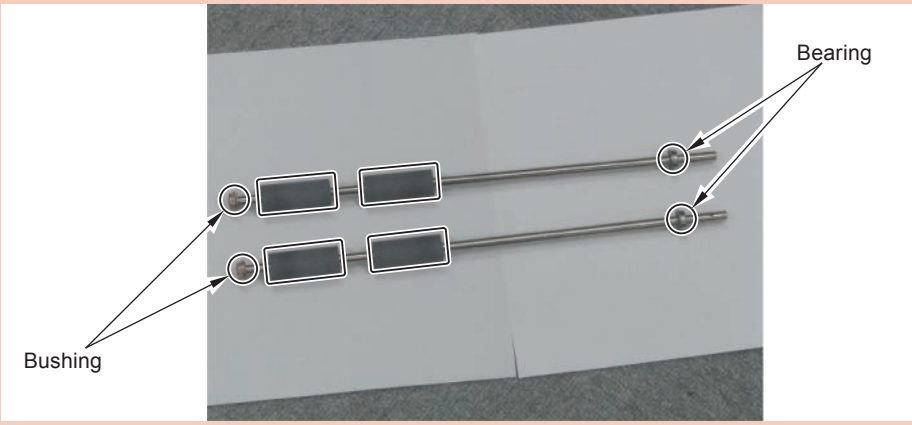

F-6-33

13) Pull out the Duplex Right Roller and remove the shaft at the rear.

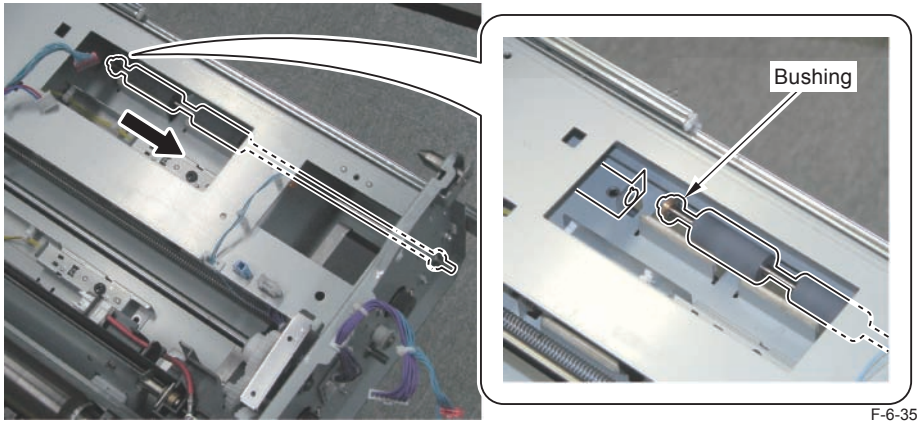
NOTE:
In this procedure, the procedure for removing the Duplex Right Roller is shown in steps 13 and 14. When removing the Duplex Outlet Roller, check the installation position in step 15 and remove the Duplex Outlet Roller by a similar procedure.

CAUTION: Points to Caution at Work

- Be careful not to damage the surfaces of the Duplex Right Roller and the Duplex Outlet Roller.
- The bearing at the front and the bushing at the rear of the Duplex Right/Duplex Outlet Roller are not fixed, so be careful not to drop them.

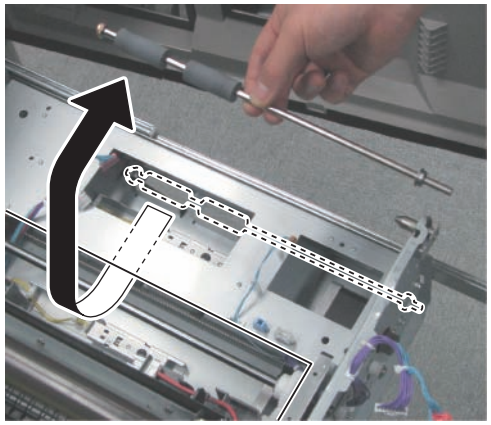



F-6-34




F-6-35

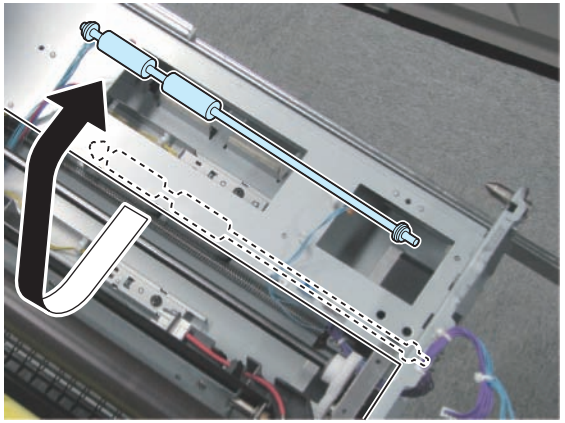
14) Move the Duplex Right Roller toward the rear and remove the shaft from the Fixing Feed Unit Side Plate. Then, move the Duplex Right Roller in the direction of the arrow and take it out from the opening on the top of the Fixing Feed Unit.



F-6-36

15) Remove the Duplex Outlet Roller in a similar procedure referring to the procedure for removing the Duplex Right Roller in steps 13 and 14.

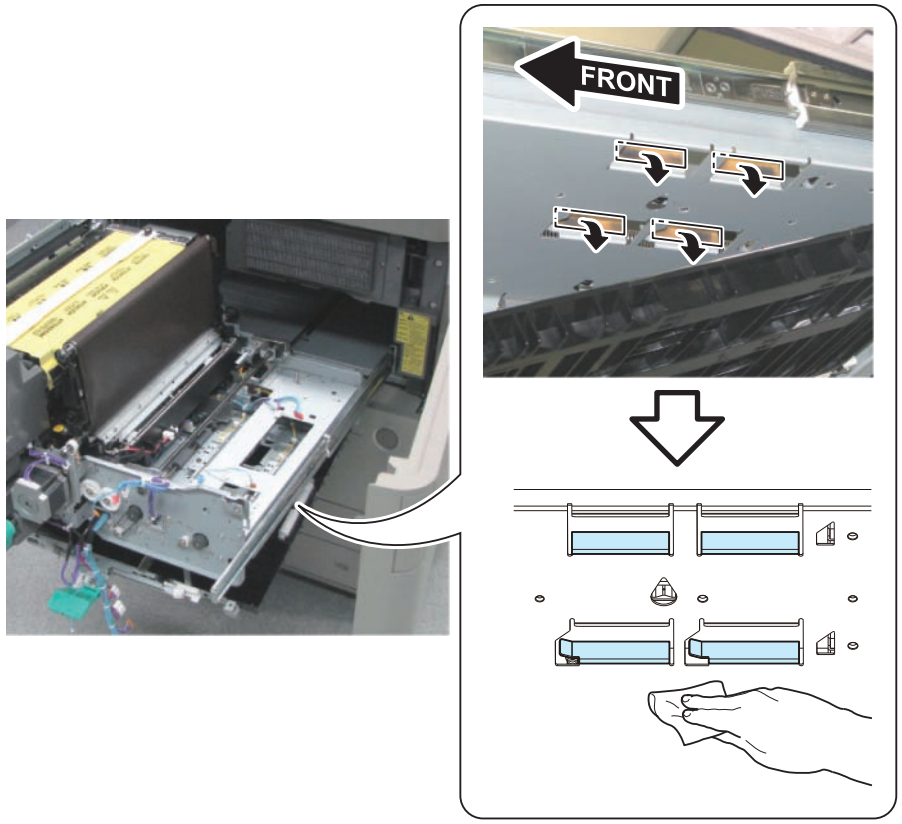
NOTE:
The installation position of the Duplex Outlet Roller is shown in the following figure.



F-6-37

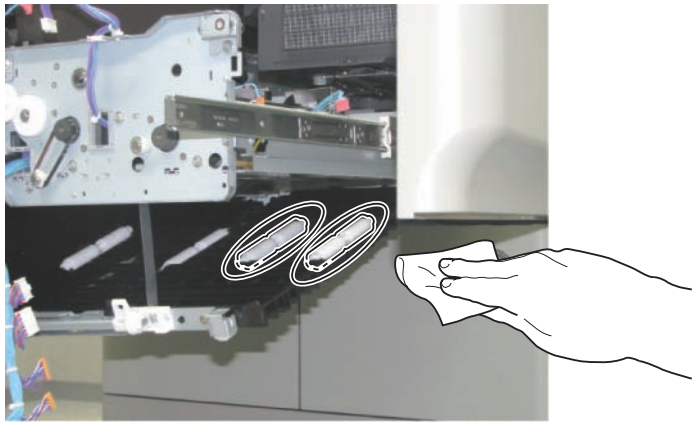
16) Remove the 4 Cleaning Brushes contacting the Duplex Right Roller and the Duplex Outlet Roller.

17) Clean the four areas where the Cleaning Brushes are attached with lint-free paper moistened with alcohol.



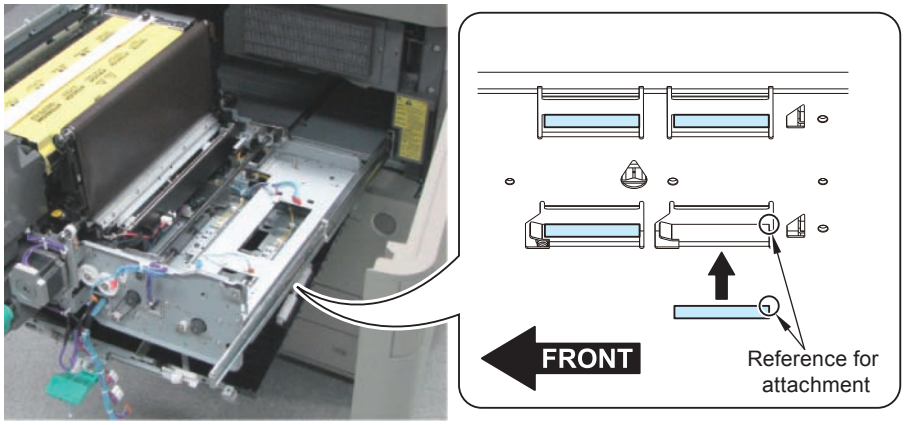

F-6-38

18) Remove the paper on the Duplex Path, and clean the entire perimeter of each of the 4 rollers with lint-free paper moistened with alcohol while rotating the roller by hand.



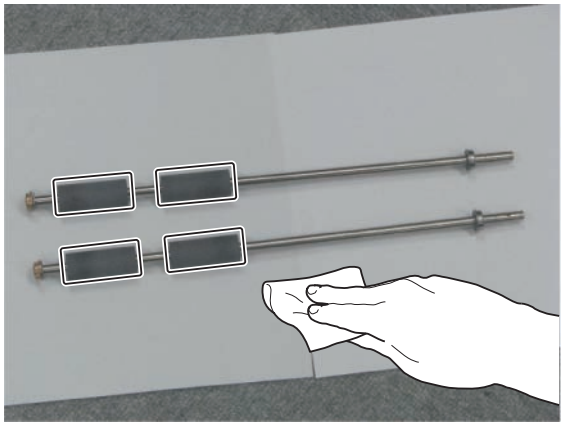
F-6-39

19) Attach new 4 Cleaning Brushes with reference to the upper right of the plate where they are going to be attached.




F-6-40

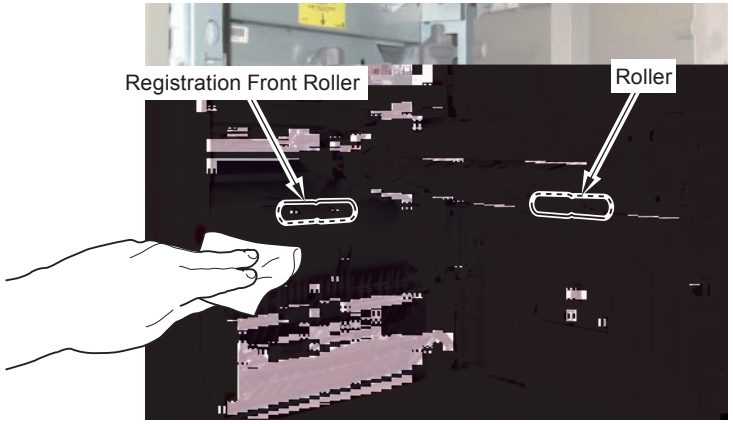
20) Clean the four areas on the removed Duplex Right Roller and the Duplex Outlet Roller with lint-free paper moistened with alcohol.



F-6-41

21) Install the removed parts in reverse order.
22) Open the Right Door.
23) Open the Right Lower Cover.
24) Clean the entire perimeter of each of the 2 rollers and Registration Front Roller with lint-free paper moistened with alcohol while rotating the roller by hand.

CAUTION:
When rotating the roller by hand, be sure not to touch the surface of the roller but to hold a side face.



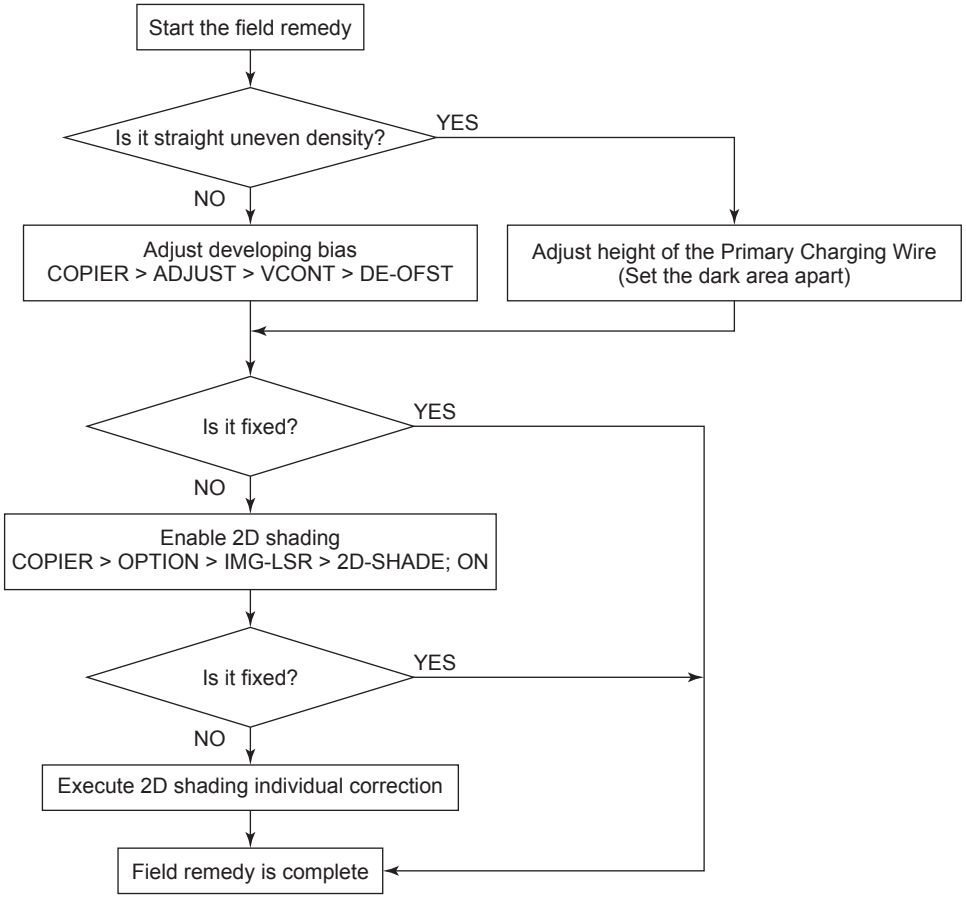

F-6-42

## Uneven density

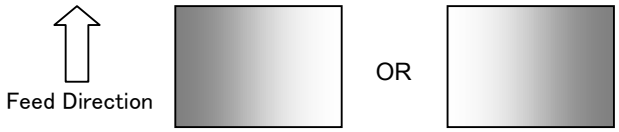
[Cause]

Uneven density occurs on the image because of uneven developing performance or change in drum characteristics due to wear.

[Field Remedy]

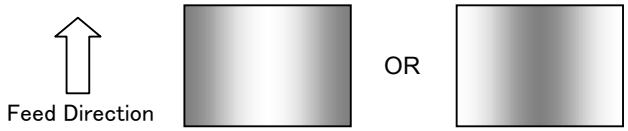



F-6-43




F-6-44

In the case of dark/light image at either the left or right side on the image in horizontal direction, adjust height of the Primary Charging Wire and check the output result. When making adjustment, execute the work while keeping the wire at dark area apart.




F-6-45

If it is not a straight uneven density, change the value of the following service mode in decrement of -10 and check the output result.

COPIER > ADJUST > VCONT > DE-OFST

(Setting value: default 0, -10, -20, …-50)

CAUTION :

Executing the above setting can generate smeared image or foggy image.

After switching the mode to enable 2D shading in the following service mode, turn OFF/ON the main power and check the output result.

(For detailed procedure, see “Troubleshooting > Uneven density correction by 2D shading > Step 1) to 3) (Refer to page 6-7)

COPIER > OPTION > IMG-LSR > 2D-SHADE  Setting value: 1 (ON)

Output the test pattern for 2D shading and adjust the uneven density area individually.

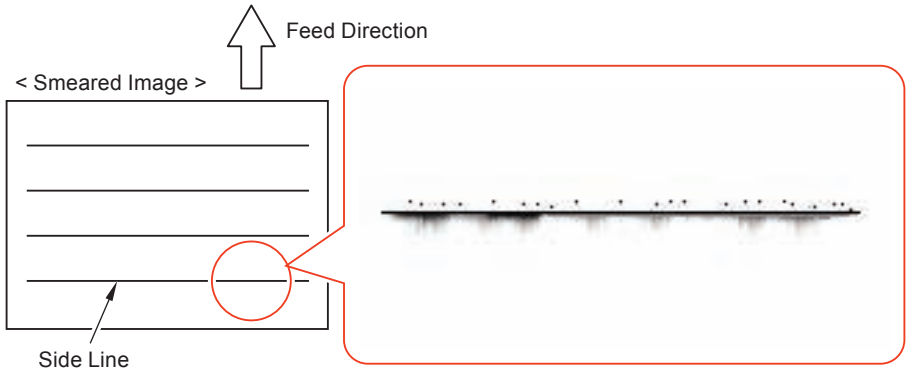
(For detailed procedure, see “Troubleshooting > Uneven density correction by 2D shading > Step 4) to 5) (Refer to page 6-7)

## Smeared image

[Cause]

Excess toner is transferred on the paper that causes toner collapse at the time of fixing, which can generate smeared image on the image. The following are assumed causes of smeared image:

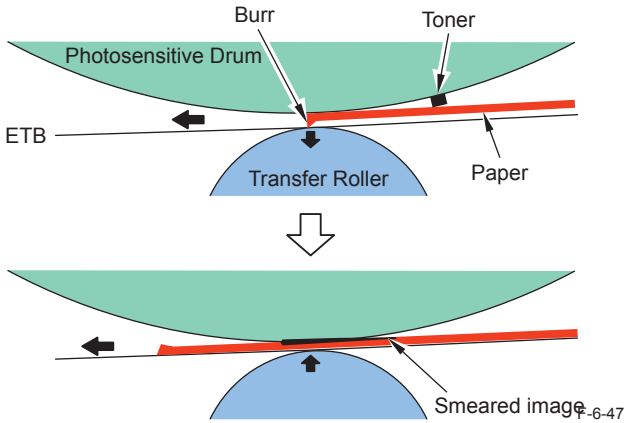
- When the paper type is changed
- Toner deterioration
- Rapid change in environment (High temperature <- -> Low temperature)




F-6-46

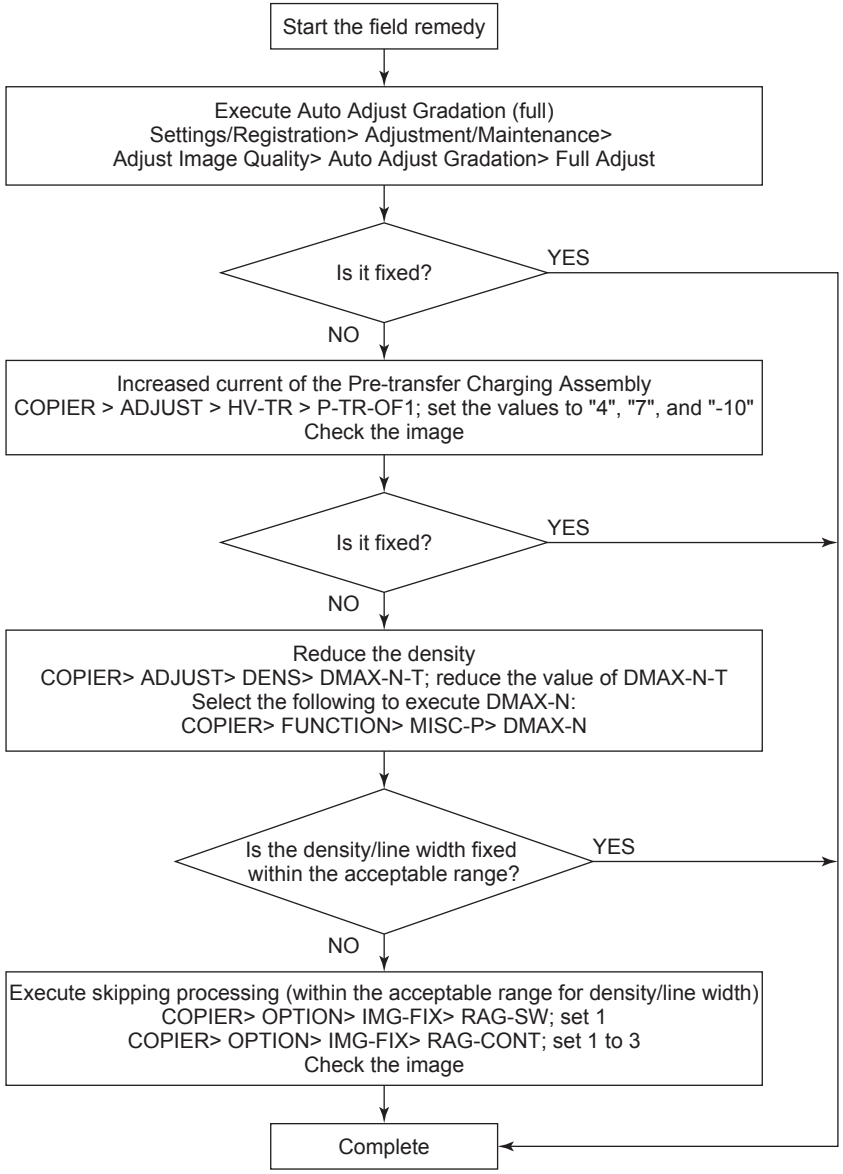
Smeared image may also occur exclusively in the area 5 to 10 mm from the leading edge of the paper when there is burr on the leading edge of the paper (jagged edge formed when the paper was cut by a cutter).

It is caused by toner being pushed backward by the power of the ETB, which is pushed down by the burr when it passes through the transfer nips, to go back to the original position.




F-6-47

[Field Remedy]




F-6-48

Select the following to execute Full Adjust: “Settings/Registration > Adjustment Maintenance > Adjust Image > Auto Adjust Gradation < Full Adjust”; and check the output result.

1) In COPIER > ADJUST > HV-TR > P-TR-OF1, set the values to "4", "7", and "-10" in that order from the left, and check the output result.

CAUTION :

Executing the above setting may cause the Pre-transfer Charging Wire to be easily soiled. Be sure to check for soiling of the Charging Wire at the time of inspection since heavy soiling may cause vertical lines to occur on the rear side of the image.

1) COPIER > ADJUST > DENS > DMAX-N-T; reduce the value of DMAX-N-T from 895 (default) by -30.
2) Select the following to execute DMAX-N: COPIER > FUNCTION > MISC-P > DMAX-N; and then check the output result.

If the symptom is not improved, further reduce the value in step 1) by -30 and then execute step 2).

CAUTION :

Changing the above setting can cause reduced density or thinner line

If the smeared image is not improved within the acceptable range for density and line width, execute skipping process in the following procedure:

1) COPIER > OPTION > IMG-FIX > RAG-SW; change the value to 1
2) COPIER > OPTION > IMG-FIX > RAG-CONT; change to 1 and check the output result.
3) If the symptom is not improved, change the value in step 2) to 2, 3…and check the output result.

CAUTION :

Changing the above setting can cause minor skipping in the text part.

## Adjusting the Edge Emphasis Level

The edge emphasis level of image can be adjusted in both user mode and service mode, but the use conditions differ.

| | User mode | Service mode |
|---|---|---|
| Item code | Other Functions > Sharpness | COPIER> OPTION> IMG-MCON> SHARP |
| Operator | User | Service technician |
| Purpose | To make adjustment for each original to be copied | To set the central value of edge emphasis to control individual variability or environmental change during transportation/after installation. |
| Text/photo area | Individual | Batch |
| Setting range | -3 to +3 level | 1 to 5 |
| Default value | 0 level | 3 |
| Setting value at power OFF/ON or at reset | Canceled (Default value can be retained.) | Retained |

T-6-8

The following table shows the edge emphasis level by the combination of "SHARP" and "Sharpness" settings, using the relative value when the default is 100.

| | | User mode "Sharpness" | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Service mode "SHARP" | 1 | 25 | 40 | 50 | 60 | 100 | 140 | 175 |
| | 2 | | 45 | 65 | 85 | 115 | 145 | |
| | 3 | | 50 | 75 | 100 | 125 | 150 | |
| | 4 | | 55 | 85 | 115 | 135 | 155 | |
| | 5 | | 65 | 100 | 140 | 150 | 160 | |

T-6-9

Images become smoother as values in the table become smaller, while they become sharper as values become larger.
Note that, when "Sharpness" is the upper limit or lower limit, the relative value stays constant regardless of the "SHARP" setting, therefore the edge emphasis effect does not change even if the settings are changed.

Normally, adjustment is made for each copy on the Touch Panel based on the service mode setting, but depending on the environment or paper type (coarse surface, etc.), edge emphasis may not turn out the way the user expected.
In this case, edge emphasis level customized for the user can be set by setting the current value of "Sharpness" as the default value.

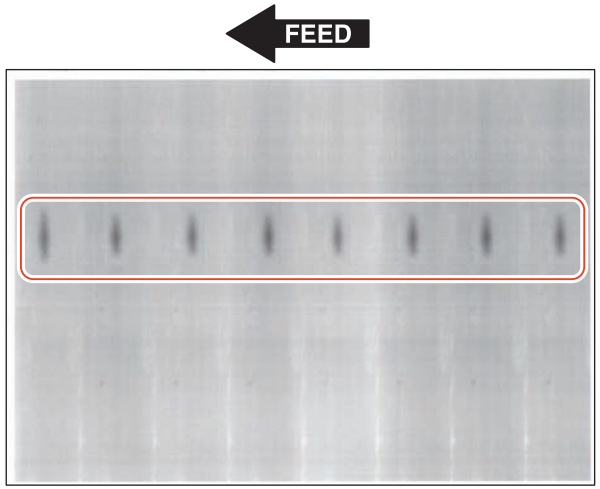
Example: In the case of the environment where the relative value "135" is suitable as the default value.

1) Set "SHARP" to "4".
2) Set "Sharpness", which is set to "+1" level, as the default in the user mode (Function Settings > Copy > Change Default Settings).

## Soiling at an interval equal to the circumference of the Developing Sleeve

[Location]
Developing Sleeve

[Cause]
If the surface of the sleeve is soiled, uneven toner coating occurs, causing the soiling of the same shape to appear at intervals equal to the circumference of the sleeve (approx. 63 mm) in the vertical scanning direction.




F-6-49

[Field Remedy]
1) Rotate the sleeve in the normal direction and identify the location where the soiling occurs.

> CAUTION:
> Do not turn the sleeve in the reverse direction.

2) Remove the toner found at that location using a blower, etc.

> CAUTION:
> If toner is dry wiped instead of removed, it may be fixed on the surface of the sleeve.

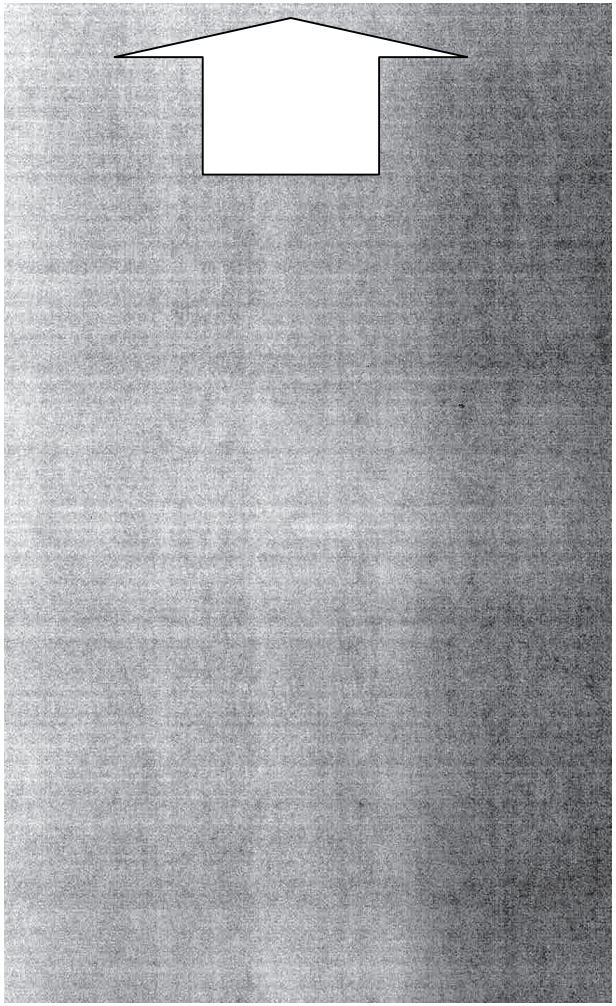
3) Wipe the surface of the sleeve with dry lint-free paper.

CAUTION:
Do not use water or alcohol.

4) Execute service mode > COPIER > TEST > PG > TYPE to output a halftone image (PG12), and check the image.
If white spots occur, go to step 5.
5) Execute service mode > COPIER > FUNCTION > MISC-P > DEV-ROT.
6) Check the image.
If the white spots persist, execute step 5 again.

CAUTION:
Heavy use of DEV-ROT can result in deterioration of developer or toner scattering.

# Image failure due to the temperature rising at the edge of the Fixing Roller (crepe mark)



F-6-50

<Location of Trouble>

Fixing Roller, Pressure Roller

<Cause>

This is the symptom which image error like crepe mark occurs when temperature at the edge of the Fixing Roller rises.

When the temperature rising at the edge occurs, the edge of the Pressure Roller made with rubber expands, giving the following influences on papers.

- Feed speed at the edge is increased, compared with the speed at the center.
- Tension is applied in the direction of both edges.

As it get close to the trailing edge, fixing is performed while a paper is distorted, causing an image error.

<Conditions>

Although all images have a possibility to have the error because the cause is temperature rising at the edge, the symptom is mainly significant with halftone images. The following shows estimated error occurrence with halftone image.

- When printing 200 sheets or more of small size paper continuously (approx. 1000 sheets in A4 size)
- When printing a large size sheet right after printing 100 sheets or more of small size paper continuously

<Field Remedy>

1) Go through the following: Settings/Registration > XXX > XXX; and turn ON the item.

By doing so, image error (crepe mark) will not occur.

With this setting, temperature difference between the center and the edge of the Fixing Roller is detected, and start idle rotation when temperature rising at the edge tends to occur.

During idle rotation, paper feed is stopped to keep constant temperature on the Fixing Roller, so the productivity is reduced.

2) Switching the image priority mode level.

When the image priority mode is specified, productivity may be extremely reduced depending on use conditions (paper size, paper type, and print image).

In such a case, change the level of production reduction by the following service mode.

COPIER >OPTION >IMG-FIX > FIX-IMGLV

[Setting values] 0: xxx, 1: xxx, 2: xxx

# MTF Adjustment

The MTF value of the Reader Unit may differ from the factory setting value depending on the condition of transportation/storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, readjust the MTF value by reading the MTF adjustment chart at installation as needed.

○: Need adjustment, -: Not need adjustment

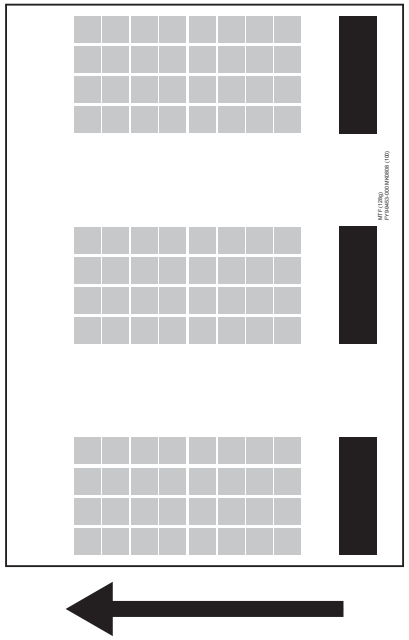
| Series | Model | MTF Adjustment Type | | | | | |
|---|---|---|---|---|---|---|---|
| | | Copyboard reading | | Front side stream reading | | Back side stream reading | |
| | | Color | B&W | Color | B&W | Color | B&W |
| imagePRESS 1135/1125/1110 Series | Simultaneous duplex reading *1 | - | - | - | - | - | - |
| imageRUNNER ADVANCE C5051/C5045/ C5035/C5030 Series | Copyboard reading | ○ | -*2 | - | - | - | - |
| | Reverse duplex reading | - | - | ○ | - | - | - |
| | Simultaneous duplex reading | - | - | ○ | ○ | ○ | ○ |
| imageRUNNER ADVANCE C9075 PRO/9070 PRO/9065 PRO/ 9060 PRO/C7065/7055 Series | Reverse duplex reading | - | - | ○ | ○ | - | - |
| | Simultaneous duplex reading | - | - | ○ | ○ | ○ | ○ |
| imageRUNNER ADVANCE 8105/8095/8085 Series | Simultaneous duplex reading | - | - | ○ | ○ | ○ | ○ |
| imageRUNNER ADVANCE 6075/6065/6055 Series | Reverse duplex reading | - | - | ○ | ○ | - | - |
| | Simultaneous duplex reading | - | - | ○ | ○ | ○ | ○ |

T-6-10

*1: Respond by another adjustment (Refer to the Service Manual).
*2: In the case of using a simultaneous duplex reading model as a copyboard model, B&W adjustment is also required.

## Adjustment Procedure

1) Obtain the MTF adjustment chart.



F-6-51

NOTE:
The end with a dark color square will be the trailing edge at reading. When adjusting the copyboard reading, place the chart on the Copyboard Glass to make the dark color square comes at the right side.

2) Set the MTF adjustment chart.

| Description of adjustment | Location to set the chart |
|---|---|
| Copyboard reading | Copyboard Glass |
| Front side stream reading | DADF Document Pickup Tray |
| Back side stream reading | DADF Document Pickup Tray (turn over the chart when setting) |

T-6-11

3) Execute sampling of the MTF value.

| Description of adjustment | Color/B&W | (Lv.1) COPIER > FUNCTION > MISC-R > |
|---|---|---|
| Copyboard reading | Color | CLM-PLTN |
| | B&W | BWM-PLTN |
| Front side stream reading | Color | CLM-DF1 |
| | B&W | BWM-DF1 |
| Back side stream reading | Color | CLM-DF2 |
| | B&W | BWM-DF2 |

T-6-12

NOTE:
In the case of executing sampling of the MTF value several times, execute in arbitrary order.

4) During the adjustment, “START” is indicated, and once it is terminated normally, “OK!” is indicated.
At abnormal termination, “NG1 to 3” is indicated.

NOTE:
If “NG1 to 3” is indicated, check the location to set the chart and direction of the chart, and then executed the adjustment again.

5) Check that the initial setting of the MTF value is set to “1”.

| Description of adjustment | Color/B&W | (Lv.1) COPIER > FUNCTION > MISC-R > |
|---|---|---|
| Copyboard reading | Color | CLPLT-EN |
| | B&W | BWPLT-EN |
| Front side stream reading | Color | CLDF1-EN |
| | B&W | BWDF1-EN |
| Back side stream reading | Color | CLDF2-EN |
| | B&W | BWDF2-EN |

T-6-13

NOTE:
- The initial value of the MTF value is updated by switching the Control Panel screen.
- After the adjustment, the corresponding MTF value is corrected.
  (Lv.1) COPIER > ADJUST > CCD > MTF-xx, MTF2-xx
- When replacing the Reader Controller PCB or the Scanner Unit, check the initial value of the MTF value. If the value is “1”, it will be necessary to execute the adjustment.

6) Print the image with moiré, and check that moiré is not appeared on the image.
If moiré appears, make a fine adjustment.

## When Making Fine Adjustment After Sampling the MTF Value

1) Set the MTF value for fine adjustment to “1”.

| Color/B&W | (Lv.1) COPIER > FUNCTION > MISC-R > |
|---|---|
| Color | CLM-TGT |
| B&W | BWM-TGT |

T-6-14

NOTE:
The MTF value for fine adjustment can be set only after executing sampling of the MTF value.

2) Recalculate the MTF filter coefficient.

| (Lv.1) COPIER > FUNCTION > CCD > |
|---|
| MTF-CLC |

T-6-15

3) Print the image with moiré, and check that moiré is not appeared on the image.
If moiré appears, determine the image quality by asking the user to compare the images before adjustment, after sampling of the MTF value, and after making a fine adjustment.

4) If using the MTF value after sampling as the MTF value, set the MTF value for fine adjustment to “0” and recalculate the MTF filter coefficient.
If using the MTF value before the adjustment, it disables the MTF adjustment.

## When Disabling the MTF Adjustment

1) By setting the initial setting of the MTF value to “0”, the MTF value is initialized to the factory setting value.

| Description of adjustment | Color/B&W | (Lv.1) COPIER > FUNCTION > MISC-R > |
|---|---|---|
| Copyboard reading | Color | CLPLT-EN |
| | B&W | BWPLT-EN |
| Front side stream reading | Color | CLDF1-EN |
| | B&W | BWDF1-EN |
| Back side stream reading | Color | CLDF2-EN |
| | B&W | BWDF2-EN |

T-6-16

## Paper wrinkle

<Location>

Fixing Roller, Pressure Roller

<Cause>

Right after the startup, temperature is different between the center and the edge of the Fixing Roller (temperature: center > edge).

Because a slippery solid black image does not match to the nip shape when it is fed, the center of paper is pulled toward the feeding direction, causing paper wrinkle.

<Condition>

Timing: Approx. 20 sheets immediately after the startup first time for the day

Paper size: Paper size larger than B4

<Field Remedy>

Normally, when printing to paper larger than A3 or LDR size paper at the start of printing in a high humidity environment, control temperature is increased by performing idle rotation. Paper wrinkle which occurs at this time can be decreased, but first copy time becomes longer. In other cases, idle rotation is not performed.

If paper wrinkle occurs on paper larger than B4, increase the setting value from 2 in increments of 1 until paper wrinkle is alleviated.

If paper wrinkle occurs on B4 size paper, increase the setting value from 4 in increments of 1 until paper wrinkle is alleviated.

COPIER>OPTION>BODY>FX-WNKL

[Setting values]

0: OFF

1: When paper is larger than A3/LDR size paper in a high humidity environment, idle rotation is performed for up to 20 seconds. (Default)

2: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 10 seconds, whereas it is performed for up to 20 seconds when paper size is 304.8×457.2 mm (12"×18")/330.2×482.6 mm (13"×19").

3: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 20 seconds, whereas it is performed for up to 40 seconds when paper size is 304.8×457.2 mm (12"×18")/330.2×482.6 mm (13"×19").

4: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 20 seconds.

5: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 40 seconds.

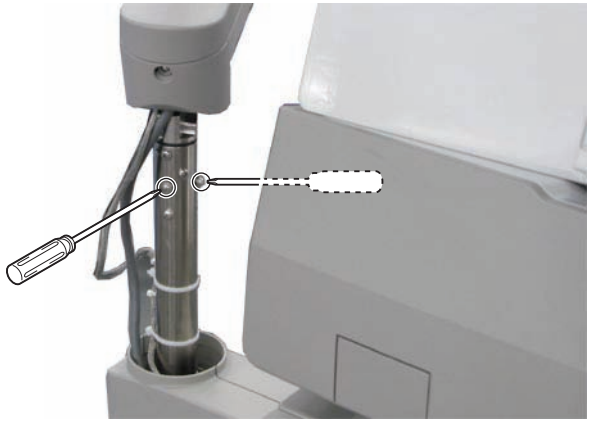
6: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 60 seconds.

## Adjusting rotation of the Upright Control Panel Arm

If rotation of the Upright Control Panel Arm has become loose, retighten the Fixation Screws securing the Arm Rotation Adjustment Ring according to the following procedure.

<Procedure>

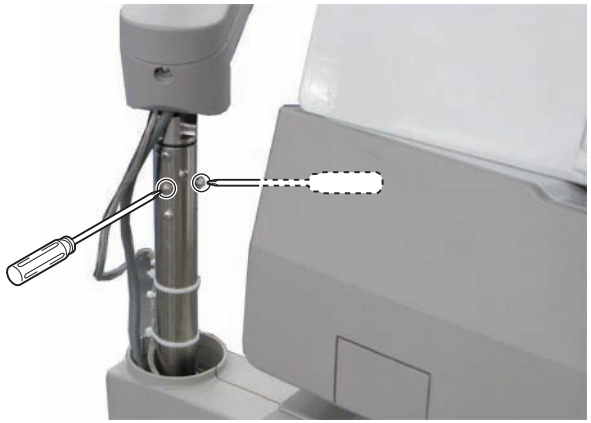
1) Remove the Shaft Support Cover (Left) and the Shaft Support Cover (Right).
2) Open the DADF and retighten the 2 Fixation Screws securing the Arm Rotation Adjustment Ring.



F-6-52

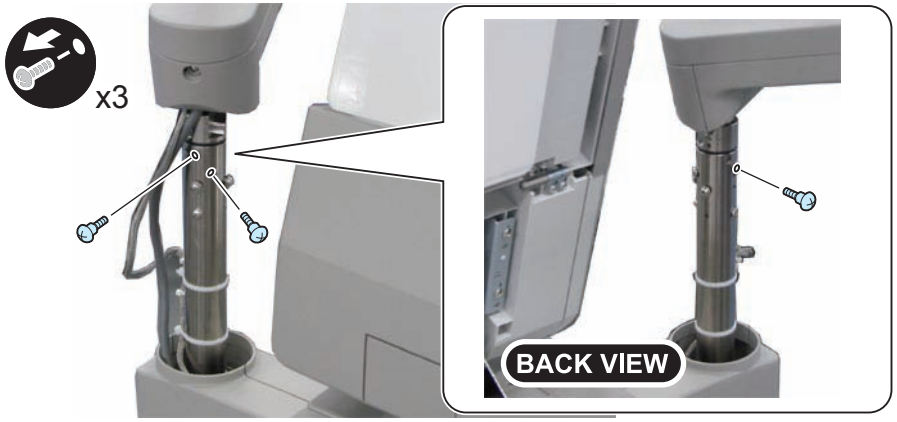
NOTE:
If rotation of the arm is still loose after retightening the Fixation Screws according to "●Adjusting rotation of the Upright Control Panel Arm", change the phase difference between the Arm Rotation Adjustment Ring and the Fixation Screws according to the following procedure.

1) Open the DADF and loosen the 2 Fixation Screws securing the Arm Rotation Adjustment Ring.



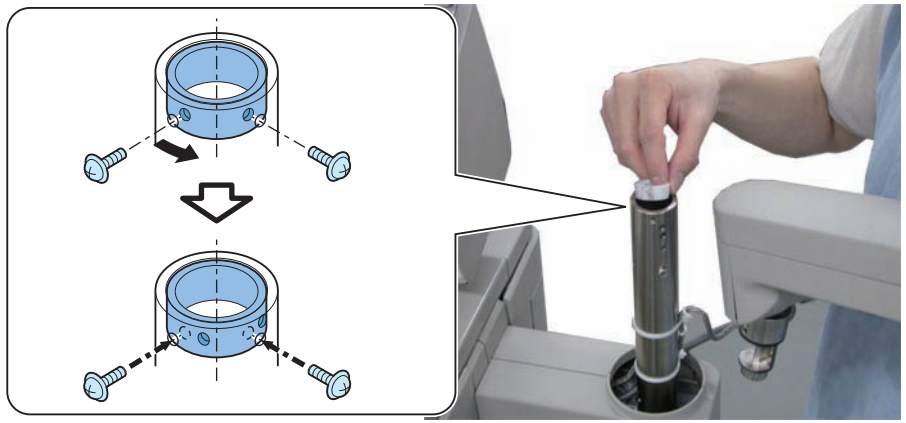
F-6-53

2) Remove the 3 Stepped Screws securing the Arm Shaft.




F-6-54

3) Pull out the Upright Control Panel and the Arm Shaft, and rotate the Arm Rotation Adjustment Ring to change the phase so that the Fixation Screws do not contact with the dents formed by tightening the screws.



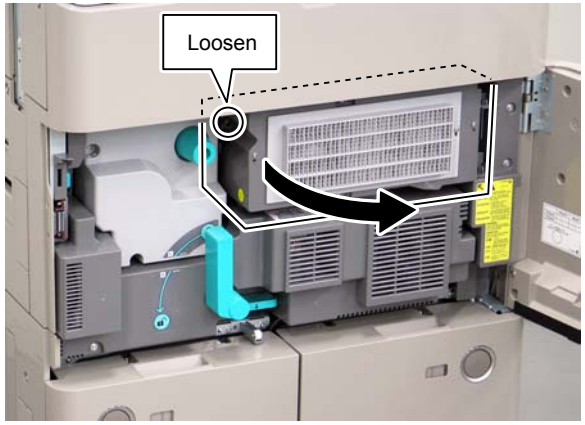
F-6-55

4) Insert the Upright Control Panel and the Arm Shaft, and retighten the 2 screws loosened in step 3.

## Remedy to be implemented when the ETB Disengage Member (Transfer Frame Stopper) is left unremoved

When the power is turned ON after installation, E017-0003 may occur due to the ETB Disengage Member (Transfer Frame Stopper) left unremoved.
When this error occurs, the ETB Disengage Member (Transfer Frame Stopper) is caught between the ETB Unit and the plate of the machine and cannot be removed. Moreover, one side of the Photosensitive Drum is in contact with the ETB Unit, so pulling out the Fixing Feed Unit by sheer force may result in damage to the ETB Unit.
When the ETB Disengage Member (Transfer Frame Stopper) is left unremoved, follow the following steps to implement remedy.

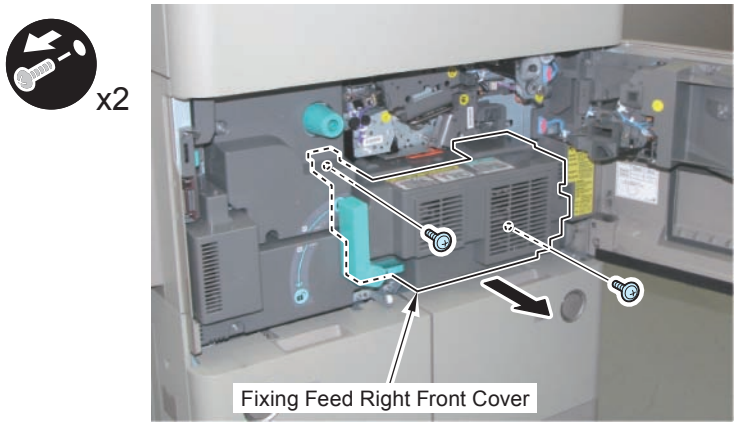
<Field Remedy>
1) Turn OFF the power.
2) Open the Inner Cover.




F-6-56

3) Remove the Fixing Feed Right Front Cover.

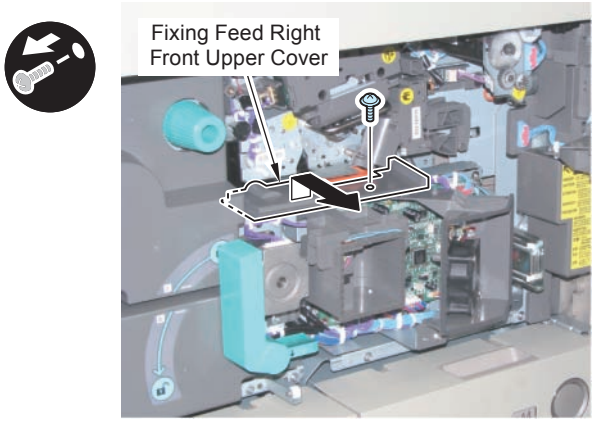
- 2 Screws




F-6-57

4) Remove the Fixing Feed Right Front Upper Cover.

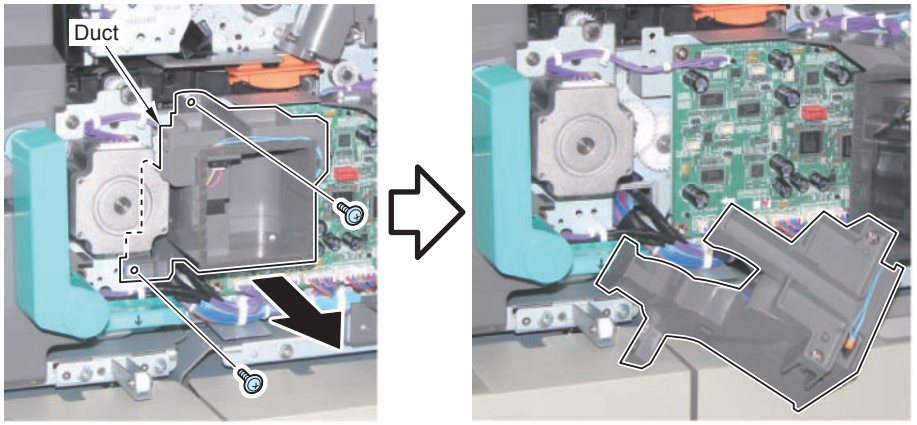
- 1 Screw




F-6-58

5) Remove the Fan Duct.

- 2 Screws

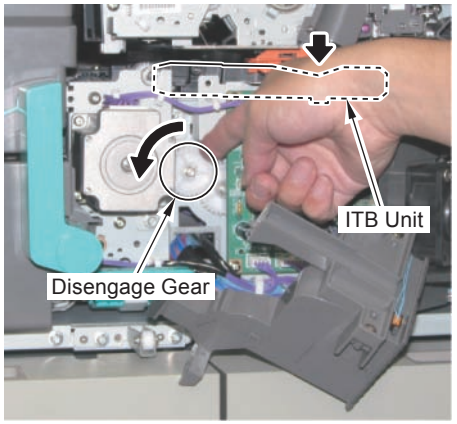



F-6-59

6) Rotate the Disengage Gear about 90 degrees counterclockwise by hand and lower the ITB Unit.

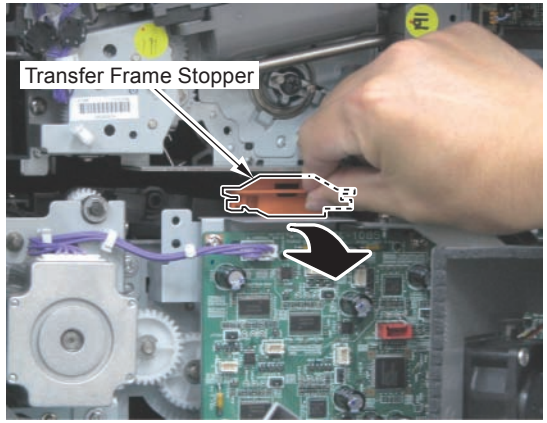
CAUTION:

The load of rotating the gear is heavy, so be careful not to get injured.




F-6-60

7) Remove the Transfer Frame Stopper.



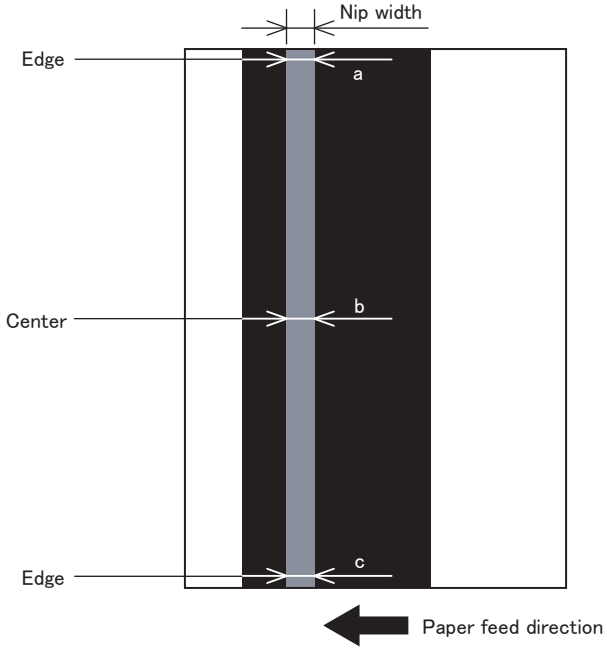

F-6-61

## Checking nip width

In the case of paper wrinkle or fixing failure, check that the fixing nip width is within the specified range. Note that the fixing nip width of this equipment cannot be adjusted in the field.

1) Print approx. 20 sheets of A4 size paper.
2) Set A4 size plain paper/recycled paper on the Multi-purpose Tray.
3) COPIER > FUNCTION > FIXING > NIP-CHK
   A sheet is stopped once in a state held by the Fixing Nip area, and is delivered approx. 20 seconds later.
4) Measure the nip width of delivered sheet.
   If the nip widths are as follow it is judged as normal: 7.0 to 8.0 mm at the center (b), and difference between front(a) and rear(b) is within 0.5 mm.

In the case of failure, check if there are any damaged parts (*), and replace the damaged parts (if any).
* Gear, Bearing, Fixing Roller, Pressure Roller and Fixing Assembly




F-6-62

## Introduction

Operation of the (2 types of) error diagnosis tools added to the main body and remedy for errors are described. These tools can reduce time to determine cause of errors occurred in field and improve the accuracy of specifying error locations.
This manual can be applied when the main body is placed in the following conditions.

- The main body does not boot. (In such a case that the Control Panel is not displayed or the progress bar does not work, etc.)
- An error is suspected to have occurred in the Main Controller PCB 1/2 and other related PCBs (child PCBs such as SDRAM or TPM mounted in the Main Controller PCB 1/2).

PCBs and units diagnosed by each tool are as follow:

### Boot System Error Diagnosis Tool

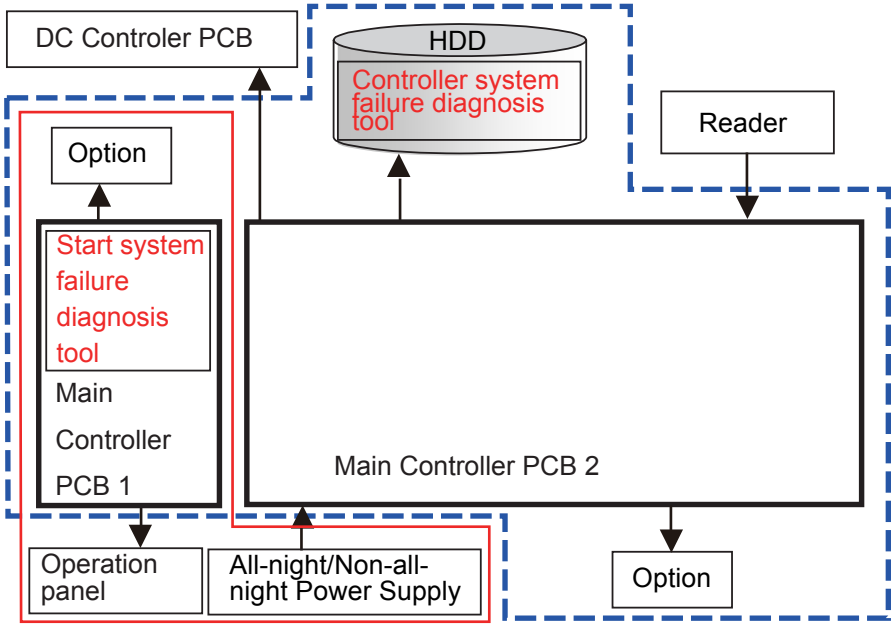
- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, FLASH Memory PCB>
- Control Panel
- All-night Power Supply, Non-all-night Power Supply

### Controller System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, TPM PCB>
- Main Controller PCB 2 side <Main Controller PCB 2, SDRAM, Memory PCB>
- HDD>

## Overview

Two types of error diagnosis tools are installed in this machine, and stored in the locations shown below.




F-6-63

Boot System Error Diagnosis Tool covers the components shown in the red frame (solid line) in the figure. Controller System Error Diagnosis Tool covers the components shown in the blue frame (dotted line).

### Boot System Error Diagnosis Tool

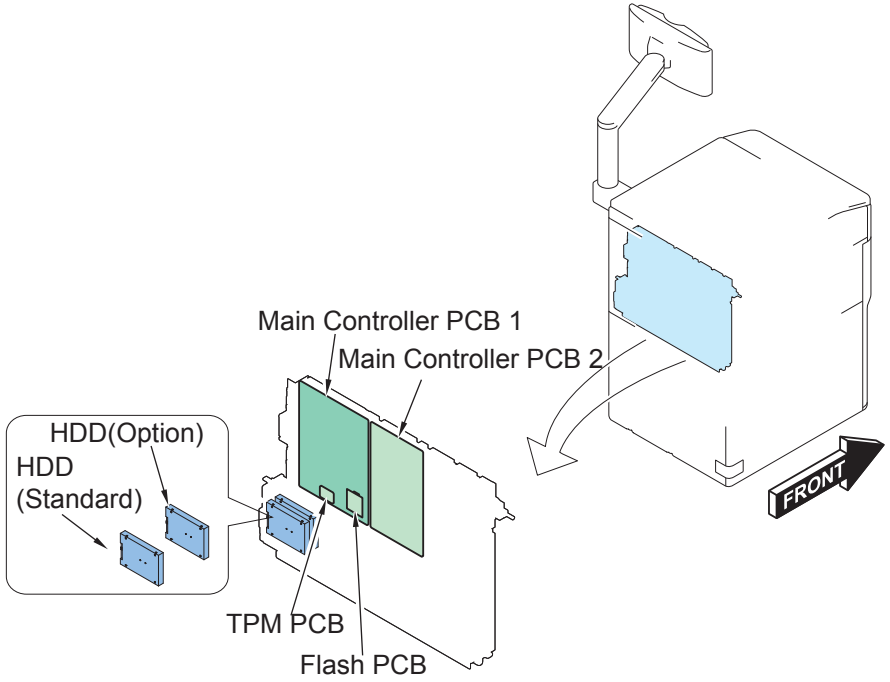
This tool automatically checks the Control Panel, Main Controller PCB 1, All-night Power Supply, and Non-all-night Power Supply, and notifies the result by the number of light-out and blinking interval of the lamp on the Control Panel.
This tool is installed in the ROM of Main Controller PCB 1.
Therefore, regardless the version of MN-CNT, this tool can be used even when an error occurs in child PCBs or when the Controller System Error Diagnosis Tool cannot be booted.

## Controller System Error Diagnosis Tool

This tool automatically checks the Main Controller PCB 1/2, child PCBs mounted on the Main Controller PCB 1/2, and HDD, and display the result on the Control Panel.
This tool is installed in HDD.
Therefore, this tool cannot be used when an error occurred in HDD or HDD cannot be accessed.

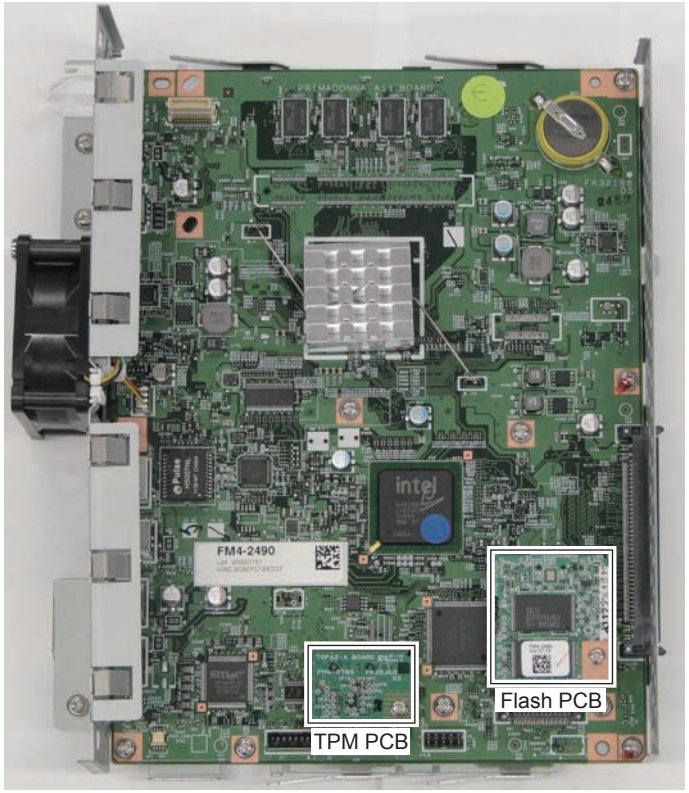
## Layout Drawing

Layout Drawing of PCBs Subject to Diagnosis



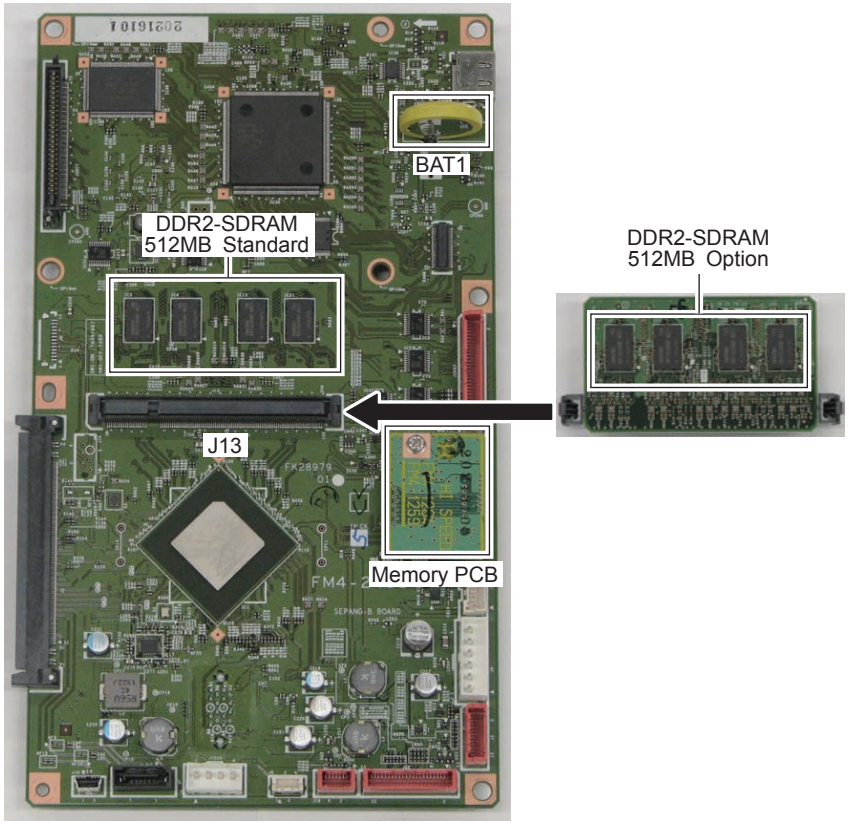

F-6-64

### Main Controller PCB 1




F-6-65

Main Controller PCB 2

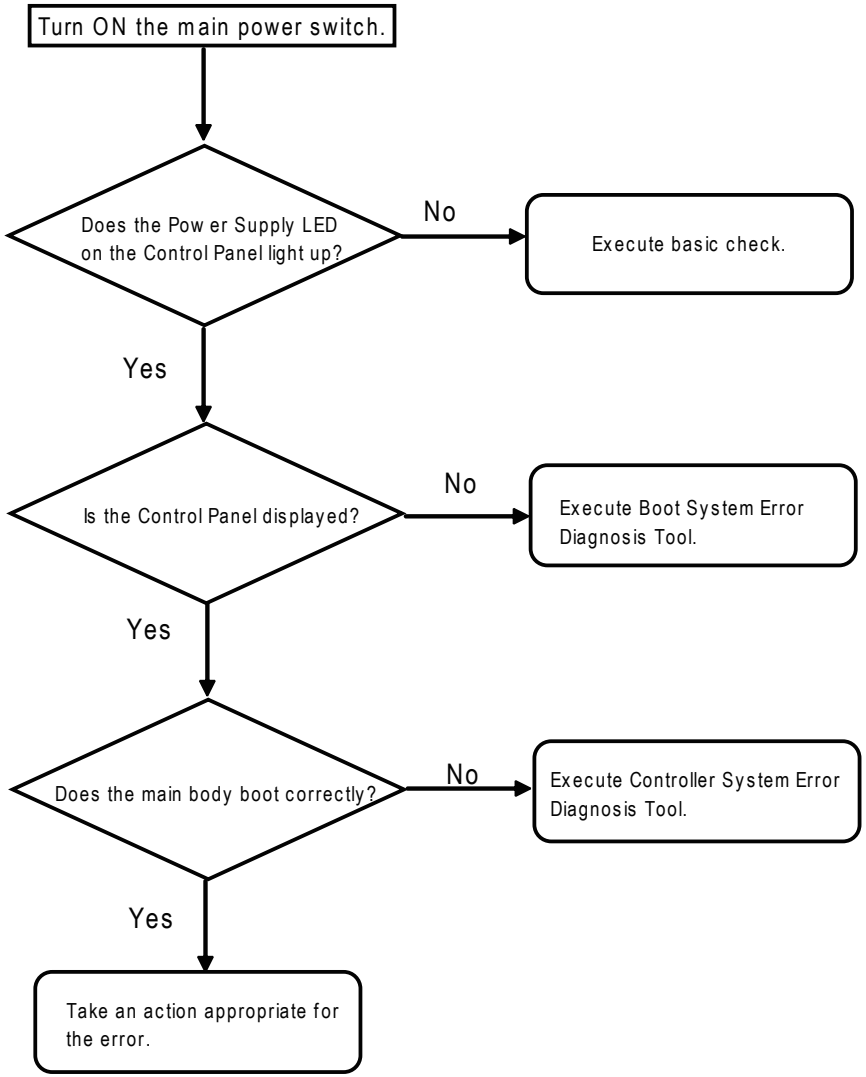



F-6-66

# Basic Flowchart

Basic Check Items

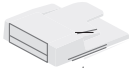
Check all of the items shown below.




F-6-67

## Basic Check Items

1. Check if the Leakage Breaker is turned OFF.
2. Check if the Power Supply Plug is disconnected.
3. Check if the Connection Cable between the Main Controller PCB 1 and Control Panel is disconnected.
4. Check if the Connection Main Controller PCB 1 and Main Controller PCB 2 definitely?
5. Check if the Connection An All-night Power Supply.



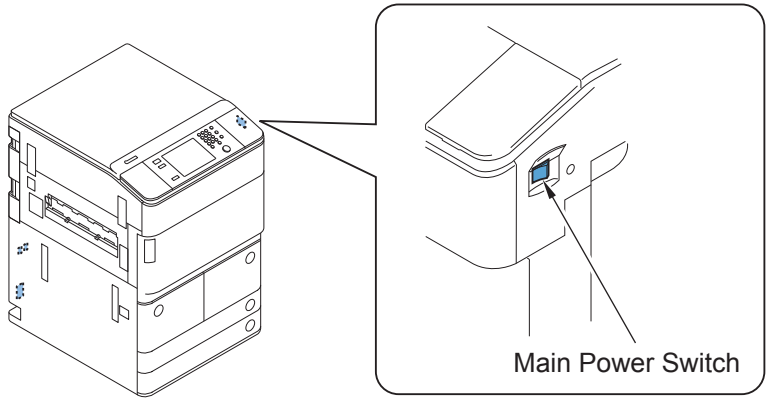
# Operation

Operations of the two diagnosis tools are explained below.
Use each tool according to the following purposes.

- When the main body does not boot (the Control Panel is not displayed): Execute Boot System Error Diagnosis.
- When an error is suspected to have occurred in the Main Controller PCB 1/2 or child PCBs mounted on the Main Controller PCB 1/2: Execute Controller System Error Diagnosis.

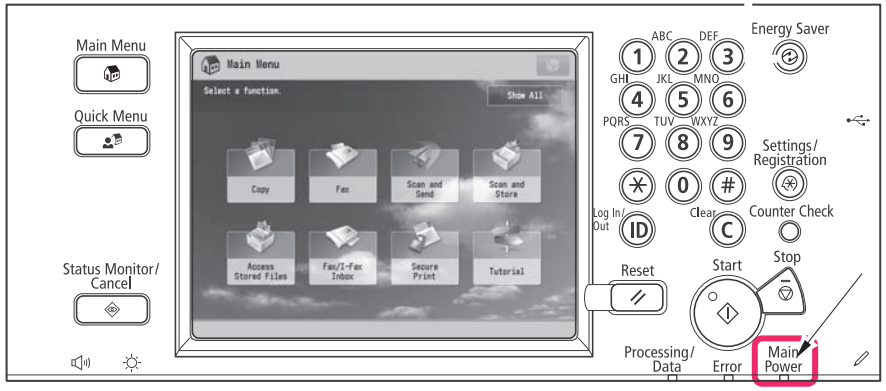
## Boot System Error Diagnosis

1) Turn ON the Main Power Supply Switch while pressing the Control Panel Energy Saver Switch.




F-6-68

2) Right after the Main Power Supply Lamp lights up once, it lights out instantly, and diagnosis starts.
(When the Main Power Supply Lamp lights out, you can release your finger from the Control Panel Switch.)



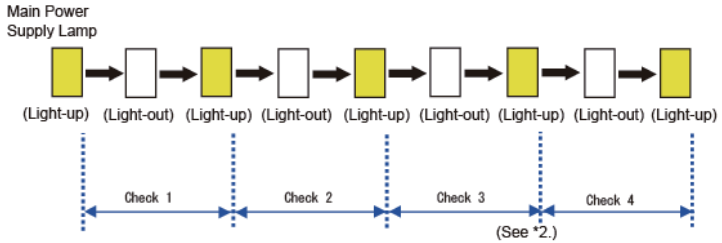

F-6-70

## Diagnosis Time

Diagnosis is completed in approx. 1 minute.

<When the diagnosis result is normal>

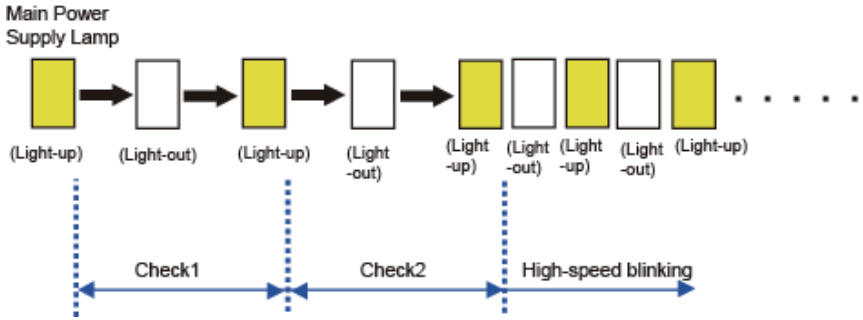
After the Main Power Supply Lamp repeatedly lights out 5 times, it lights up and the diagnosis is completed.
After completion of the diagnosis, this machine executes normal boot sequence.




F-6-71

<When an error is detected by diagnosis>

The Main Power Supply Lamp repeats high-speed blinking after completion of a check in which an error is detected. (See *1.)
For example, when an error is detected in Check 2, the Main Power Supply Lamp lights out twice and repeats high-speed blinking (ON/OFF in 0.3 seconds interval).
When an error is detected, be sure to count the number of times the Main Power Supply Lamp lights out.
For detailed results, see "Error Diagnosis".



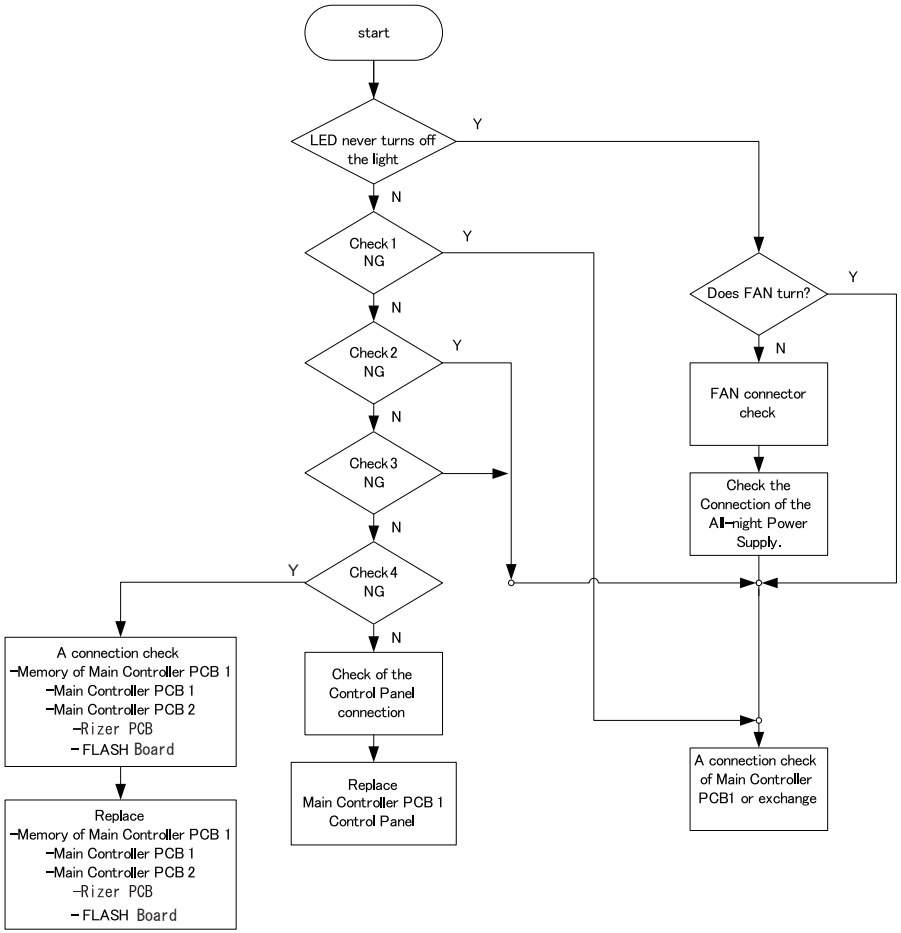

F-6-72

*1: When an error is detected, there is a possibility that the Main Power Supply Lamp may not perform high-speed blinking but perform other operation (continuous light-up, light-out). In this case, remove and then install the SDRAM on the Main Controller PCB 1.
If the error is not resolved, execute the remedy of the Check No. which is not completed normally. (For details, see "Error Diagnosis".)
*2: Although diagnosis time for Check 3, and Check 4 is longer than that of other Checks, it is correct operation.

## ■ Error Diagnosis

<Boot System Error Diagnosis Table>

The error locations are identified according to the following table.

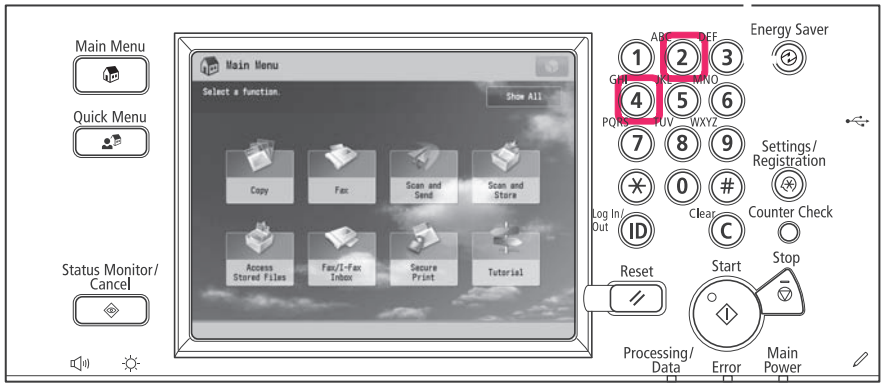



F-6-73

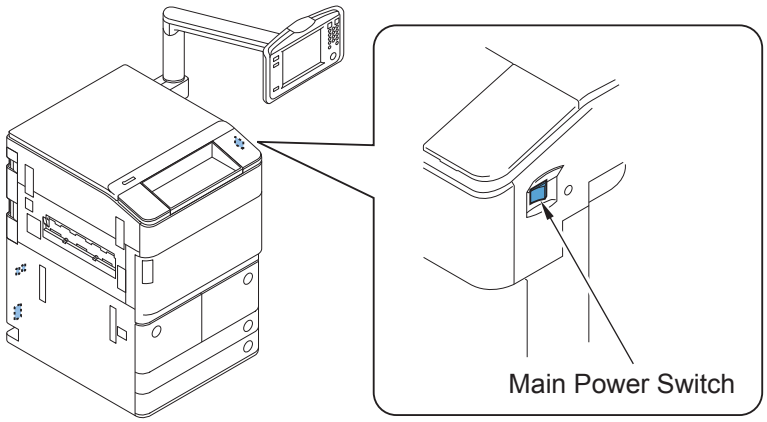
# Controller System Error Diagnosis

## ■ Boot Method

1) Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.

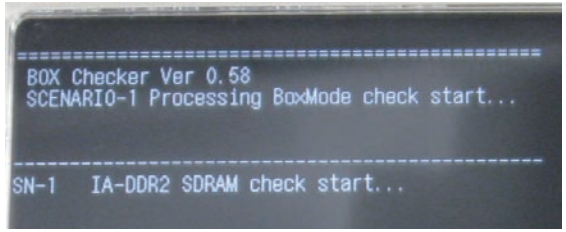



F-6-74




F-6-75

2) Keep pressing the numeric keys (for approx. 20 seconds) until the following screen appears on the Control Panel.




F-6-76

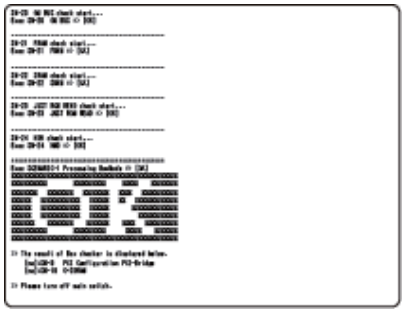
Note:
When this tool is not installed correctly, the following regular screen is displayed.
In this case, perform the following remedy.
Turn OFF the Main Power Supply Switch again, and execute step 1 and 2 shown above.
If this tool still does not boot, it means that BCT is deleted. So, install BCT.
If BCT is not installed correctly, "--.--" is displayed in Service Mode (COPIER>DISPLAY>VERSION>BCT) in the main body.

F-6-77

## Diagnosis Time

Diagnosis is completed in approx. 3 minutes.
The result is displayed on the Control Panel.

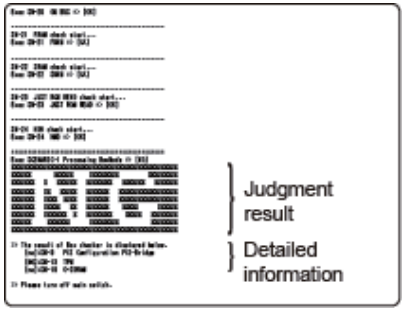
<When the diagnosis result is normal>



F-6-78

<When an error is detected by diagnosis>

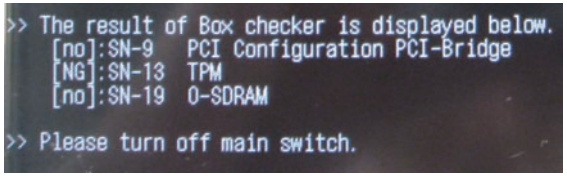
Detailed information is displayed under the judgment result. In detailed information, the name of the test where an error was detected is indicated.




F-6-79

<How to view the error result>

The following screen is an enlarged view of the detailed information indicated above.
Explanation of the detailed error information is described.




F-6-80

[no] means that optional PCBs are not mounted.
When [no] is displayed although an optional PCB is mounted, it means that an error has been occurring.
[NG] means that an error occurred to PCBs mounted as standard.

Note:
Once the tool is activated, this machine reboots after approx. 2 minutes.
After completion of the diagnosis, be sure to turn OFF and then ON the main power.
By turning the power OFF, the operation of this tool completes.

<Controller System Error Diagnosis Table>

The error locations are identified according to the following table.

| Test Name | Description | Assumed Error Location | Remedy | Error Code |
|---|---|---|---|---|
| SN-1 IA-DDR2 SDRAM | Check an error between the Main Controller PCB 1 and SDRAM on the Main Controller PCB 1 | Main Controller PCB 1<br>SDRAM on Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-2 SM BUS IA DIMM0 | Check an SM bus error in SDRAM on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-3 SM BUS IA DIMM1 | Check an SM bus error in SDRAM on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-4 SM BUS IA Clock Gen | Check an SM bus error in Clock Generator on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-5 SM BUS SOC DIMM | Check an SM bus error in the Main Controller PCB 1 and SDRAM on the Main Controller PCB 2 | Main Controller PCB 1<br>Main Controller PCB 2<br>SDRAM on Main Controller PCB 2 | 1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2.<br>2. Check the installation of SDRAM on the Main Controller PCB 2.<br>3. Replace SDRAM on the Main Controller PCB 2.<br>4. Replace the Main Controller PCB 2.<br>5. Replace the Main Controller PCB 1. | - |
| SN-6 PCI Config SOC | Check a PCI bus error in the Main Controller PCB 1 and the Main Controller PCB 2 | Main Controller PCB 1<br>Main Controller PCB 2<br>SDRAM on Main Controller PCB 2 | • 1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2.<br>• 2. Replace the Main Controller PCB 1.<br>• 3. Replace the Main Controller PCB 2. | - |
| SN-7 PCI Config LANC | Check a LAN chip error on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-8 CPLD | Check failure of CPLD chip on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-9 LANC SPI | Check failure of LANC SPI on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-10 RTC CHECK | Check failure of RTC on the Main Controller PCB 1 | Main Controller PCB 1 | Replace the Main Controller PCB 1. | - |
| SN-11 TPM | Check failure of the TPM PCB on the Main Controller PCB 1<br>* TPM PCB is not installed in products for China. So, the diagnosis results NG. | Main Controller PCB 1<br>TPM PCB | 1. Check the installation of the TPM PCB.<br>2. Replace the TPM PCB.<br>3. Replace the Main Controller PCB 1. | E746 |
| SN-12 SOC-DDR2 SDRAM | Check an error between SDRAMs on the Main Controller PCB 2 | Main Controller PCB 2<br>SDRAM on Main Controller PCB 2 | 1. Check the installation of SDRAM on the Main Controller PCB 2.<br>2. Replace SDRAM on the Main Controller PCB 2.<br>3. Replace the Main Controller PCB 2. | E748 |
| SN-13 SRI CHECK | Check On-board BUS on the Main Controller PCB 2 | Main Controller PCB 2 | Replace the Main Controller PCB 2. | - |
| SN-14 JUST ROM READ | Check On-board ROM on the Main Controller PCB 2 | Main Controller PCB 2 | It is always no indication.<br>A result become NG<br>Replace the Main Controller PCB 2. | |
| SN-15 FRAM | Check Main Controller PCB 2 and the connection of the memory PCB | Main Controller PCB 2<br>Memory PCB | 1. Check the installation of Memory PCB on the Main Controller PCB 2.<br>2. Replace Memory PCB on the Main Controller PCB 2.<br>3. Replace the Main Controller PCB 2. | E355 |

| Test Name | Description | Assumed Error Location | Remedy | Error Code |
|---|---|---|---|---|
| SN-16 SRAM | Check failure of SRAM on the Main Controller PCB 2.<br>A battery emptied check | Main Controller PCB 2 | Replace the Main Controller PCB 2. | E246<br>E350<br>E355 |
| SN-17 GS | Check On-board BUS on the Main Controller PCB 2 | Main Controller PCB 2 | Replace the Main Controller PCB 2. | - |
| SN-18 HDD | Check an HDD I/F error | Main Controller PCB 2<br>HDD Cable<br>HDD | 1. Check the cable connection of the HDD.<br>2. Check the connection between the Main Controller PCB 2 and the Main Controller PCB 1.<br>3. Replace the HDD. | E602 |
| SN-19 BOARD CONNECT IA-SOC | Check failure between the Main Controller PCB 2 and the Main Controller PCB 1 | Main Controller PCB 1<br>Main Controller PCB 2 | 1. Check failure between the Main Controller PCB 2 and the the Main Controller PCB 1.<br>2. Replace the Main Controller PCB 2.<br>3. Replace the Main Controller PCB 1. | E748 |
| SN-20 BOARD CONNECT SOC-DCON | Check failure between the Main Controller PCB 2 and the DC controller PCB | Main Controller PCB 2<br>DC controller PCB | 1. Check failure between the Main Controller PCB 2 and DC controller PCB.<br>2.Replace the DC controller PCB<br>3. Replace the Main Controller PCB 2. | - |

T-6-17

## ■ Restrictions

### <Boot System Error Diagnosis>

- If an error cannot be resolved by executing remedy according to the error diagnosis table described above, consider boot failure of the main power supply and take appropriate actions.

### <Controller System Error Diagnosis>

- Regarding the diagnosis for the test names (SN-1, 2, 3,6,12,18,19), if an error occurs in the diagnosis under the test names, this diagnosis tool will not boot.
- When no PCBs are installed on the Main Controller PCB 1/2, the following judgment results are displayed.

Standard PCB: [NG]
Optional PCB: [OK]
However, [no] is displayed in detailed error information for optional PCBs.

# Version upgrade

## Overview

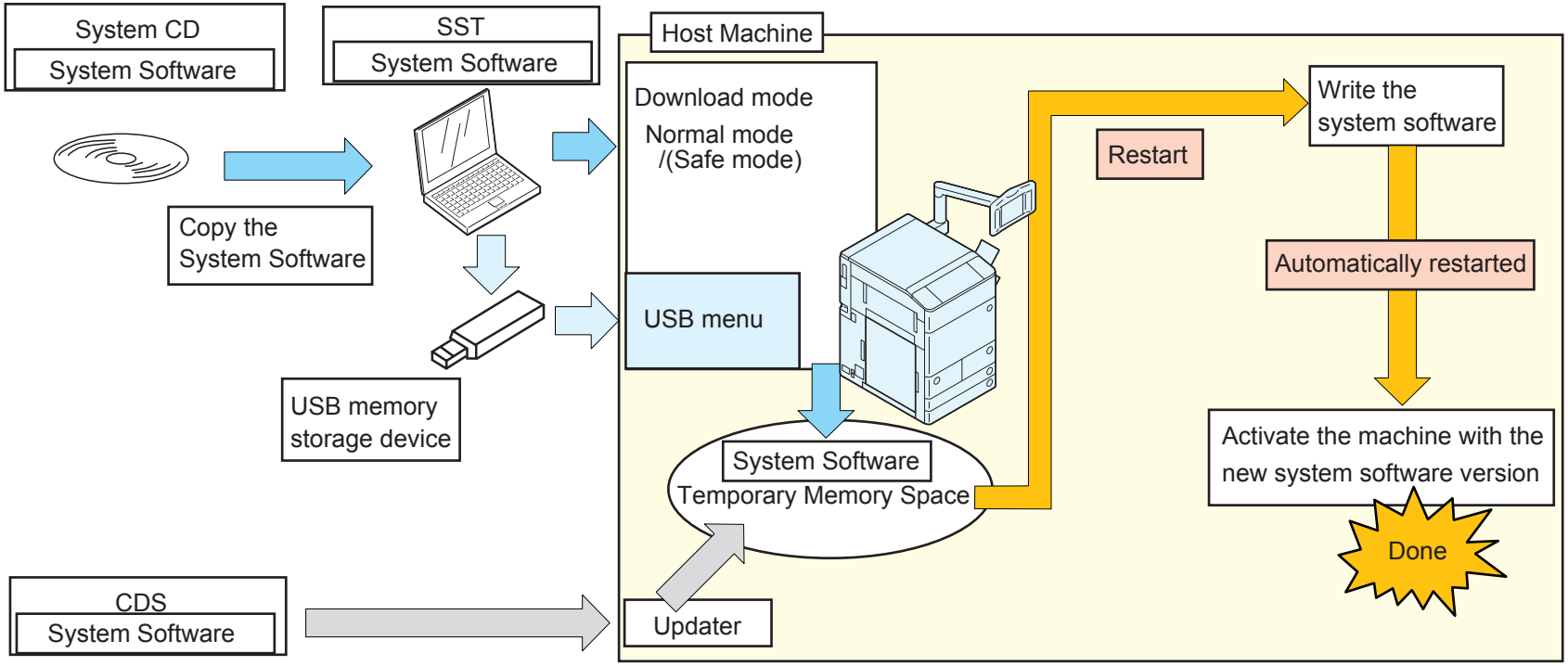
### Overview of Version Upgrade

The system software version is upgraded in 2 steps, downloading and writing the new version of the system software.

#### Downloading System Software

This machine supports the following 3 downloading methods.

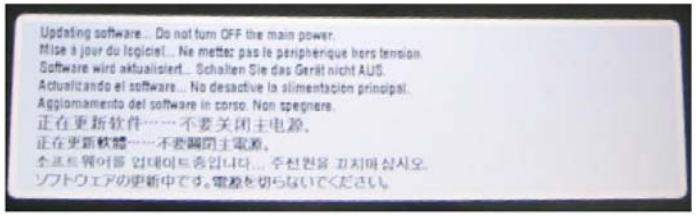
1. Download via the service support tool (hereinafter “SST”)
   Connect this machine to the PC by the cross cable to download the system software using SST installed in the PC.
2. Download using the USB memory storage device
   Insert the USB memory storage device storage device to the slot of the machine and download the system software stored in the device.
3. Download via Contents Delivery System (hereinafter “CDS”)
   Access to CDS via Internet to download the system software directly to the machine.




F-6-81

## Writing System Software

The system software downloaded in either of the above-mentioned methods is stored in the temporary memory space.
After the system software is successfully downloaded, restart the machine to write the software in the machine.
In case the main power switch is turned OFF during the writing process, the machine may not be started.
This machine supports the remote version upgrade via CDS. When upgrading the system software via CDS, the warning message is shown on the control panel to alert the user not to turn OFF the power switch.




F-6-82

When the system software is successfully written, the machine is automatically restarted to activate the downloaded system software.
If any error occurs during the writing process, the error code, E753-0001, is shown.
The name of the system software component is shown to the left of the error log message, “version up…..error”. Check the name if the software is for the option not attached to the machine. If so, turn OFF / ON the machine to recover the error (see Troubleshooting for details).

F-6-83

## Download Mode

When the version is upgraded via SST or with the USB memory storage device storage device, start the machine in Download mode. This machine has the following 2 Download modes similarly with other iR-series models.

### Normal mode(recommend):

- Start from Copier > FUNCTION > SYSTEM > Download.
- Conventionally, the main power switch of this machine was turned ON while pressing 1 and 7 keys. However, the procedure above automatically assigns a static IP address and enables the download same as before.
- You can obtain the version information and avoid unnecessary download and errors.

NOTE:
When entering Download mode, be sure to go into Service mode after all items of main menu have been displayed.
This machine reads the version information of system software when it starts. You must start Download mode after the version information has been obtained.

### Safe mode:

- Press 2 and 8 keys simultaneously on the numeric keypad when turning on the power.
- Be sure to use normal mode when using download mode except in a case where it is not possible to start this machine and enter service mode or where format of the HDD is going to be executed.

## System Software Components

The table below shows the system software components for this machine.

| Software to be upgraded | | Display on SST | | How to upgrade versions | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | Registered name of product | Name of system software | SST | USB memory | Others | |
| Host Machine | Main Controller | iA8105 | SYSTEM | ○ | ○ | - | |
| | MEAP Controller | | MEAPCON | ○ | ○ | - | |
| | Language Module | | LANGUAGE | ○ | ○ | - | |
| | Remote UI Contents | | RUI | ○ | ○ | - | |
| | RUI portal | | RPTL | ○ | ○ | - | |
| | Mobile print | | MOBPR | ○ | ○ | - | |
| | UI-BOX | | BOX | ○ | ○ | - | |
| | UI-COPY | | COPY | ○ | ○ | - | |
| | UI-Intro | | INTRO | ○ | ○ | - | |
| | UI-SEND | | SEND | ○ | ○ | - | |
| | Voice Synthesis Dictionary | | TTS | ○ | ○ | - | |
| | Paper Type Information File | | MEDIA | ○ | ○ | - | |
| | Service Mode Contents | | SMCNT | ○ | ○ | - | |
| | Printer Controller | | DCON | ○ | ○ | - | |
| | WebDAV Contents | | WEBDAV | ○ | ○ | - | |
| | Resources for Web Browser | | BROWSER | ○ | ○ | - | |
| | Reader Controller(2-sided Single Pass) | | RCOND | ○ | ○ | - | Duplex Color Image Reader Unit-C1 |
| | FAX Board Boot Program | | G3CCB | ○ | ○ | - | Super G3 FAX Board-AF1/Super G3 2nd Line Fax Board-AF1/Super G3 3rd/4th Line Fax Board-AE1 |
| | Fax Board Main Program | | G3CCM | ○ | ○ | - | Super G3 FAX Board-AF1/Super G3 2nd Line Fax Board-AF1/Super G3 3rd/4th Line Fax Board-AE1 |
| | Key/Certificatefor Encrypted Communication | iAxxxx | KEY | ○ | ○ | - | |
| | OCR Libraly | | SDICT | ○ | ○ | - | |
| Professional Puncher Integration Unit-B1 | Interface Controller | PIU_B1 | PIU_CON | ○ | ○ | - | Professional Puncher Integration Unit-B1 |
| ARCNET Connection | | | | | | | |
| Insertion Unit-K1 | Option Controller | ISU_K1 | OP_CON | ○ | ○ | - | Insertion Unit-K1 |
| | Inserter Controller | | IST_CON | ○ | ○ | - | |
| Staple Finisher-F1/Booklet Finisher-F1 | Finisher Controller | FIN_F1 | FIN_CON | ○ | ○ | - | Staple Finisher-F1/Booklet Finisher-F1 |
| Paper Folding Unit-H1 | Folder Controller | | FLD_CON | ○ | ○ | - | Paper Folding Unit-H1 |
| Booklet Trimmer-D1 | Trimmer Controller | BT_D1 | TRM_CON | ○ | ○ | - | Booklet Trimmer-D1 |
| IPC Connection | | | | | | | |
| Staple Finisher-D1/Booklet Finisher-D1 | Finisher Controller | FIN_D1 | FIN_CON | ○ | ○ | - | Staple Finisher-D1/Booklet Finisher-D1 |
| | Saddle Controller | | SDL_CON | ○ | ○ | - | Booklet Finisher-D1 |
| Paper Folding Unit-H1 | Folder Controller | | FLD_CON | ○ | ○ | - | Paper Folding Unit-H1 |
| Insertion Unit-K1 | Inserter Controller | | IST_CON | ○ | ○ | - | Insertion Unit-K1 |
| Inner Booklet Trimmer-A1 | Trimmer Controller | | TRM_CON | ○ | ○ | - | Inner Booklet Trimmer-A1 |

This machine holds the increased number of system software components compared to conventional iR machines to meet vastly extended functionality.

T-6-18

## Note on Download Process

Warning: Never turn OFF the power during the download / writing process.

Turning off the power during the download / writing process may cause a failure of machine start-up at power-on.

If this occurs, start the machine in Safe mode (by pressing 2 and 8 keys simultaneously on the numeric keypad).

When the machine is successfully started in Safe mode, execute formatting of BOOTDEV partition, retry downloading the system software.

CAUTION:

Be sure to use normal mode when using download mode except in a case where it is not possible to start this machine and enter service mode.

In safe mode, version information of SYSTEM, MEAPCONT, LANGUAGE, RUI, and SDICT can be obtained, but version information of other system software such as DCON and RCON cannot be obtained. Therefore the following points to note are required when downloading in safe mode.

[RCON]

The version is not upgraded except in a case where Single mode of SST is used or when "Overwrite all" of USB download menu is used.

[DCON and others]

The following symptoms occur when SST (Single mode) or USB download menu (Auto) is used.

- The time for download/write becomes longer because the software is overwritten even when system software of the same version is being written.
- A confirmation message is not displayed when a lower version is going to be downloaded.

CAUTION: error code E753-0001

When an error occurs during writing process of the system software downloaded using SST or USB memory, error code E753-0001 is displayed.

Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

# Version Upgrade via SST

## Overview

The system software can be downloaded either of the two modes below via SST.

- Assist mode(recommended)
- Single mode

Assist mode provides the following features.

- Attached option types are automatically recognized.
- The new versions of the system software for attached option types are automatically searched.
- The set of system software with interactive behavior confirmed is automatically downloaded.
- The accessories attached to the host machine are automatically recognized to download the system software for each accessory.

This machine holds a number of system software components that mutually interacts during operation. Behaviors of such system software should be confirmed when these are downloaded as the set. Thus, Assist mode is basically recommended to download the system software for this machine.

Use Single mode only when any of the following conditions is met.

- When downloading some the system software components, i.e. DCON, RCON or options.
- When reloading the system software after HDD is formatted

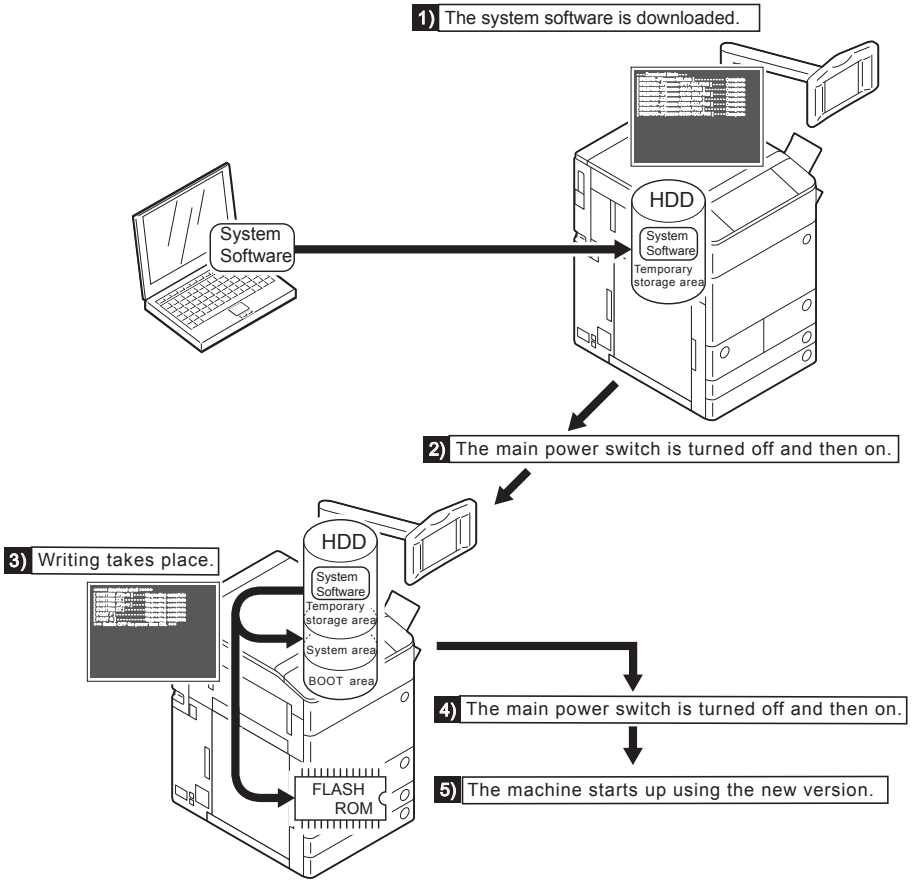
NOTE:
Use Single mode only when any of the following conditions is met.

- When downloading some the system software components, i.e. DCON, RCON or options.
- When reloading the system software after HDD is formatted

## Downloading the System Software

System software is saved in the temporary storage area on HDD after downloaded with SST. Restart the machine after download so that it will be written to the system area, and the flash ROM.

After the writing has been completed normally, this machine automatically restarts with the new system software.




F-6-84

## Copying System Software

### System CD -> SST

Copy the system software stored in the system CD to SST.

> NOTE:
> The system software is compressed if the file size exceeds the CD memory capacity.
> If the above is the case, decompress the file before copying it to SST.

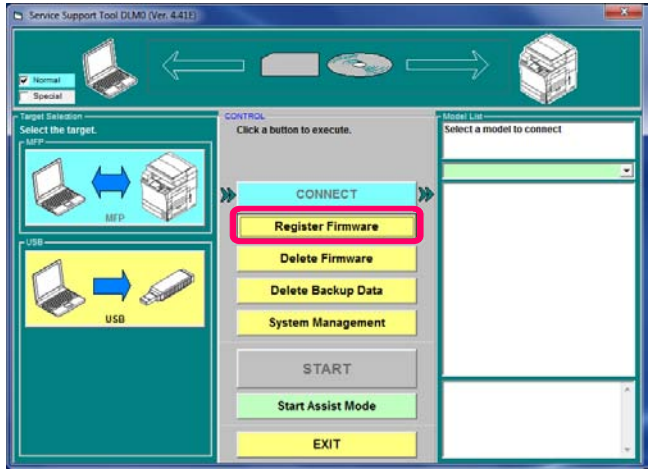
Preparation

Requirements:

- PC with SST Ver.4.41 or later installed
- The system CD for this machine

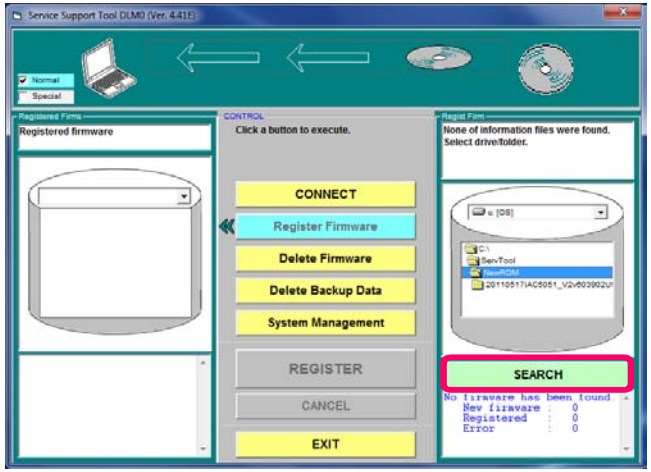
Steps to copy the system software

1) Start the PC
2) Set the system CD in the PC
3) Start SST
4) Click “Register Firmware” button.



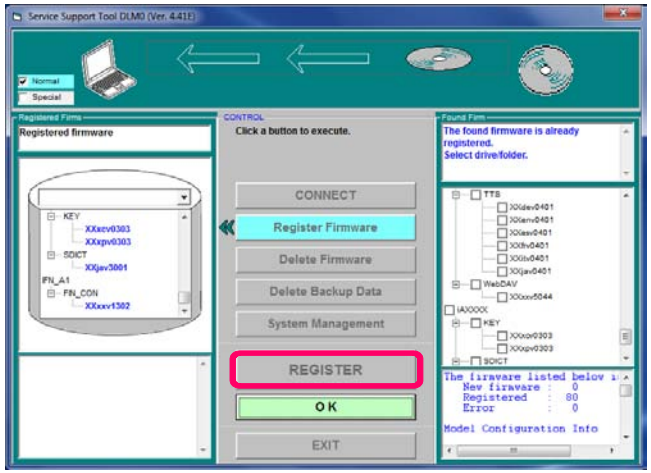

F-6-85

5) Select the drive where the system CD is set and click “Search” button.



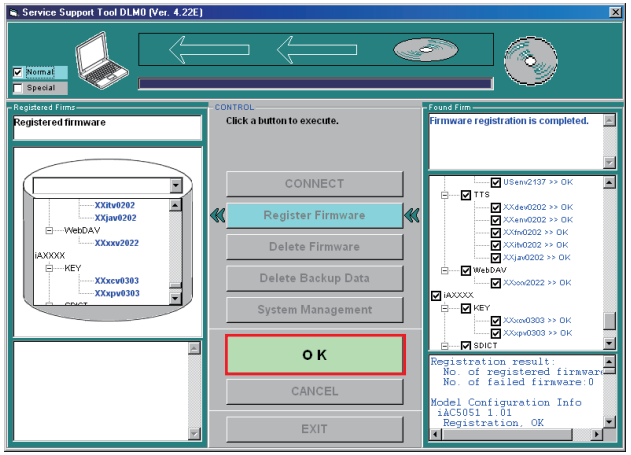

F-6-86

6) The system software stored in the system CD is listed.
Uncheck the box(es) for unnecessary folder(s) and/or system software and click “Copy” button.




F-6-87

7) The message is shown when the system software is successfully copied. Click “OK” button.




F-6-88

## Connection

The following IP address is automatically set for this machine at start-up in Download mode.

- IP address:172.16.1.100
- Subnet mask:255.255.255.0

When the PC with SST installed is connected to this machine, change the PC network address to the following.

- IP address:172.16.1.160
- Subnet mask:255.255.255.0
- Default gateway: arbitrary

CAUTION:

If the PC has the connection to the network, the settings changed to the above-mentioned may cause network failures due to redundant IP addresses, etc. Ensure that the PC is disconnected from the network when you change the PC network settings. Alternatively use the cross cable to connect the PC to this machine.

Preparation

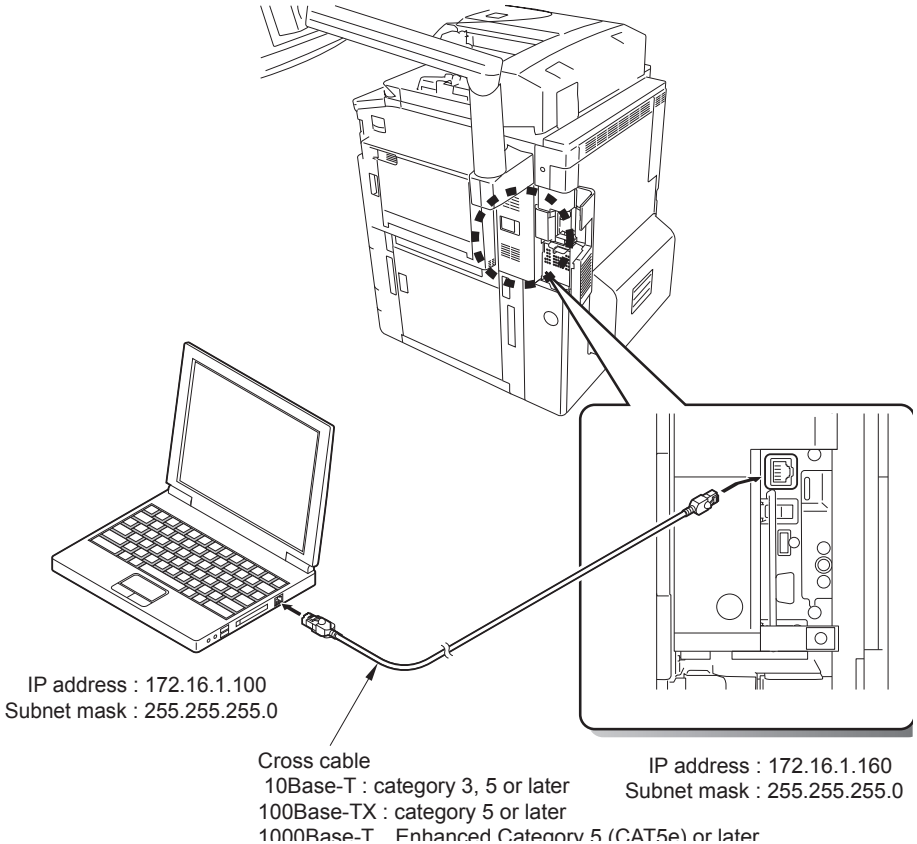
Requirements

- PC with SST Ver. 4.41 or later installed and the system software for this machine is stored
- Cross cable
  10Base-T: Category 3 or 5
  100Base-T: Category 5
  1000Base-T: Enhanced Category 5 (CAT5e) or later

CAUTION:

Disconnect USB memory storage device storage devices if connected.

Communication to SST is disabled in this machine if any USB memory storage device storage device is recognized. SST and the USB memory storage device storage device cannot be used concurrently.

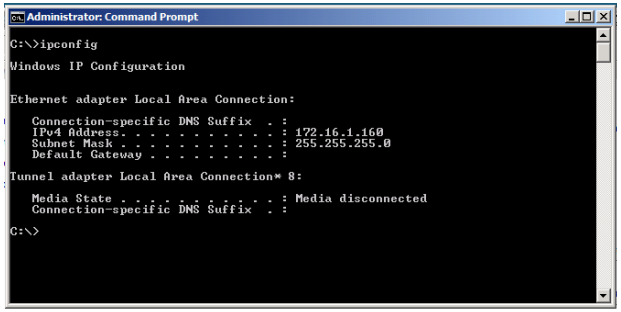



F-6-89

Steps

1) Use the cross cable to connect the machine to the PC with SST installed.
2) Turn on the main power switch of this machine.
3) Enter Service mode to start the machine in Download mode.
   Select COPIER > FUNCTION > SYSTEM > DOWNLOAD and press [OK].

4) Check the IP address of the PC.
Go to Start menu to select Program > Accessory > Command Prompt.
Type IPCONFIG and press [Return] to see the network settings of the PC.
If any discrepancies from the description in the figure below are found, change the network settings of the PC.

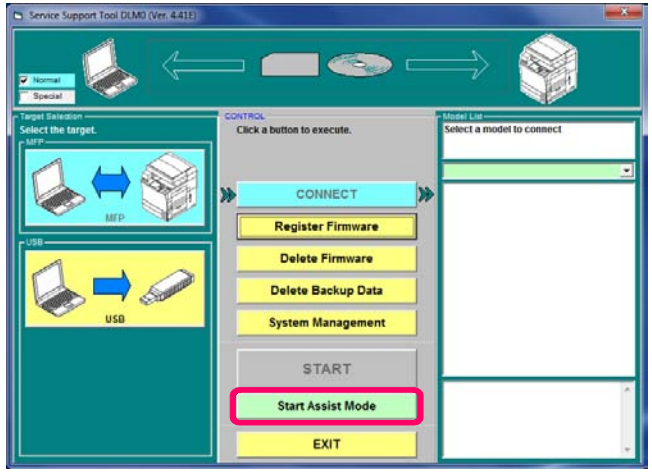



F-6-90

CAUTION:
The network settings are not shown with IPCONFIG if the PC is disconnected from the network. To check the settings, connect the PC to this machine at power-on by the cross cable.

## Downloading System Software (Assist mode)

1) Start this machine and enter Download mode (COPIER > FUNCTION > SYSTEM > DOWNLOAD).
2) Connect the PC to this machine and start SST.
3) Click “Start Assist mode” button.
Skip this step when starting SST in Assist mode.

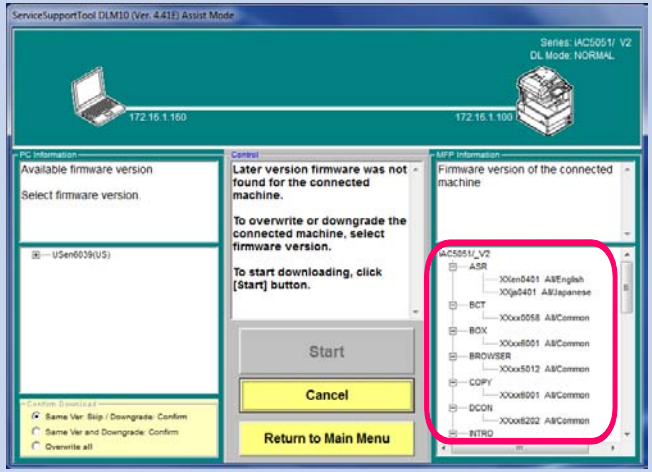



F-6-91

If the upgraded set of the system software is stored in SST, the new set is automatically selected.

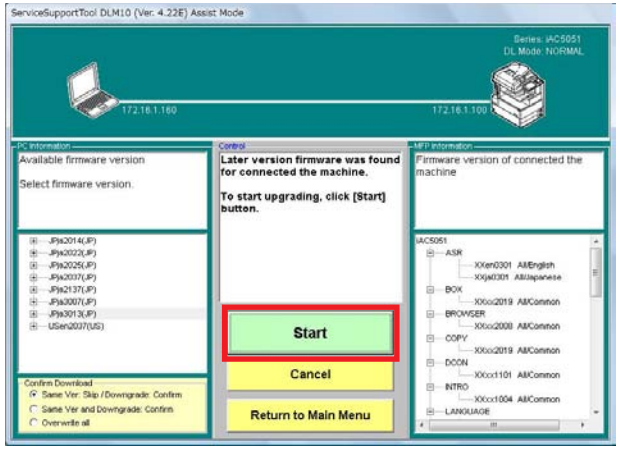
NOTE:
If no upgrade is stored, the existing system software set is unchanged. At any rate, any versions of the system software can be downloaded by manual selection.

NOTE:
When You was connected to the main body of Safe mode in Assist mode:
A system software of LANGUAGE, RUI, MEAPCONT, SDICT can acquire version information.




F-6-92

4) Click “Start” button




F-6-93

When download is completed, the machine is automatically restarted to initiate the writing process. The machine may repeat restarting several times depending on option configuration. Upon the system software written, the machine is restarted again and the main menu is displayed.

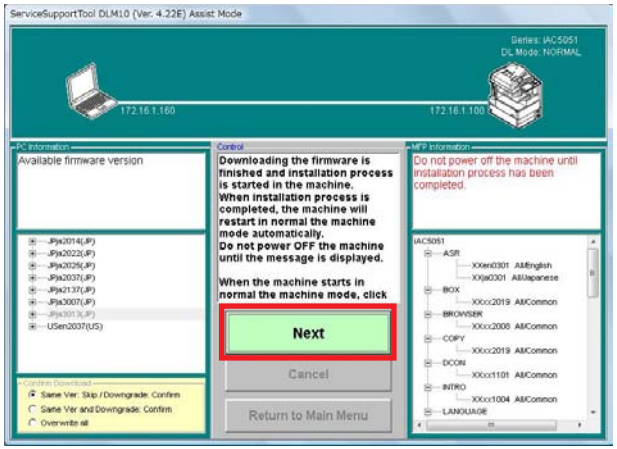
NOTE:Download Confirmation Message Modes
Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions
  Upgraded versions are downloaded without message.
  Skip download of the existing versions.
  Confirm whether to download downgraded versions.

- Confirm whether to download the existing versions / downgraded versions
  Upgraded versions are downloaded without message.
  Confirm whether to download and overwrite the existing versions.
  Confirm whether to download downgraded versions.
- Overwrite all versions
  Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.

By default, “Skip the existing versions and confirm whether to download downgraded versions” is selected.

5) Click"Next"button.



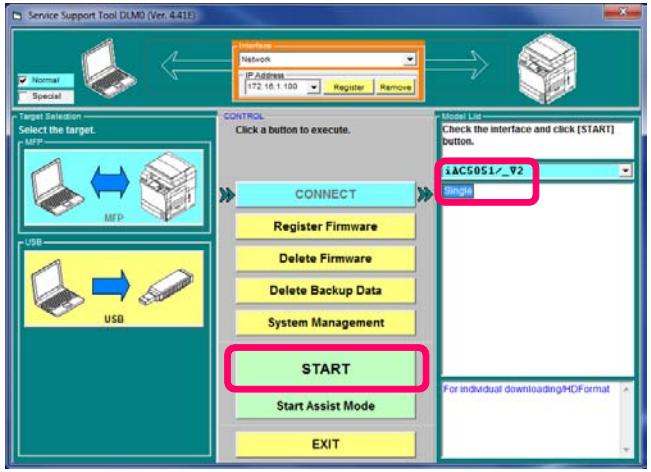

F-6-94

6) Disconnect the cross cable from the machine.
7) Enter Service mode to check the system software versions.
8) Click"OK"button.
   The main menu is displayed.

## Downloading System Software (Single mode)

The following is the sample steps to download DCON (the other components of the system software can be downloaded similarly).

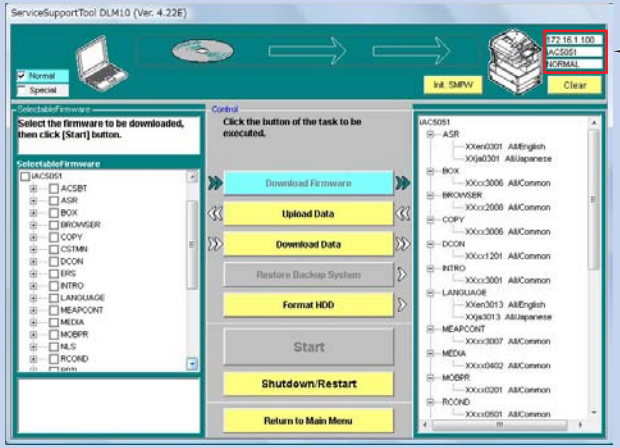
1) Start the machine in an appropriate Download mode.
2) Connect the PC to this machine to start SST.
3) Select the model to be connected and “Single”, check the network settings. Click “Start” button.




F-6-95

NOTE:
The following device information is shown at the right top of SST screen.

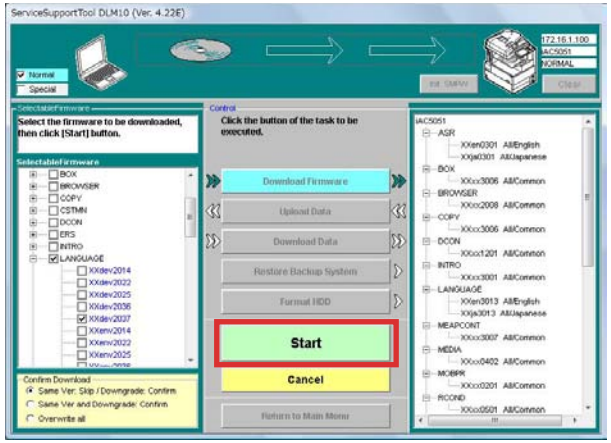
- IP address
- Model name
- Download mode




Device Information

F-6-96

4) Select the DCON version to be downloaded and click “Start” button.
Multiple files can be selected in this step.



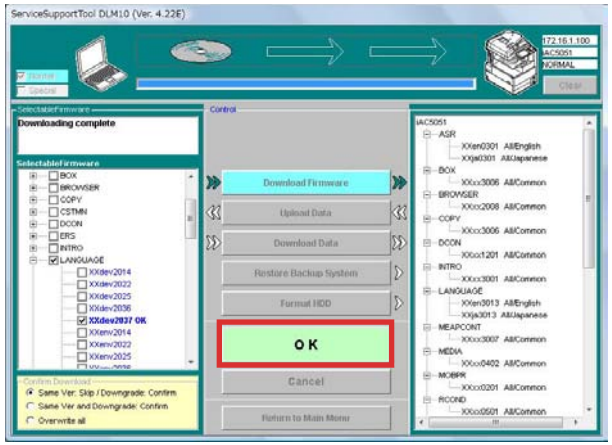

F-6-97

NOTE:Download Confirmation Message Modes
Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions
  Upgraded versions are downloaded without message.
  Skip download of the existing versions.
  Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions
  Upgraded versions are downloaded without message.
  Confirm whether to download and overwrite the existing versions.
  Confirm whether to download downgraded versions.
- Overwrite all versions.
  Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.

By default, “Skip the existing versions and confirm whether to download downgraded

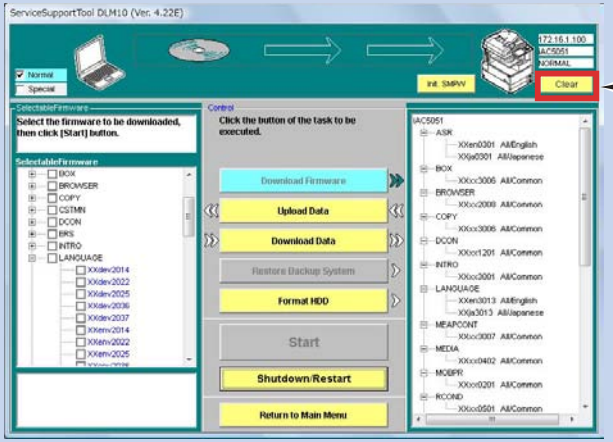
5) When download is completed, click “OK” button.




F-6-98

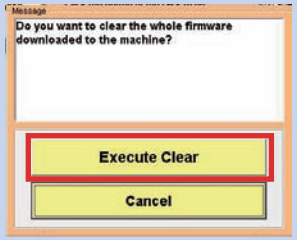
The main menu is displayed.

NOTE:
If it is before restarting the machine, the downloaded system software can be deleted not written on HDD or Flash ROM.
1) Click “Clear” button.




F-6-99

2) Click “Execute Clear” button.
The system software, which is stored in the temporary memory space of HDD, is deleted.

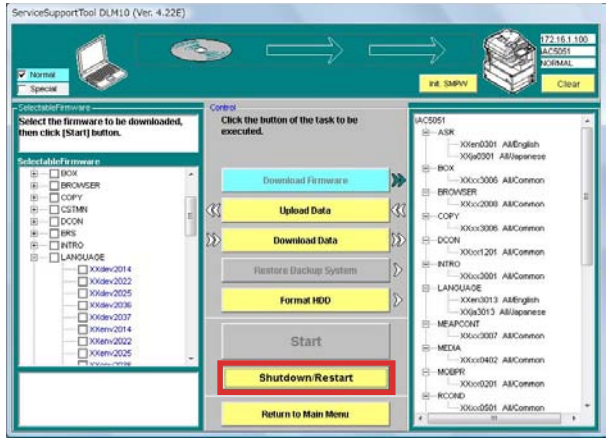



F-6-100

3) Click“OK”button.
Return to the previous screen.

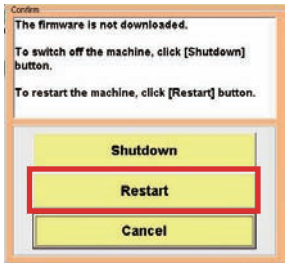
F-6-101

6) Click “Shutdown / Restart” button.




F-6-102

7) Click “Restart” button.




F-6-103

The machine is restarted.
The downloaded system software is written on HDD or Flash ROM.
8) Click"OK"button.
9) Enter Service mode to check the versions.

## Formatting HDD

### Overview

This machine probides the following two types of HDD Formatting.

- ALL:to format the whole HDD
  - When HDD set as the service parts (the new HDD) is mounted
  - When clearing the system software and data completely from HDD and reloading the system software.

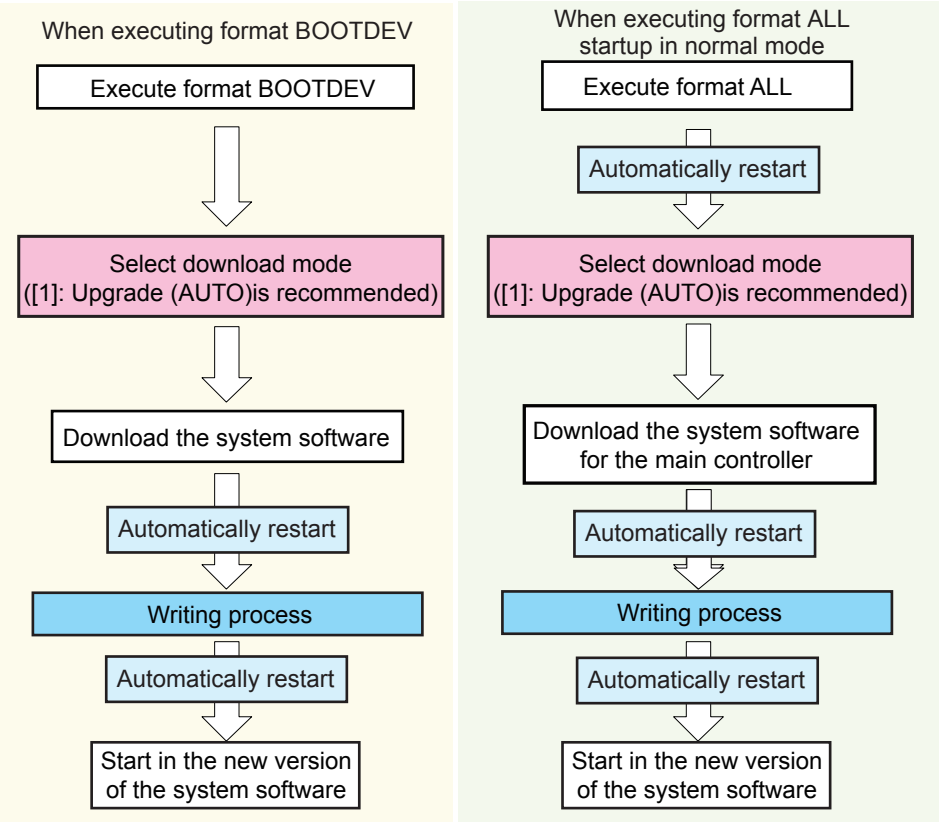
  Once Format ALL is executed in your machine, all the user data and MEAP applications held in HDD will be cleared. Ensure to gain an agreement from the user before formatting.

- BOOTDEV: to format the system software storage area on HDD.
  - When clearing the system software storage area and reloading the system software

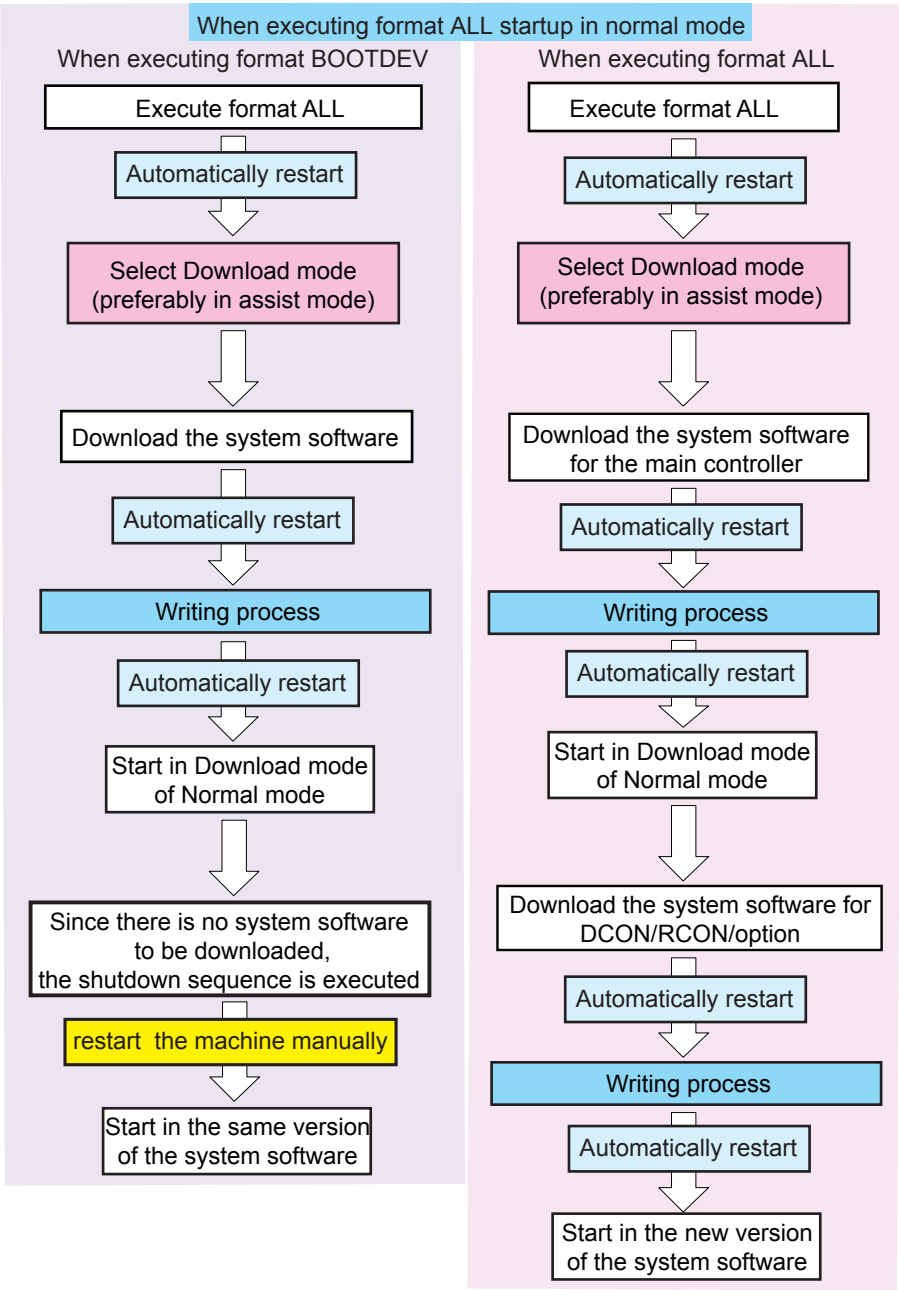
HDD needs not to be formatted at version upgrade.

HDD can be formatted only in Single mode.
After HDD is formatted, the machine cannot be started before the system software is downloaded.

After Format ALL is executed, the machine is automatically restarted to reflect formatting to HDD. At this time, the machine automatically starts in Download mode. For BOOTDEV format, the machine is ready to download the system software without restarting.
After formatting, enter either Assist mode(recommended) or Single mode to download the system software.

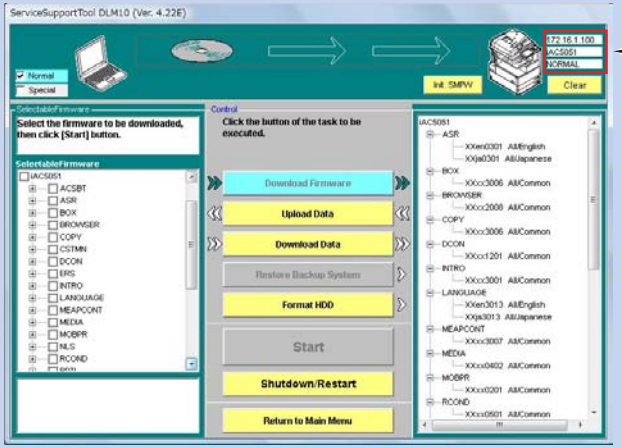

When executing format BOOTDEV
Execute format BOOTDEV
Select download mode
([1]: Upgrade (AUTO)is recommended)
Download the system software
Automatically restart
Writing process
Automatically restart
Start in the new version
of the system software
When executing format ALL
startup in normal mode
Execute format ALL
Automatically restart
Select download mode
([1]: Upgrade (AUTO)is recommended)
Download the system software
for the main controller
Automatically restart
Writing process
Automatically restart
Start in the new version
of the system software

F-6-104


When executing format ALL startup in normal mode
When executing format BOOTDEV
Execute format ALL
Automatically restart
Select Download mode
(preferably in assist mode)
Download the system software
Automatically restart
Writing process
Automatically restart
Start in Download mode
of Normal mode
Since there is no system software
to be downloaded,
the shutdown sequence is executed
restart the machine manually
Start in the same version
of the system software
When executing format ALL
Execute format ALL
Automatically restart
Select Download mode
(preferably in assist mode)
Download the system software
for the main controller
Automatically restart
Writing process
Automatically restart
Start in Download mode
of Normal mode
Download the system software for
DCON/RCON/option
Automatically restart
Writing process
Automatically restart
Start in the new version
of the system software

F-6-105

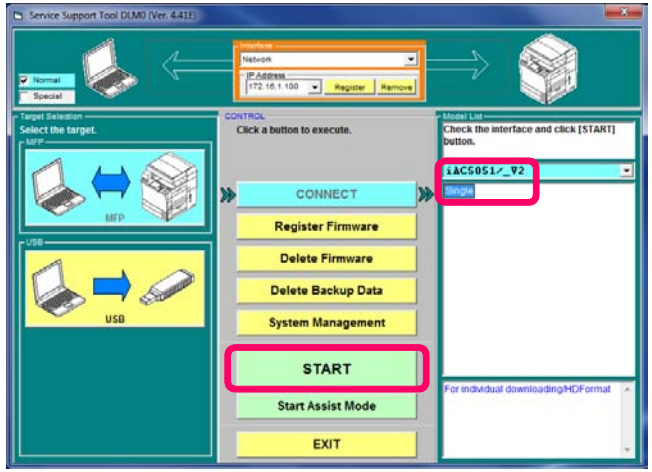
NOTE:
With SSTv4.41, due to sharing the simple mode processing with the existing models, the following screen is displayed.
As for the iR ADVANCE series models (or this machine), the procedure displayed on the screen is not necessary; thus, click the “Next” button to go on to the next screen.




F-6-106

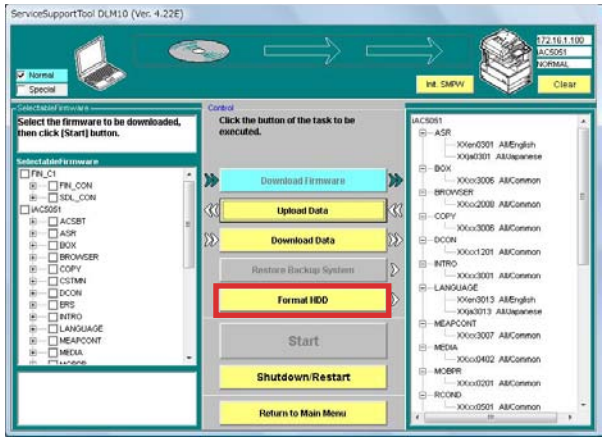
## Steps of Formatting

1) Enter Download mode. (Enter Safe mode when you mount the new HDD or when the machine is unable to start normally due to HDD failures, etc.)
2) Connect the PC to the machine to start SST.
3) Select the model to be connected and the information file (“single”) for individual download. Check the network settings and click “Start” button.



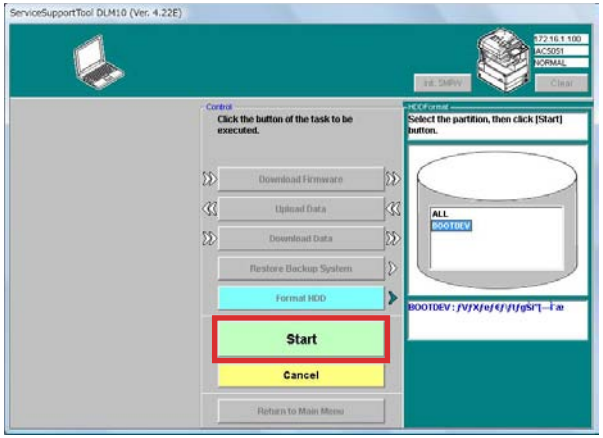

F-6-107

4) Click“Format HDD”button



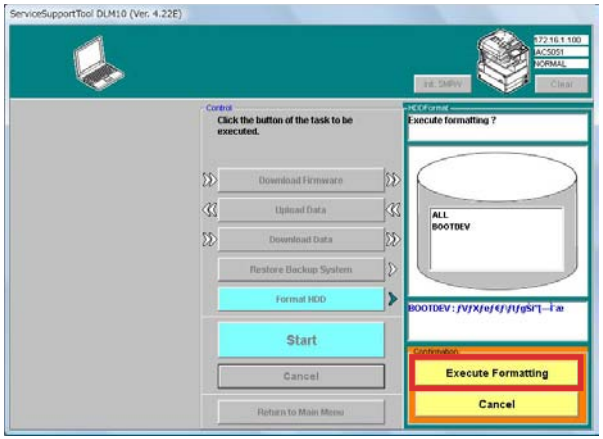

F-6-108

5) Select "BOOTDEV" or "ALL" to click "Start".




F-6-109

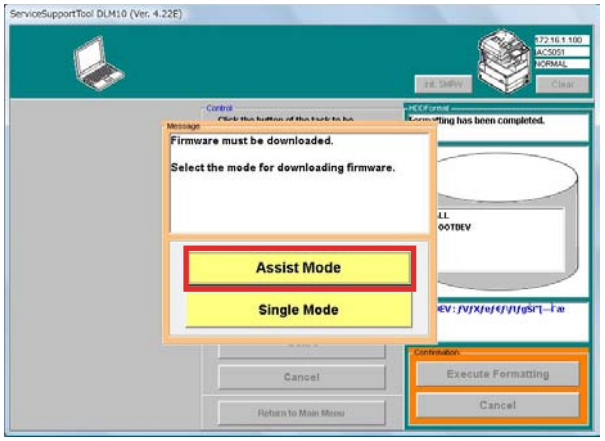
6) Click "Execute Format" button.




F-6-110

HDD is formatted.

7) Download the system software in any Download mode (Assist mode recommended). See the steps to download the system software for details.




F-6-111

CAUTION:

After HDD is formatted, ensure to download the system software. If the system software is not downloaded, E602 error is triggered at power-on.

CAUTION:

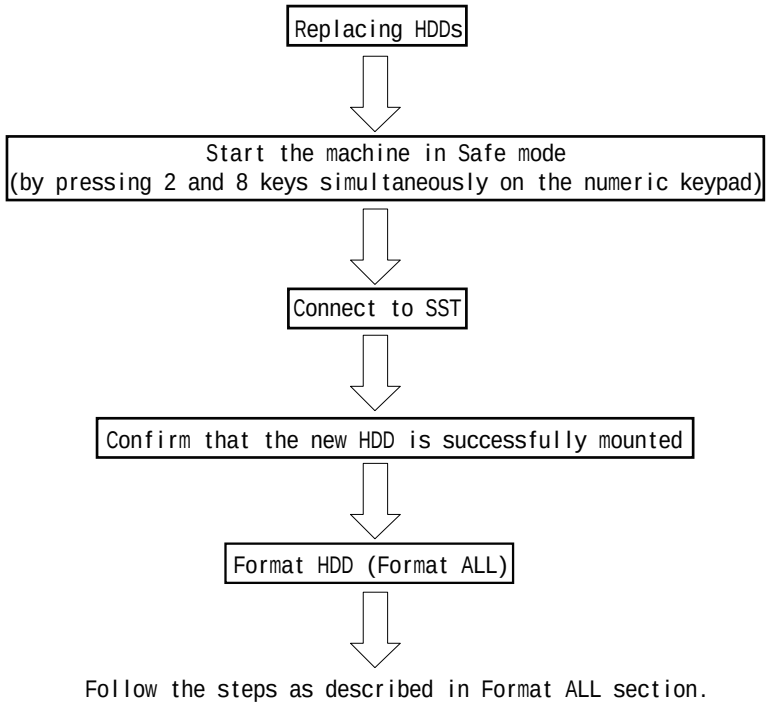
Restarting takes more time after HDD is formatted and the system software is downloaded (to write the downloaded software).

Down time may be approx. 5 minutes in maximum to proceed the writing process. Never turn OFF the machine while Starting screen is shown.

## Mounting New HDD

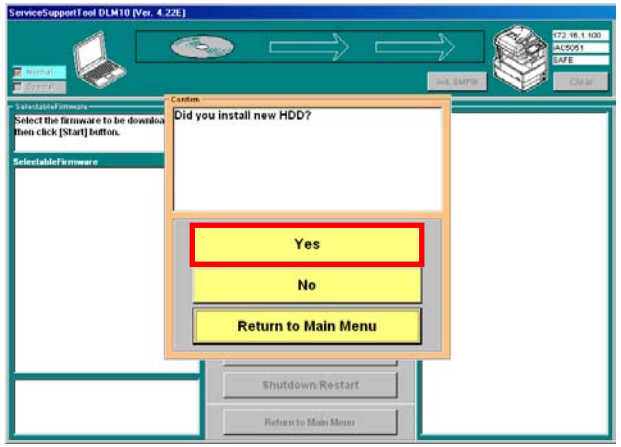
After HDD set as the service parts is mounted, the new HDD should be formatted initially. In this case, the message is shown to confirm if the new HDD is mounted.

The figure below shows the abbreviated steps.



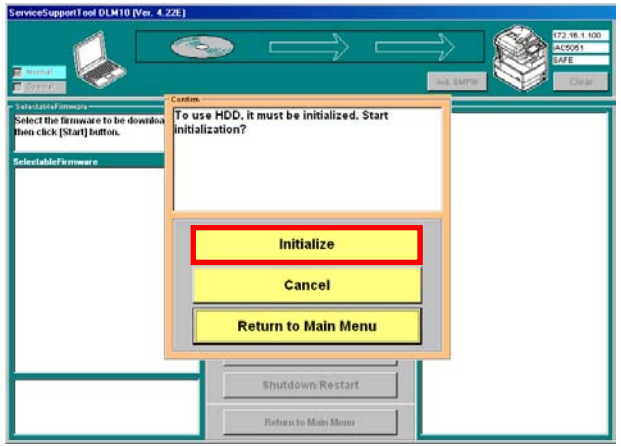

F-6-112

When the new HDD is mounted, the machine cannot be started in the normal procedure. Start the machine in Safe mode as Download mode. When gaining connection to SST, the message is shown to confirm if the new HDD is mounted.




F-6-113

Click "Yes" and the message is shown, confirming whether to format HDD.




F-6-114

Click “Initialize” button to initialize HDD (Format ALL). Follow the steps described in Format ALL section to download the system software.

## Backup

### Overview

At the time of replacing controller PCBs, the backup function enables to save data held in the PCB to migrate them to the new PCB.

- Backup via SST

| Backup data | Downloaded/Uploaded file names |
|---|---|
| Backup data RAM | SramImg.bin(to be uploaded / downloaded) |
| MEAP applications | MeapBack.bin(to be uploaded / downloaded) |
| For investigation in Dev | Sublog.bin(Downloadable) |
| Service Print | The text file of the contents which You output to paper with a service mode(Downloadable). |

T-6-19

  - Backup RAM holds the data from Backup RAM of the Main Controller PCB 2. (Before replacing the Main Controller PCBs, DC Controller PCB, be sure to back up the data because Backup RAM holds the parts durable counter data and service mode setting data in the Main Controller.)
  - MeapBack holds MEAP applications and their data stored in HDD

- Backup via Service mode

| Backup data | Service mode |
|---|---|
| Backup of Reader Controller PCB | COPIER > FUNCTION > SYSTEM RSRAMBUP (Backup)<br>COPIER > FUNCTION > SYSTEM RSRAMRES (Restore) |
| Backup of DC Controller PCB | COPIER > FUNCTION > SYSTEM DSRAMBUP (Backup)<br>COPIER > FUNCTION > SYSTEM DSRAMRES (Restore) |

T-6-20

Data is stored in HDD

NOTE:
Before replacing the Reader Controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Reader Controller PCB.

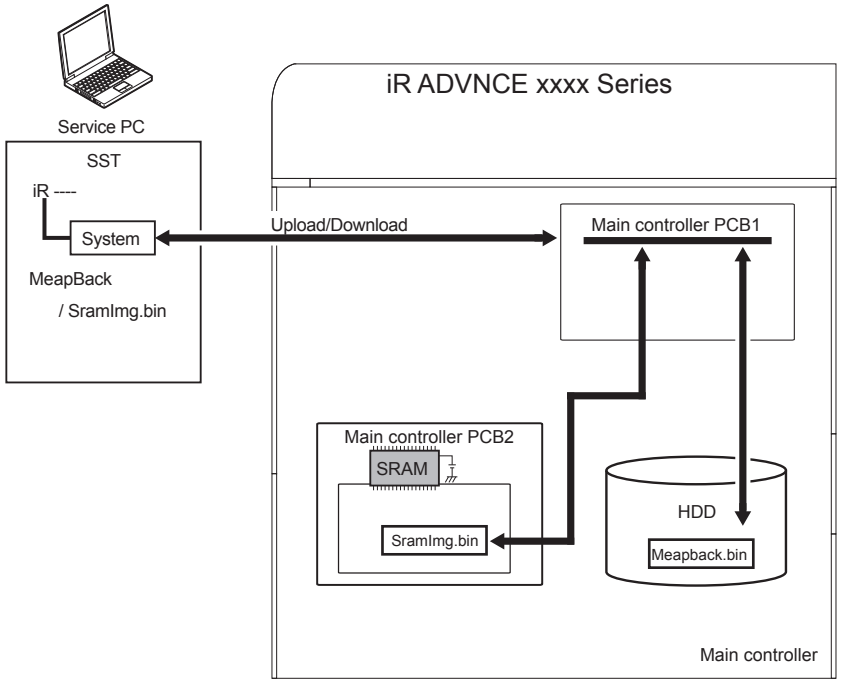
Before replacing the DC controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Controller PCB.

Before replacing the Main Controller PCB 2, upload SramImg.bin. By downloading SramImg.bin after replacement, the new Main Controller PCB 2 inherits the data including Service mode stored in the old PCB

## Steps to Upload Data

CAUTION:

- When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.
- The backup data can be downloaded only on the machine from which the data were uploaded.
- This machine does not use SramRCON and SramDcon



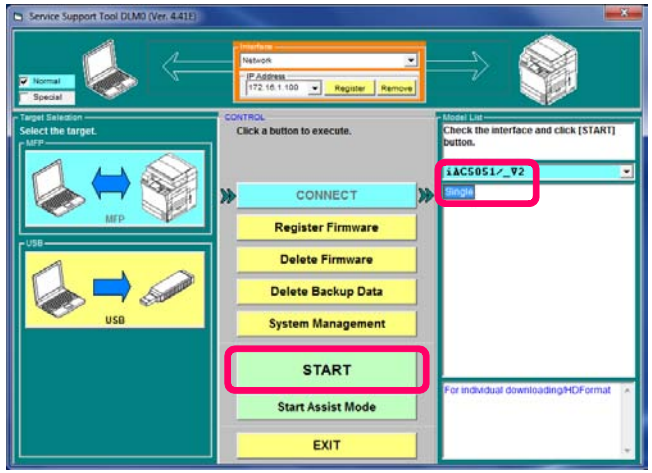

F-6-115

Listed below are the sample steps to upload MeapBack.

1) Enter Download mode.

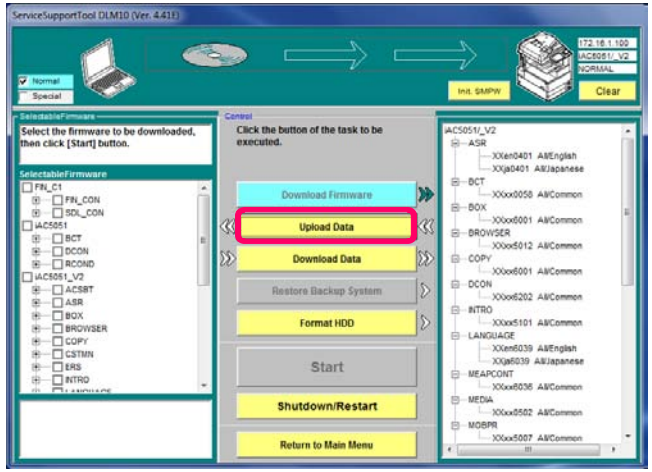
2) Connect the PC to the machine to start SST.

3) Select the model to be connected and the information file for individual download ("Single"). Check the network settings and click "Start".



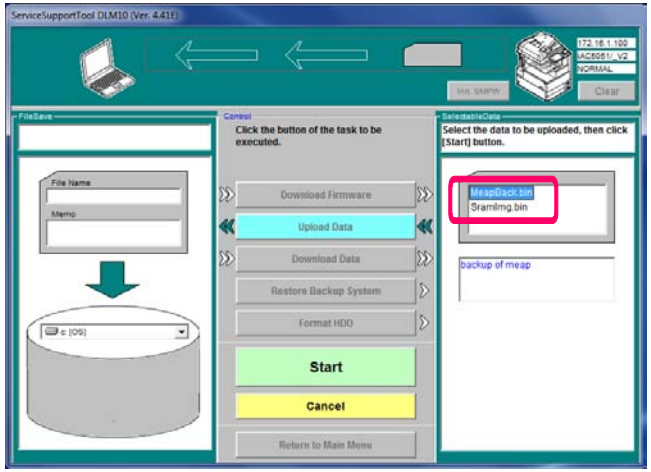

F-6-116

4) Click "Upload Data" button.



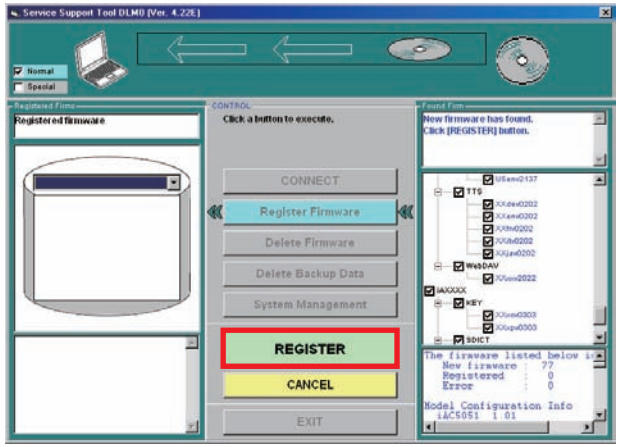

F-6-117

5) Select “MeapBack.bin” to click “Start” button.




F-6-118

6) Enter the file name to be saved and comments when necessary. Click “Save” button.




F-6-119

7) Click “OK” button

.

## Steps to Download Data

CAUTION:

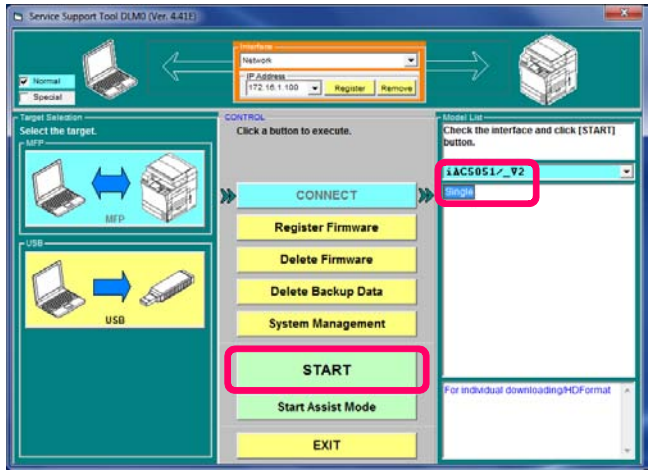
The backup data can be downloaded to the machine from which the data were uploaded

Store Meapbackup.bin; and "Settings/Registration > Data Management> Initialize All Data/Setings"; Restore it; even if it, cannot log in to SMS.

Restore Meapbackup.bin which backed up after "Initialize All Data/Setings"; store it.

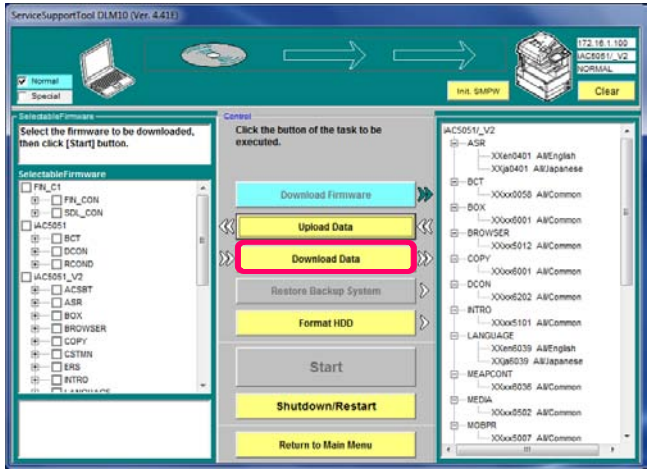
Listed below were the sample steps to download MeapBack.

1) Enter Download mode
2) Connect the PC to the machine and start SST.
3) Select the model to be connected and “Single”. Check the network setting and click “Start” button.



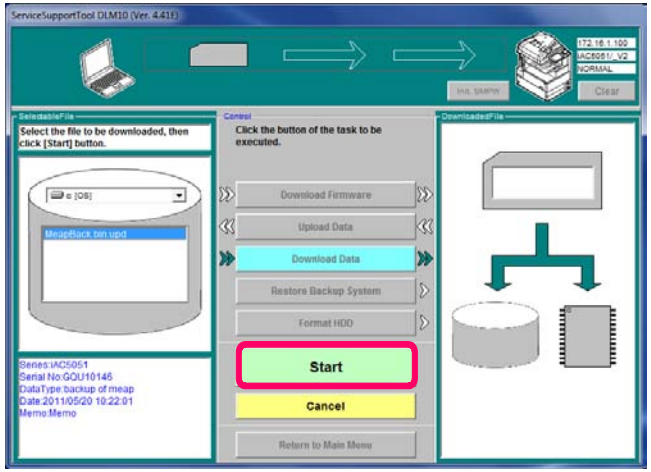

F-6-120

4) Click “Download Data” button.




F-6-121

5) Select the data to be downloaded and click “Start” button.




F-6-122

6) When the data are successfully downloaded, click “OK” button.

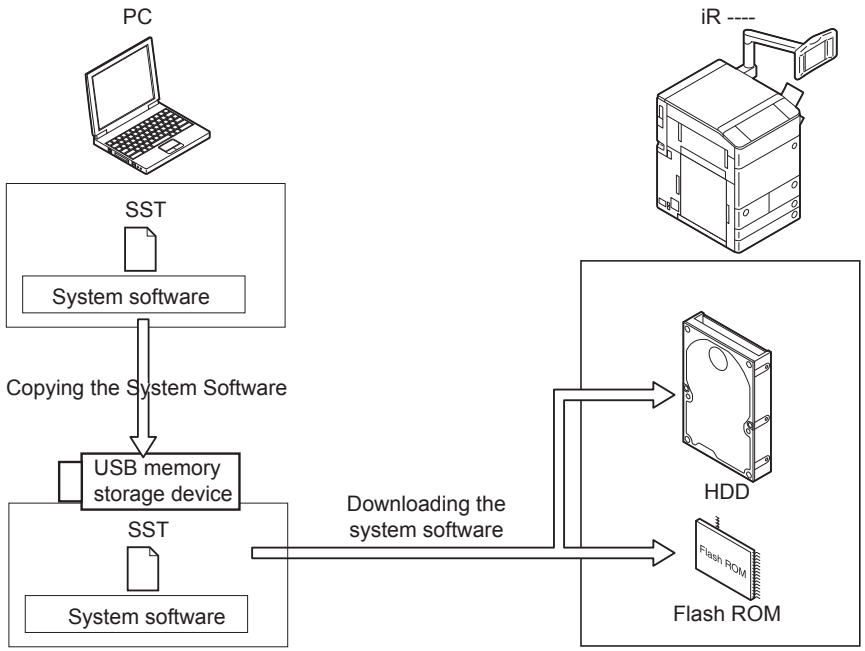
7) Restart the machine

# Version Upgrade using USB memory Storage Device

## Relation between SST and USB memory Storage Device

When using the USB memory storage device storage device for version upgrade, the system software should be copied to the USB memory storage device storage device. By inserting the USB memory storage device storage device to the slot of the machine, the system software can be upgraded.

The figure below shows the relation between SST and USB memory storage device storage device.



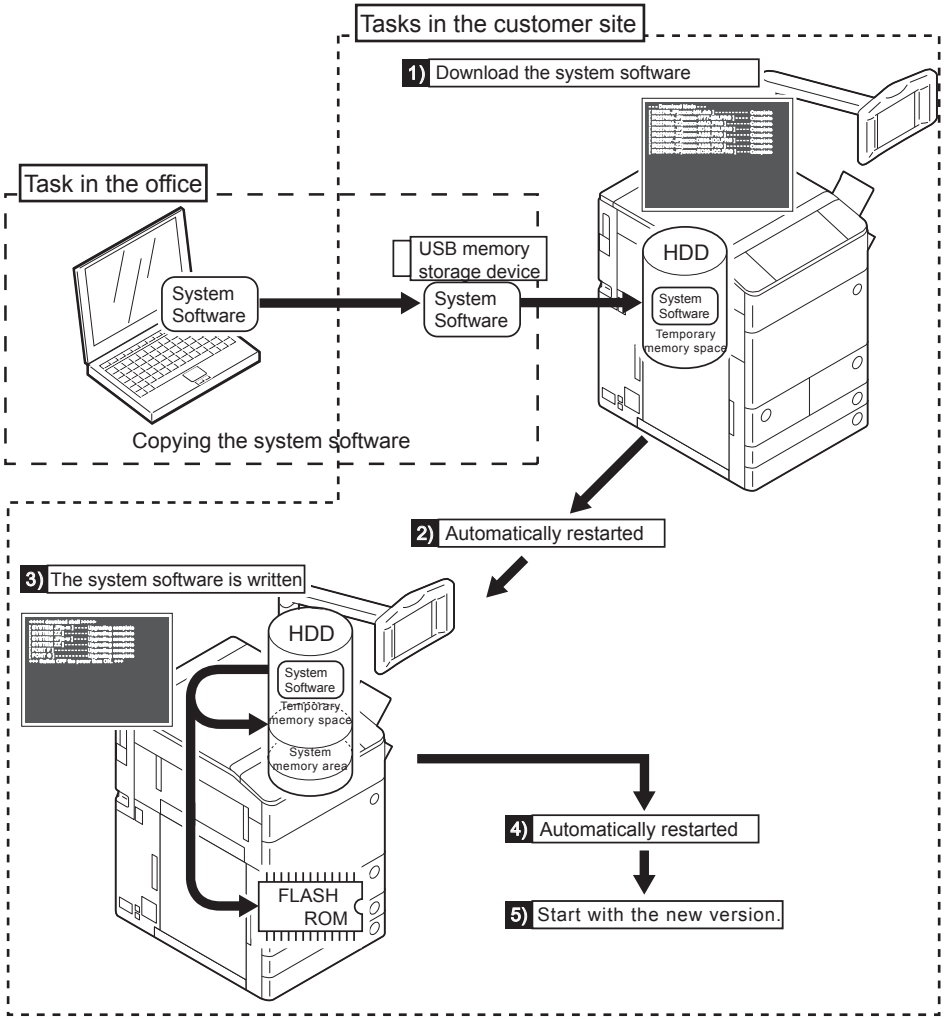

F-6-123

When downloading the system software, enter any of Download modes below.

- Normal mode (recommended)
  Select COPIER > FUNCTION > SYSTEM > Download in Service mode and press [OK].
- Safe mode (only when any system error occurs or the machine is unable to start normally; turn ON the main power switch by pressing 2 and 8 keys simultaneously on the numeric keypad)

## Downloading System Software

Copy the system software from SST to the USB memory storage device storage device.
Right after download from the USB memory storage device storage device, the system software is stored in the temporary memory space in HDD.
The system software is written in the system memory area, Boot area and Flash ROM upon the machine restarted.
When the writing process is successfully completed, the machine is automatically restarted with the new version of the system software.




F-6-124

## Copying System Software

### System CD to SST

Copy the system software stored in the system CD to SST.

NOTE:
The system software is compressed if the file size exceeds the CD memory capacity.
If the above is the case, decompress the file before copying it to SST.

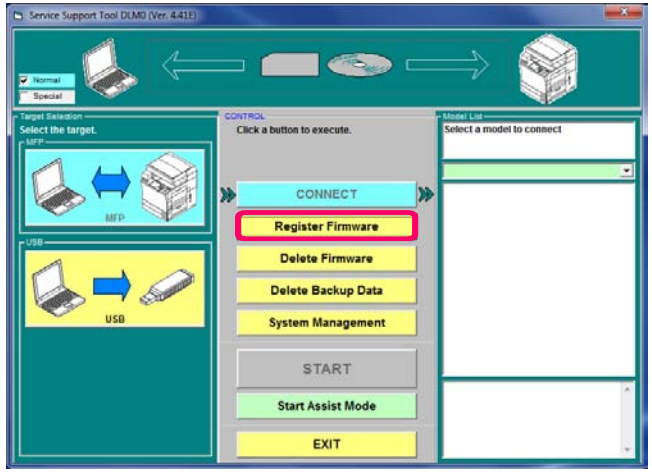
Preparation

Requirements:

- PC with SST Ver. 4.41 or later installed
- The system CD for this machine

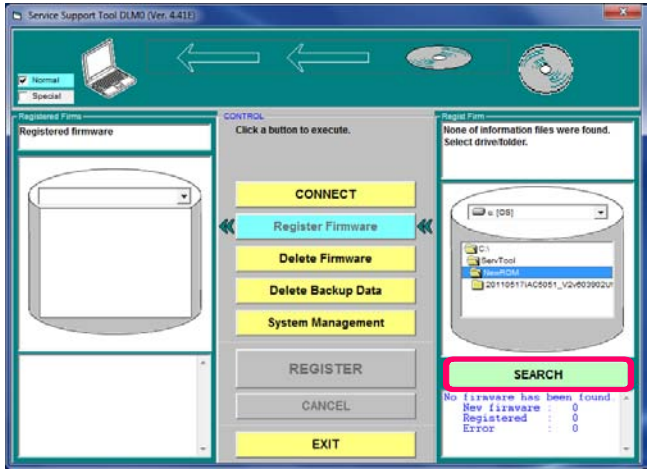
Steps to copy the system software

1) Start the PC.
2) Set the system CD to the PC.
3) Start SST.
4) Click “Register Firmware” button.



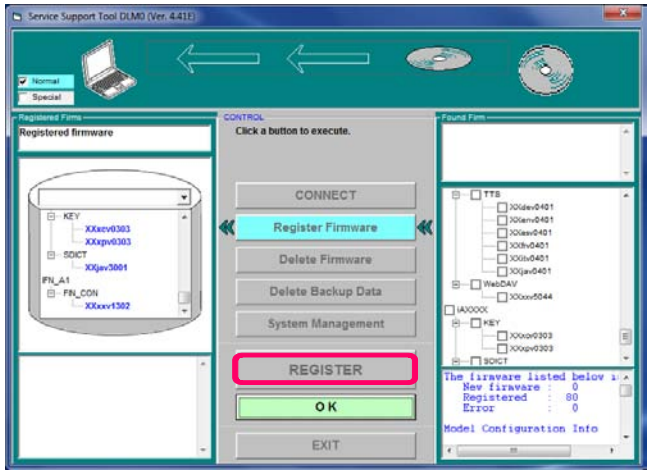

F-6-125

5) Select the drive where the system CD is set and click “Search” button.



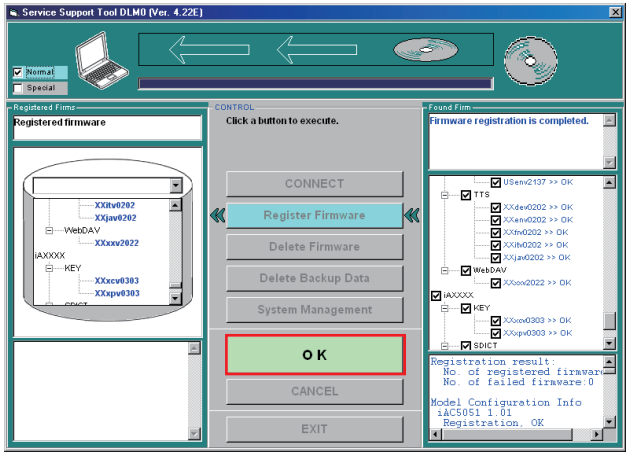

F-6-126

6) The list of the system software components stored in the system CD is shown on the screen.
Uncheck the box(es) of unnecessary folder(s) and/or system software component(s) and click “Copy” button.




F-6-127

7) The message is shown when the system software is copied. Click “OK” button.




F-6-128

## SST to USB memory Storage Device

Copy the system software stored in SST to the USB memory storage device storage device.

Preparation

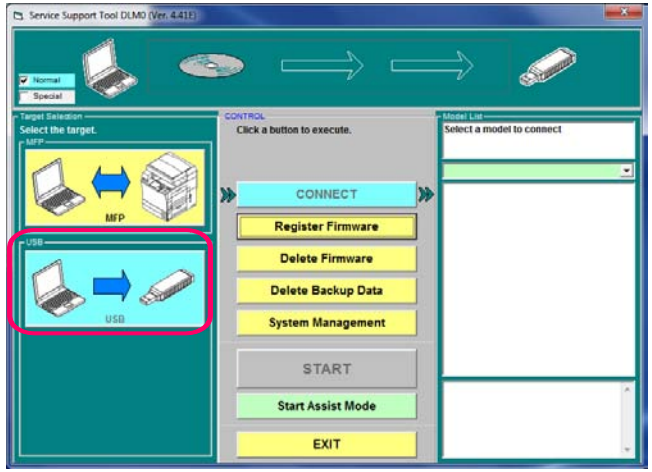
Requirements:

- PC with SST Ver. 4.41 or later installed
- USB memory storage device (*)

Requirements for USB memory storage device:
Interface: USB 1.1 or later (USB 2.0 is recommended)
Memory capacity: 1GB or more is recommended (the total file size of the system software is approx. 500MB).
Format: FAT (FAT 16), FAT32 (NTFS and HFS are not supported). The memory is formatted in a partition (multiple partitions are not supported)
Unavailable USB memory: memory that is protected by a password or the encryption technology.

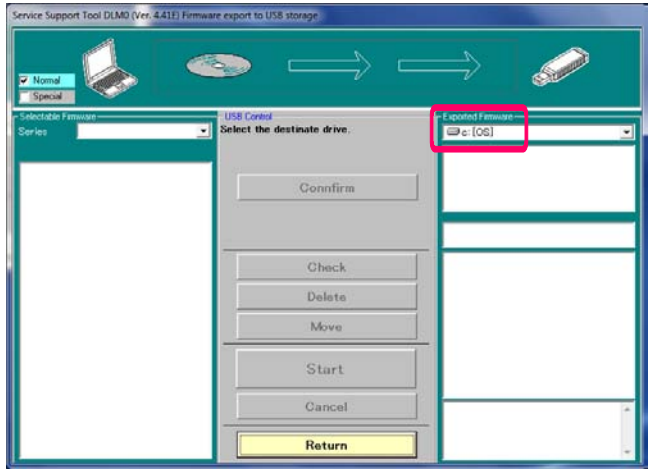
Steps to copy the system software

1) Start the PC.
2) Insert the USB memory storage device storage device to the slot of the PC.
3) Start SST.
4) Click the USB icon shown in "Select the target" Screen.



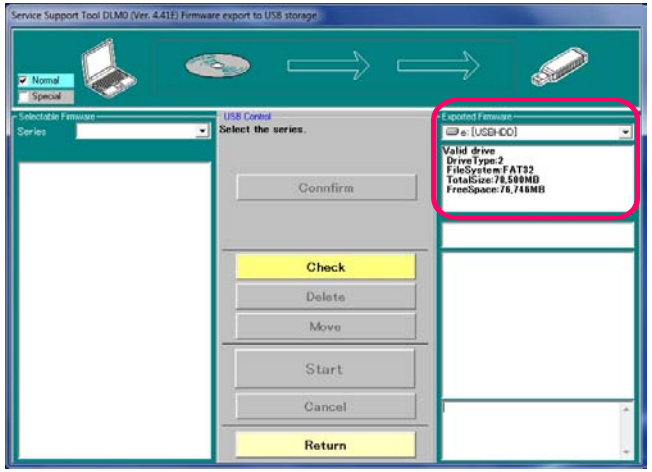

F-6-129

5) Select the drive (removable disk) where the USB memory storage device storage device is inserted.




F-6-130

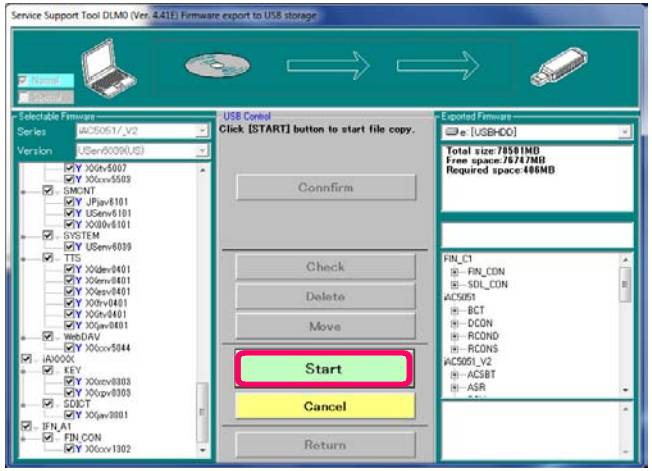
6) Select “Series” and “Version” (the System Version).




F-6-131

NOTE:
The signs shown in the field of “Firmware registration static” indicate the following:
Y: Stored in SST
N: Not stored in SST

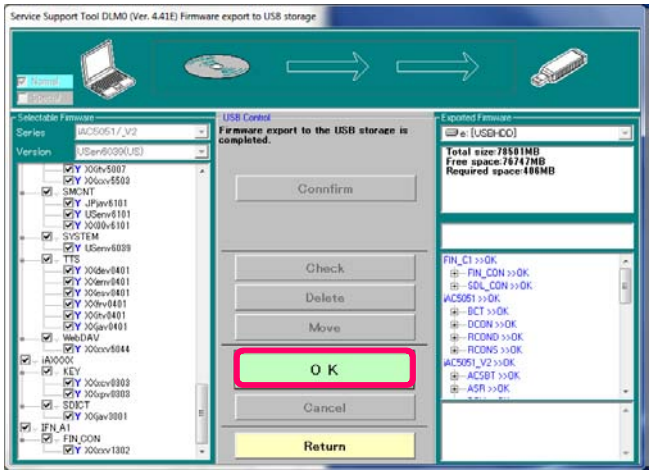
7) Click “Start” button.
Start copying the system software to the USB memory storage device storage device.




F-6-132

NOTE:
When the accessory configuration is known for the machine where the system software is to be downloaded, uncheck the boxes of unnecessary accessories. E753-0001 is triggered if the software for an unnecessary accessory is downloaded. (If this occurred, turn OFF/ON the power to recover the error.)

8) Click “OK” when the system software is successfully copied in the USB memory storage device storage device.




F-6-133

## Connection

CAUTION:

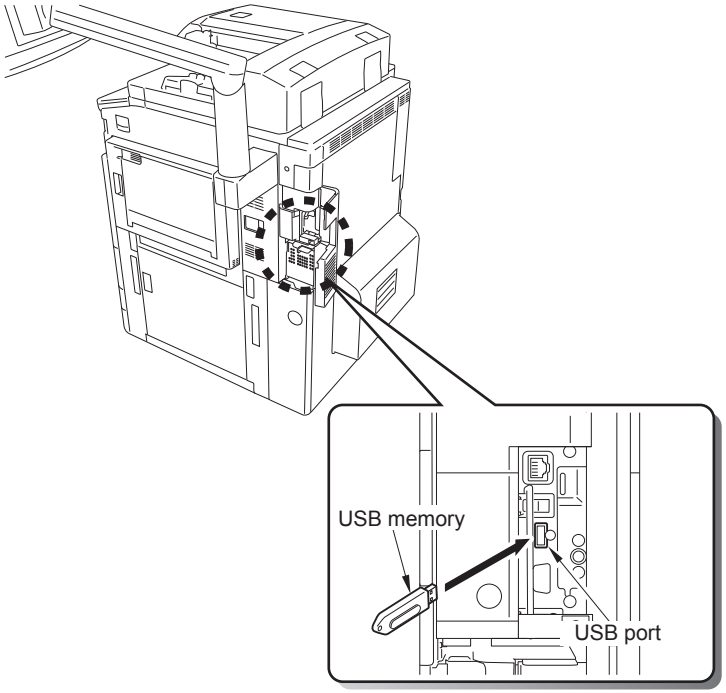
This machine does not communicate with SST once it recognizes a USB memory storage device; therefore, SST and a USB memory storage device cannot be used at the same time.

Preparation

Item to prepare: a USB memory storage device, which the system software for this machine is stored.

Procedure

1) If a cross cable is connected to this machine, remove the cross cable.
2) Connect the USB memory storage device to the USB port.




F-6-134

3) Switch to the download mode to use.

- In the case of normal mode (Recommended)
  Select the following in Service Mode: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and then press [OK].
- In the case of safe mode (This mode should not be used as general rule. To be used only when normal startup fails, such as a system error, etc.)
  While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch.
  Once this machine recognizes the USB memory storage device, the following menu is displayed on the Control Panel.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
-----------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 [Reset]: Shutdown
```

F-6-135

CAUTION:

Depending on the manufacturer or the model, this machine may not recognize the USB memory storage device.

This machine retries the detection of a USB memory storage device for up to 60 seconds after power-ON. The above menu is not displayed if the recognition of a USB memory storage device is failed within the time period.

In such a case, use another USB memory storage device.

## Upgrading System Software

### Menu/Function Overview

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 [Reset]: Shutdown
```

F-6-136

Downloading System Software

[1]: Upgrade(Auto)

To download/write the system software (automatic)

[2]: Upgrade (w Confirmation)

To download the system software (confirmation)

[3]: Upgrade (Overwrite all)

To download the system software (overwriting)

[4]: Format HDD

To format the HDD/BOOTDEV partition

[5]: Backup

Collection of debug Log or Service Print(Because You are for R&D review, do not use it other than the following.)

[7]: Clear downloaded files

To clear the system software immediately after downloading (before writing)

[8]: Download Menu 2

To move to Download Menu 2

[9]: Other Menu

Others (e.g.: version information)

[Reset]: Shutdown

To execute shutdown sequence

Press the key on the Control Panel to select/execute the functions.

### Points to Note When Operating/Using System Software

NOTE:
The following download method is recommended to execute normal download of the system software (any download work other than downloading after replacing/formatting the HDD):
Download mode --- Normal mode
Download menu --- [1]: Upgrade (Auto)

CAUTION:Prohibition to turn OFF the power during downloading/writing

Do not turn OFF the power during downloading or writing of the system software; otherwise, this machine may not be started even if the power is turned ON.

If the machine fails to be started even if the power is turned ON, start the machine in safe mode (pressing 2 + 8 keys).

When the machine can be started in safe mode, be sure to download the system software once again.

If the machine fails to be started, replace the HDD and then download the system software.

CAUTION:Caution when the power is turned OFF

Be sure to execute shutdown sequence to quit download mode.

Pressing the [Reset] key and then the [0] key on the menu screen executes the shutdown sequence.

Once the message on the touch panel disappears, turn OFF the Main Power Switch.

F-6-137

## Downloading/Writing System Software (Automatic)

### [1]: Upgrade (Auto)

The version is compared between the host machine/option and the system software in the USB memory storage device to download only the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.
In safe mode, only the following system software can retrieve the version information (the version is compared).

SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT

As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:
<In the case of startup in normal mode (Recommended)>

For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>

The system software of the options which are not connected are not downloaded.

After downloading is complete, this machine is automatically restarted to write the downloaded system software to the HDD system area/flash ROM.

Operation procedure

1) Enter download mode.
2) Connect the USB memory storage device to the USB port.

3) Press the key on the Control Panel.

[1] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 [Reset]: Shutdown
```

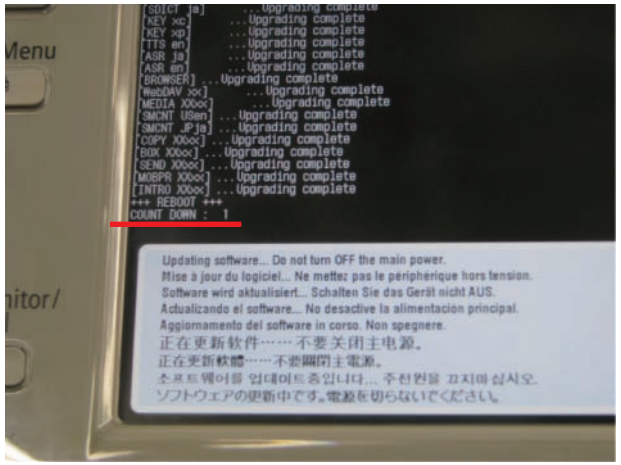
F-6-138

During downloading, download status is displayed on the Control Panel.

F-6-139

Once downloading is complete, this machine is automatically restarted to start writing to the HDD system area/flash ROM.

The screen shows the countdown once writing process is properly complete.




F-6-140

Once the countdown shows 0, this machine is automatically restarted.

4) When the main menu is displayed, press the removal key at the lower right on the touch panel and select removal of the memory media, and then remove the USB memory storage device.

CAUTION:

After HDD formatting and downloading, this machine takes a long time (for writing the software).

This machine, in some cases, stays in standby screen up to 10 min during writing. At this time, do not turn off the main power switch.

## Downloading System Software (Confirmation)

### [2]: Upgrade (w Confirmation)

The version is compared between the host machine/option and the system software in the USB memory storage device to download the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.
When the system software version in the USB memory storage device is the same or older, a confirmation message is displayed on the Control Panel so that the user can select whether to overwrite or not.

In safe mode, only the following system software can retrieve the version information (the version is compared).
SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT
As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:
<In the case of startup in normal mode (Recommended)>
For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>
The system software of the options which are not connected are not downloaded.

Unlike menu [1], this machine is not automatically started despite completion of downloading. By manually turning OFF/ON the power, the system software is written at the time of startup. In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.

Operation procedure
1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
[2] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[2] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-141

During downloading, download status is displayed on the Control Panel.

NOTE:
When the system software version in the USB memory storage device is the same or older than the system software in the HDD, a message is displayed in each case to confirm whether to overwrite or not.
Press the key on the Control Panel.
[0]: To overwrite/Any key other than [0]: Not to overwrite

```
////Copying files from USB-dev.///
[Warning] Same version or old version.
--------------------------------------
[BOOT XXxx]...Same. OVERWRITE?
   -- (YES):0 /(NO):The other keys--
```

F-6-142

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

F-6-143

4) Press the “Reset” key.
   Shutdown sequence is executed.
5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
6) Remove the USB memory storage device.
7) Ensure the LED at the lower right on the Control Panel is turned OFF, and turn ON the Main Power Switch.
   Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly completed.
   The screen shows the countdown once the writing process is properly completed. This machine is restarted with the downloaded system software at the count of 0.

## Downloading System Software (Overwriting)

### [3]: Upgrade (Overwrite all)

Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.
Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.
Unlike menu [1], this machine is not automatically started despite completion of downloading. By manually turning OFF/ON the power, the system software is written at the time of startup. In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.

Operation procedure
1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [3] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[3] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-144

During downloading, download status is displayed on the Control Panel.

CAUTION:

In overwriting download mode of the USB memory storage device, all the system software stored in the USB memory storage device is downloaded as well. Therefore, be sure to keep the following in mind: If the USB memory storage device includes the system software of non-connecting option, E753-0001 is displayed when the writing process is completed.

In the case of an error in downloading of the non-connecting option, the machine can be recovered by turning OFF/ON the power.

To prevent such error, uncheck the applicable system software so that the system software of the non-connecting option is not downloaded when downloading the system software from SST to USB.

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

F-6-145

4) Press the “Reset” key.
   Shutdown sequence is executed.
5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
6) Remove the USB memory storage device.
7) After checking that the LED is turned OFF at the lower right on the Control Panel, turn ON the Main Power Switch.
   Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly complete.
   When the countdown shows 0, this machine is restarted with the downloaded system software.

## Formatting HDD

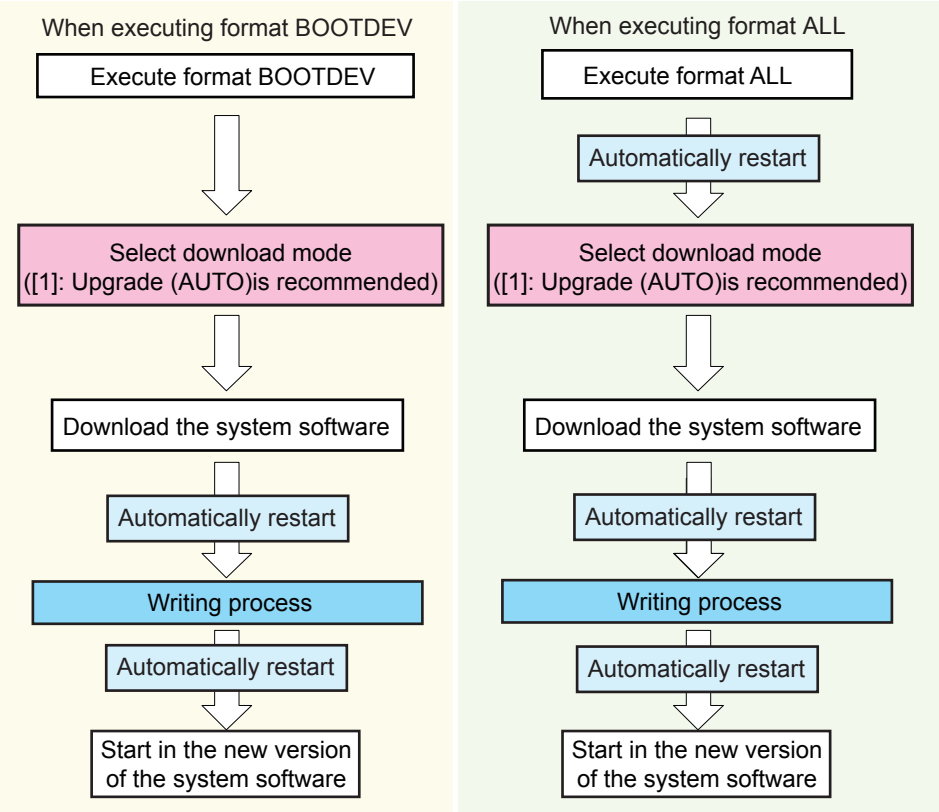
### HDD Format Overview

The following 2 types of formatting methods are available with this machine:

- ALL: To initialize the entire HDD
  - In the case of installing the HDD provided as a service part (a new HDD).
  - In the case of cleaning the entire software and data in the HDD to reinstall the system software.

  All the user data and MEAP application in the HDD is deleted when executing Format ALL with the machine in use; therefore, be sure to obtain agreement from the user to execute Format ALL.
- BOOTDEV: to format the system software storage area on HDD.
  - In the case of normal upgrading by cleaning the storage area of the system software to reinstall the system software, HDD formatting is not required.
  - User data is not erased.

After formatting, this machine cannot be started unless the system software is downloaded. When Format ALL is executed, initialization process is reflected to the HDD so that this machine is automatically restarted to automatically enter download mode. In the case of formatting BOOTDEV, the machine is not automatically restarted, but the system software can be downloaded.
After formatting is executed, be sure to download the system software by “[1]: Upgrade (AUTO)” in main menu.




F-6-146

## [4]: Format HDD

This mode executes formatting of BOOTDEV partition or the entire HDD.

Operation procedure

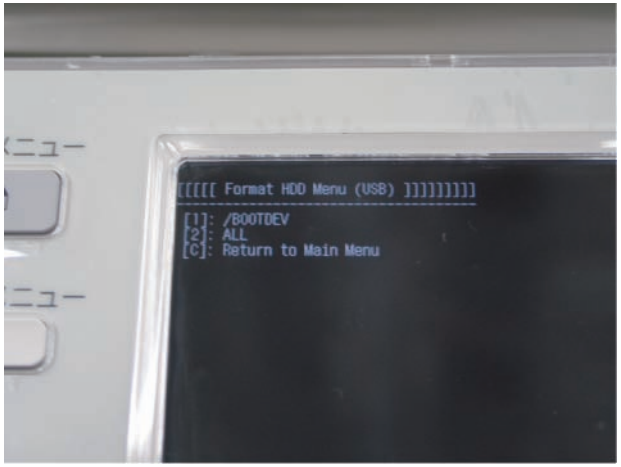
1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [4] -> [0]: To execute formating /Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[4] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-147

4) Press the key on the Control Panel.
[1] -> [0]: To execute formatting BOOTDEV/Any key other than [0]: To return to the menu screen.
[2] -> [0]: To execute formatting the entire HDD/Any key other than [0]: To return to the menu screen.
[C]: To return to the menu screen.




F-6-148

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

5) Press any key to return to the menu screen.
6) Download the system software.
Refer to “Separate Download” for details.

## Backup

### [5]: Backup

CAUTION:
This function includes R&D review.Do not usually use it other than the following function.
The USB memory collecting log uses the USB memory where You registered a system software for this Host machine with by SST.

Operation procedure
1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
[5] -> [0]: To execute formating /Any key other than [0] key: To return to the menu screen.
4) SRAM backup of Main Controller PCB 2
[1] Sublog -> Collect debugging log.
[4] ServicePrint -> Save the service data which P-PRINT or etc. output to paper with a text format.

```
[[[[[ Backup Menu (USB) ]]]]]]]]]]]
――――――――――――――――――――

[1]: Sublog
[4]: ServicePrint
[5]: Netcap
[C]: Return to Main Menu
```

F-6-149

## Clearing Download File

### [7]: Clear downloaded files

This menu clears the system software stored in the temporary storage area of the HDD.

This function is used to clear the downloaded file without writing it after downloading the system software in menu [2] or [3].

Operation procedure

1) After downloading by menu [2] or [3], press the “Reset” key to execute shutdown sequence, and then turn OFF the main power once the screen display disappears.
2) Start the machine in safe mode (while pressing 2 + 8 keys at the same time, turn ON the Main Power Switch).

If the system software is stored in the HDD temporary storage area when starting the machine in safe mode, the system software is deleted. In such a case, the following message is displayed on the touch panel.

“All downloaded file is deleted.”

3) Turn OFF the Main Power Switch.
4) Remove the USB memory storage device.

## Download Menu 2

### [8]: Download Menu 2

[8]: Download Menu 2

[1]: Service Mode Password Clear

```
[[[[[ download Menu 2nd (USB) ]]]]]]
------------------------------------
[1]: Service Mode Password Clear
[C]: Return to Main Menu
```

F-6-150

## Other Menu

### [9]: Other Menu

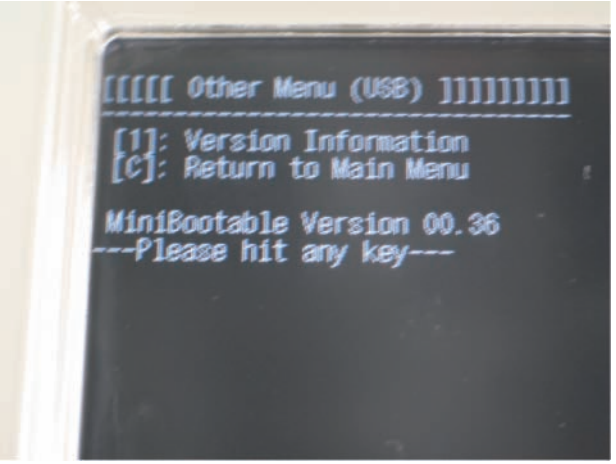
This mode displays other menu.

Operation procedure

1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [9] -> [0]: To display other menu/Any key other than [0] key: To return to the menu screen.

### [1]: Version Information

This mode displays the version of download mode.




F-6-151

Press any key to return to the main menu.

# Troubleshooting

## Error Code: E753-0001

### Cause

In the case of an error during writing process of the system software or in the case of writing the system software of the option that is not installed, an error is determined to display E753-0001.

### Remedy

The result of writing process is displayed at the upper side of E753-0001 error display.
Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

### Upgrading by SST

Be sure to use Assist mode as a general rule because the system software of the non-connecting option is not to be downloaded in Assist mode.
In Single mode, it is available to download the system software of the option that is not installed.
In the case of downloading the Finisher's system software, make the download mode of the Host Machine in normal mode and connect to SST, and then download just the system software of the Finisher with the version information displayed at the right side of the SST screen.
In the case that Super G3FAX Board – AE1 is not installed or in the case of download mode in safe mode, G3CCB/G3CCM is not displayed on the list of downloadable system software.

## List of Initial Check Items

| Item | No. | Detail | Check |
|---|---|---|---|
| Site Environment | 1 | The voltage of the power supply is as rated (±10%). | |
| | 2 | The site is not a high temperature / humidity environment (near a water faucet, water boiler, humidifi er), and it is not in a cold place. The machine is not near a source of fire or dust. | |
| | 3 | The site is not subject to ammonium gas. | |
| | 4 | The site is not exposed to direct rays of the sun. (Otherwise, provide curtains.) | |
| | 5 | The site is well ventilated, and the floor keeps the machine level. | |
| | 6 | The machine's power plug remains connected to the power outlet. | |
| Checking the Paper | 7 | The paper is of a recommended type. | |
| | 8 | The paper is not moist. Try paper fresh out of package. | |
| Checking the Placement of Paper | 9 | Check the cassette and the manual feed tray to see if the paper is not in excess of a specific level. | |
| | 10 | If a transparency is used, check to make sure that it is placed in the correct orientation in the manual feed tray. | |
| Checking the Durables | 11 | Check the table of durables to see if any has reached the end of its life. | |
| Checking the Periodically Replaced Parts | 12 | Check the scheduled servicing table and the periodically replaced parts table, and replace any part that has reached the time of replacement. | |

T-6-21

# Version Upgrade via CDS

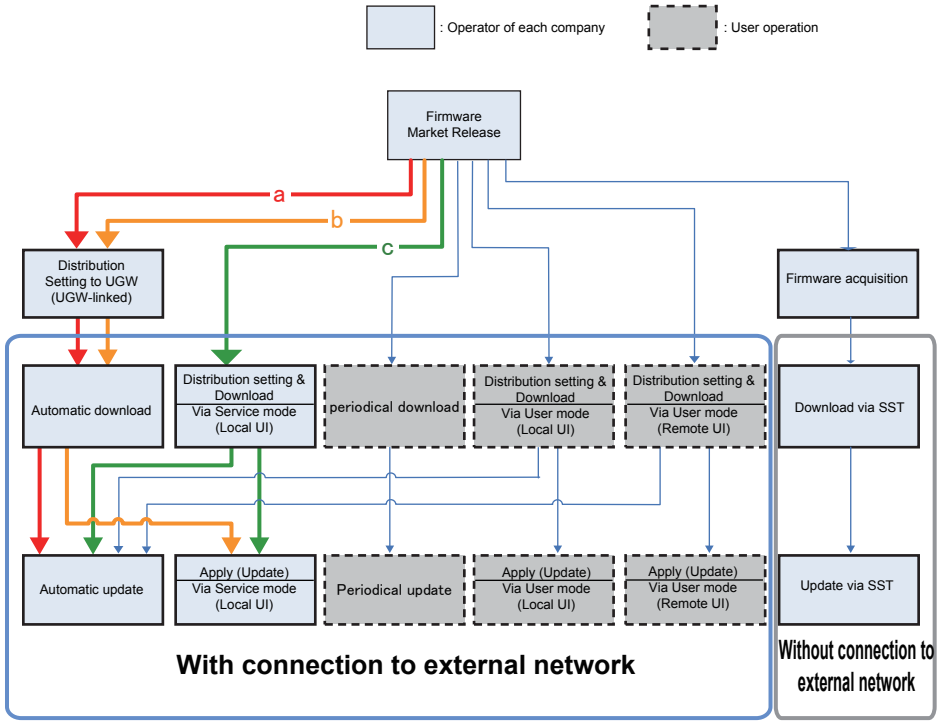
## Overview

Among the 4 methods in which service technicians provide firmware install services, the following 3 methods are available using Updater functions.

a. UGW-linked Download and Update (Full-remote Update)

b. UGW-linked Download (Remote Distribution Update)

c. Manual Download and Update (On-site Update from Service Mode)




F-6-152

*1: Schedules for UGW-linked distribution are maintained on CDS.

NOTE:
- See User Manual of the device for how to connect the device to the external network.
- When needed, perform the communication test before actual download to check if the communication with the distribution server is normal.

# Preparation

## Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

| Installation Method | Setting Sales Company's HQ | Network Settings | Enabling UGW Link | Enabling [Update Firmware] Button of User Mode | Enabling [Manual Update] Button of User Mode (Remote UI) | Periodical update validation |
|---|---|---|---|---|---|---|
| UGW-linked Download and Update | Yes | Yes | Yes | - | - | - |
| UGW-linked Download | Yes | Yes | Yes | - | - | - |
| Manual Download and Update | Yes | Yes | - | - | - | - |
| Manual Download and Update via Local UI | Yes | Yes | - | Yes | - | - |
| Manual Download and Update via Remote UI | Yes | Yes | - | Yes | - | - |
| Special Download and Update via Remote UI | Yes | - | - | - | Yes | - |
| Periodical update | Yes | Yes | - | - | - | Yes |

T-6-22

- For Install of Application

| Installation Method | Network Settings | Enabling [Install Application/ Options] Button of User Mode |
|---|---|---|
| LMS-linked Installation | Yes | - |
| LMA-linked installation via Local UI | Yes | Yes |
| LMS-linked installation via Remote UI | Yes | Yes |

T-6-23

## Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

| Market | Default Setting of Sales Company's HQ | Setting of Sales Company's HQ after Change |
|---|---|---|
| Canada | US | CA |
| Latin America | US/SG | LA |
| Hong Kong | SG | HK |

T-6-24

Go to the following screen to change the setting of Sales Company's HQ.

| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER > FUNCTION > INSTALL > CDS-CTL |

NOTE:
The list below shows the setting of Sales Company's HQ for CDS-CTS by market.
Check and adhere to the appropriate setting for your market.
<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP
USA = US
Singapore = SG
Europe = NL
Korea = KR
China = CN
Hong Kong = HK
Australia = AU
Canada = CA
Latin America= LA

## Network Settings

### 1. Connecting to External Network

The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

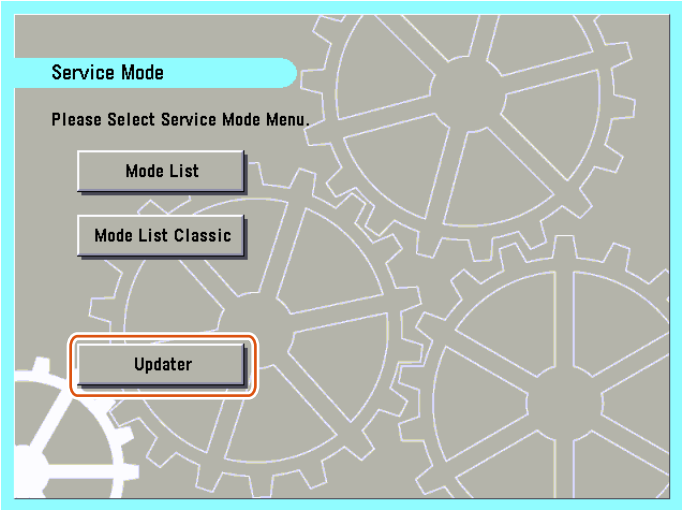
NOTE:
- See User Manual for how to connect the device to the external network.
- Before using UGW link or User mode, see the sections below to prepare as required.
  "Enabling UGW Link"
  "Enabling [Update Firmware] Button of User Mode"
  "Enabling [Install Application/Options] Button of User Mode"

NOTE:
"External Network" here means the network connecting the device to CDS via Internet.

### 2. Confirming URL Setting of Distribution Server

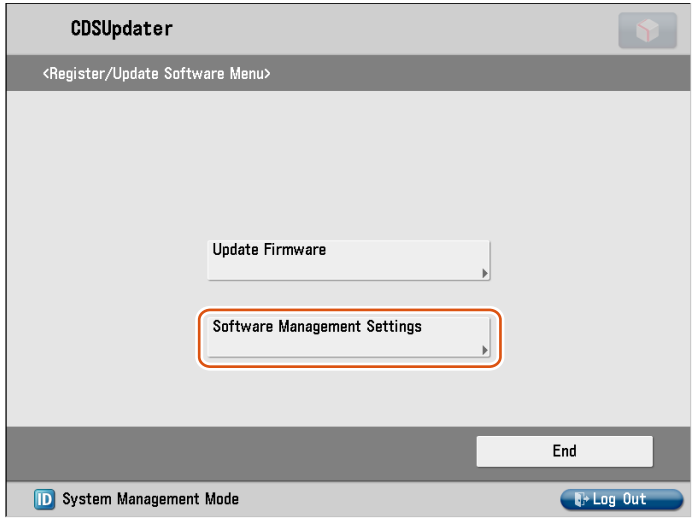
This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.
2. Press [Updater] button.



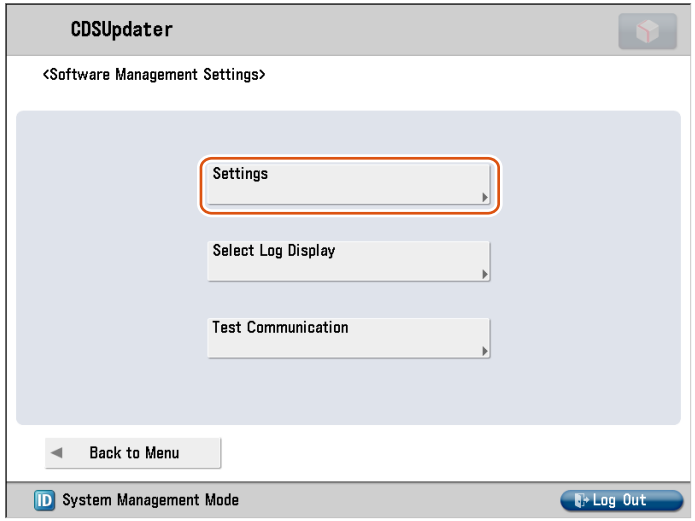

F-6-153

3. Press [Software Management Settings] button.



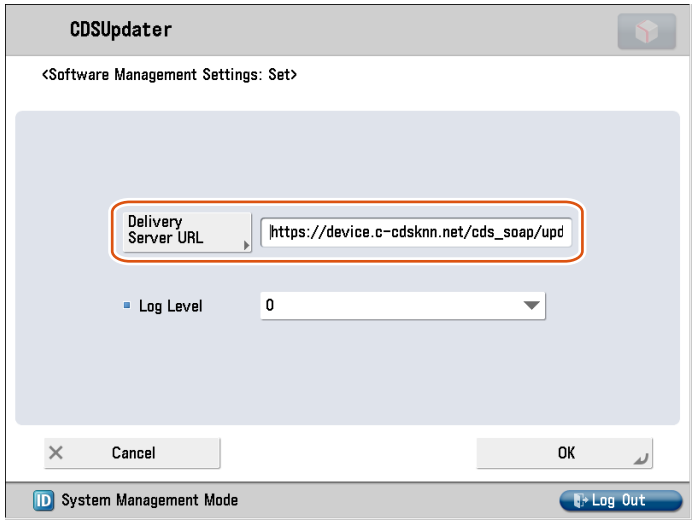

F-6-154

4. Press [Settings] button.




F-6-155

5. Ensure to enter “https://device.c-cdsknn.net/cds_soap/updaterif” in the field beside the [Delivery Server URL] button.
If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.




F-6-156

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

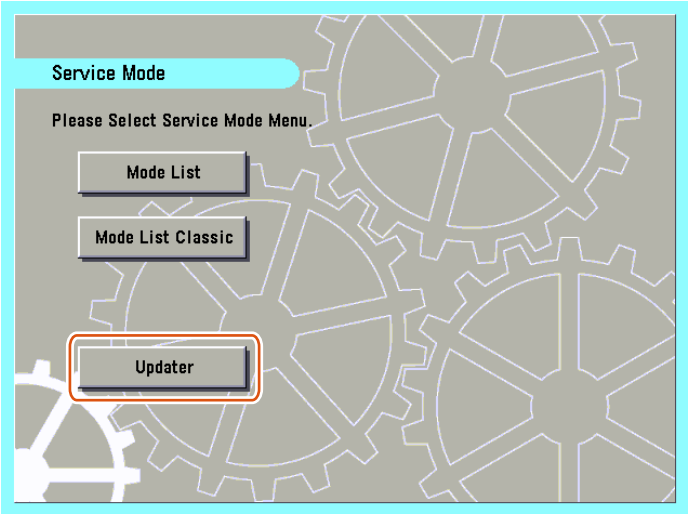
### 3. Communication Test

This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

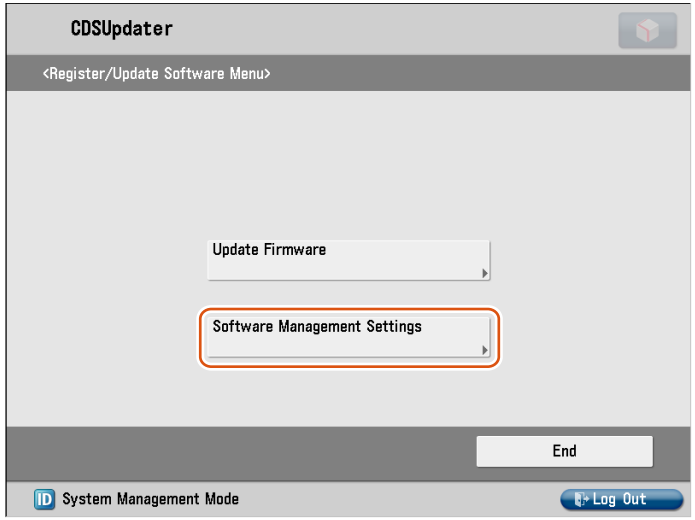
NOTE:
CDS and RDS are another servers.
You need the communication test of CDS by all means even if You succeed in a communication test of the RDS.

2. Press [Updater] button.



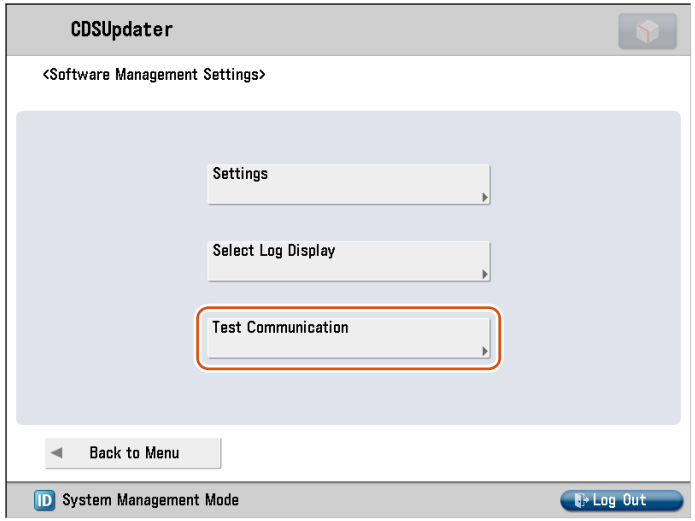

F-6-157

3. Press [Software Management Settings] button.



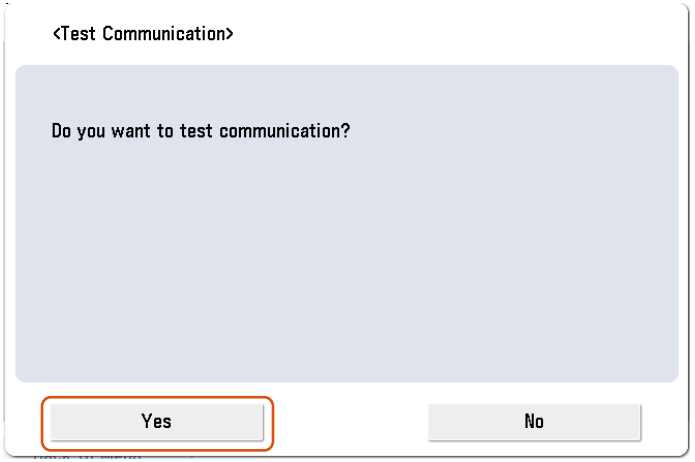

F-6-158

4. Press [Test Communication] button.




F-6-159

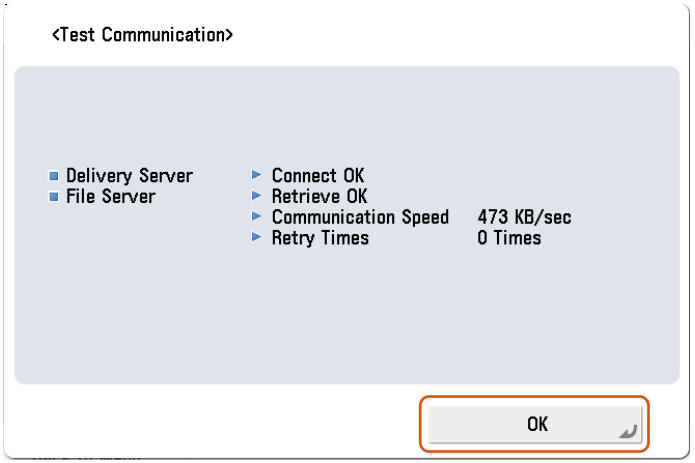
5. Press [Yes] button.




F-6-160

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.




F-6-161

## Enabling UGW Link

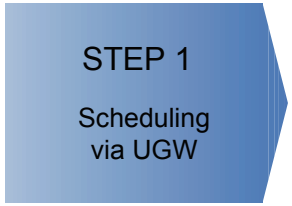
When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

| | | |
|---|---|---|
| Service Technician | Setting of Device Service Mode (Level 1) | COPIER >OPTION >FNC-SW >CDS-UGW (0 -> 1) |
| | Setting of UGW WebPortal | In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware]. |
| Sales Company's HQ | Setting of Authorities on UGW WebPortal | See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account. |

NOTE:
- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual“ for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.

## a. UGW-linked Download and Update (Full-remote Update)

See the figure below for the operational flow of “UGW-linked Download and Update”.




F-6-162

### STEP1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW.
See “UGW-linked Download and Update” in chapter 5 of Operation Manual of Content Delivery System V1.0 for Firmware Distribution for details.

The device checks the schedule concerned every 12 hours on UGW. This allows the device to register the firmware distribution setting, enabling automatic firmware download and update.

CAUTION:

Firmware update will not be triggered when any of the following jobs remains in the queue.

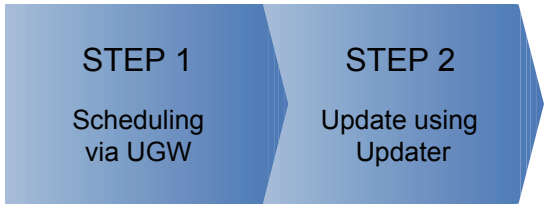
-Print
-Scan
-Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See the section of "Wait for EOJ (end of job) Function" under “Limitations and Cautions”, “Updater” of Chapter 2 “Technology” of this manual for more detailed information.

NOTE:
To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

## b. UGW-linked Download (Remote Distribution Update)

See the figure below for the operational flow of “UGW-linked download”.




F-6-163

### STEP 1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW.
See “UGW-linked Download” in Operation Manual of CDS V1.0 (for Firmware Distribution) for details.

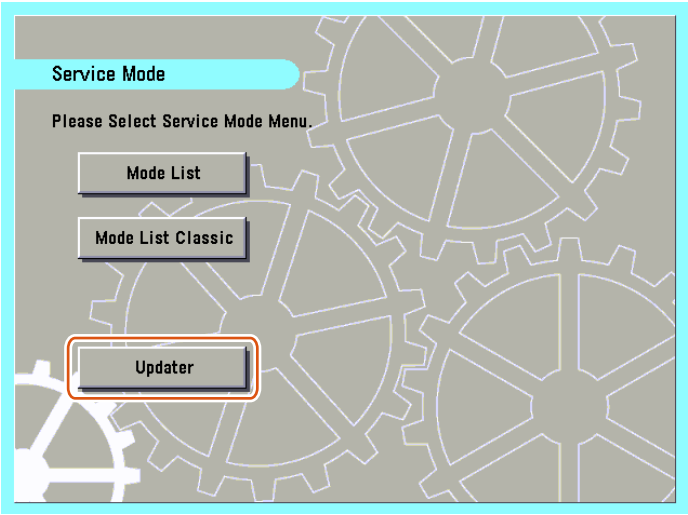
NOTE:
The firmware downloaded by scheduling via UGW can be checked/deleted from User mode, but cannot be updated. If a user download the other firmware, the firmware downloaded with "UGW-linked Download" is overwritten.

### STEP 2: Update using Updater

The firmware downloaded on the device can be updated using Updater functions.

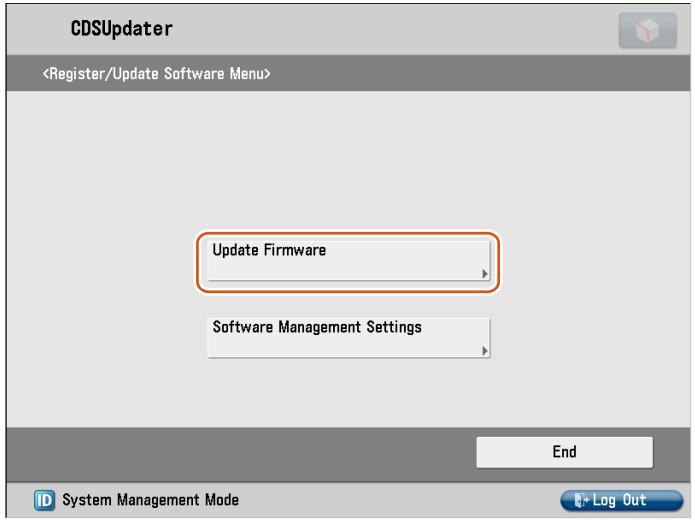
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



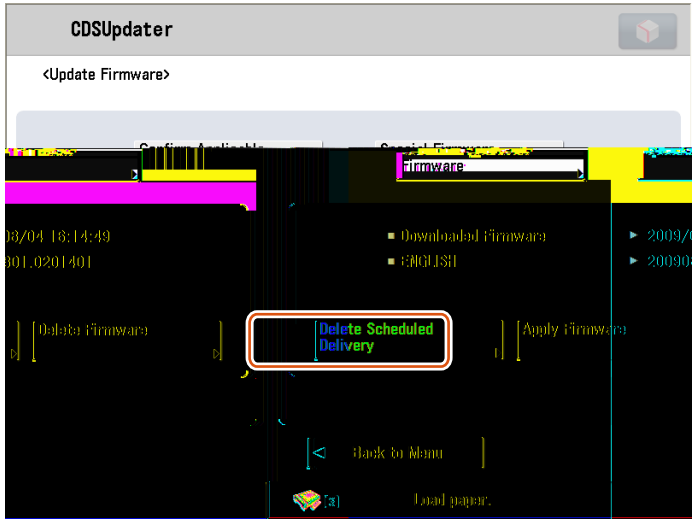

F-6-164

3. Press [Update Firmware] button.



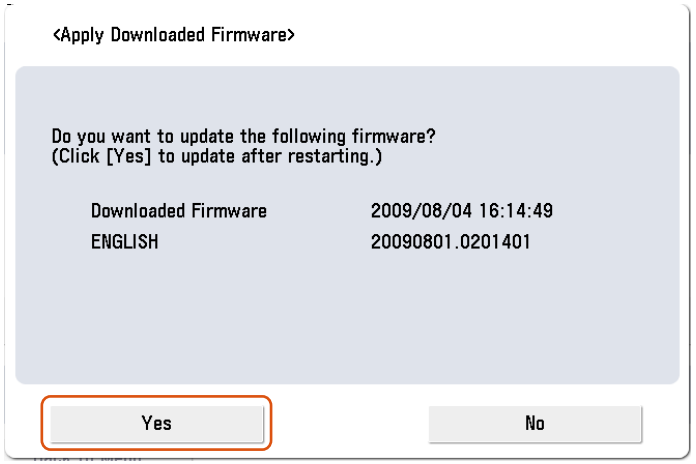

F-6-165

4. Press [Apply Firmware] button.




F-6-166

5. Confirm the downloaded firmware and press [Yes] button.




F-6-167

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of “Manual Download and Update”.

CAUTION:

Firmware update will not be triggered when any of the following jobs remains in the queue.

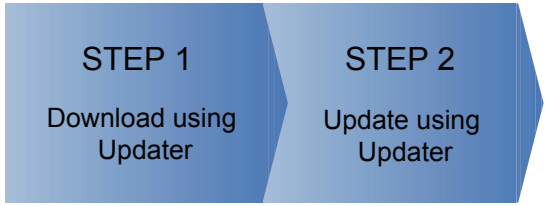
-Print
-Scan
-Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See the section of "Wait for EOJ (end of job) Function" under “Limitations and Cautions”, “Updater” of Chapter 2 “Technology” of this manual for more detailed information.

NOTE:
To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

## c. Manual Download and Update (On-site Update from Service Mode)

The figure below shows the operational flow of “Manual Download and Update”.



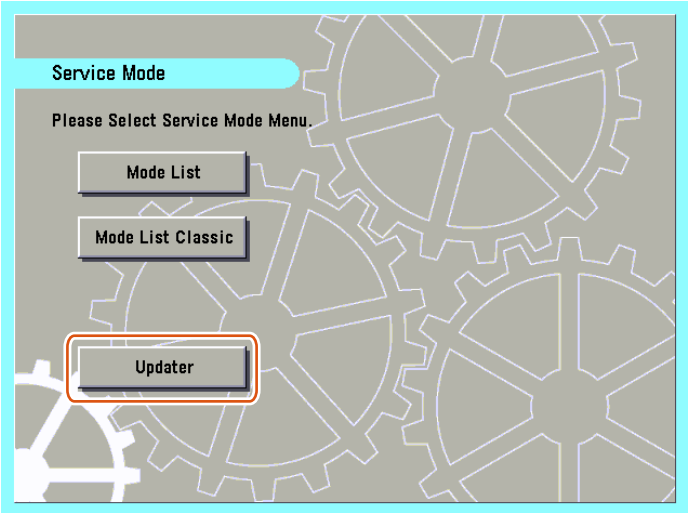

F-6-168

### STEP 1: Download using Updater

The firmware can be downloaded from CDS to the device using Updater.

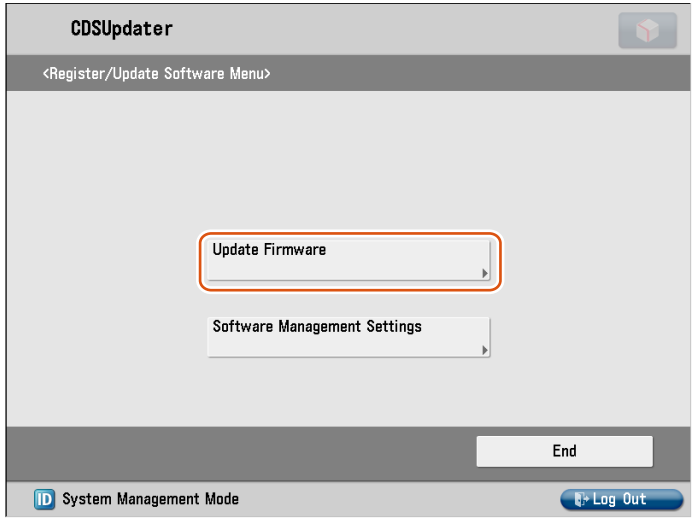
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



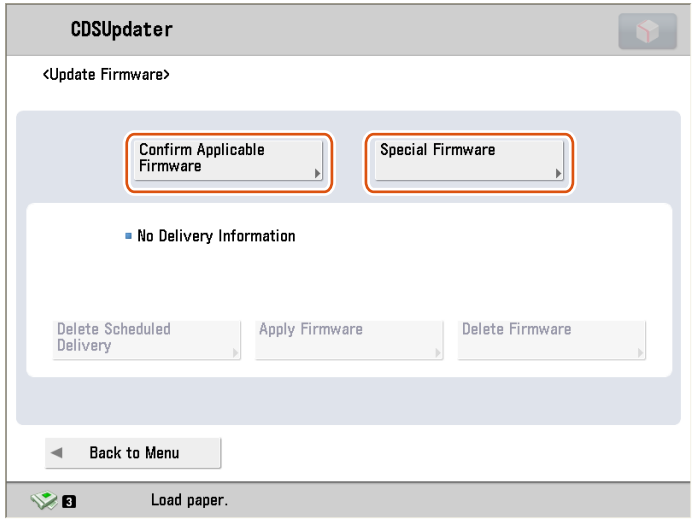

F-6-169

3. Press [Update Firmware] button.



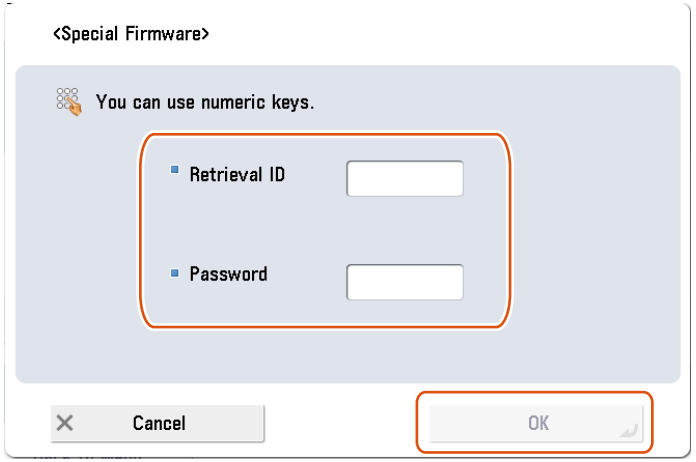

F-6-170

4. Confirm the firmware to be updated in either of the following 2 ways.
- To update to the official edition, press [Confirm Applicable Firmware] button and go to Step 6.
- To update to the individual response edition, press [Special Firmware] and go to Step 5.




F-6-171

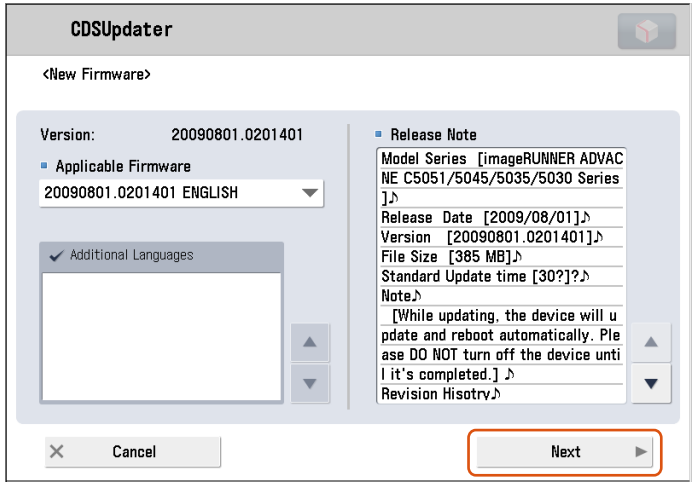
5. [Special Firmware] screen is shown as below. Enter the fields and press [OK] button.




F-6-172

- [Retrieval ID]:
  Enter numeric up to 8 characters.
- [Password]:
  Enter numeric up to 8 characters.

6. [New Firmware] screen is shown as below. Check the contents and press [Next] button.

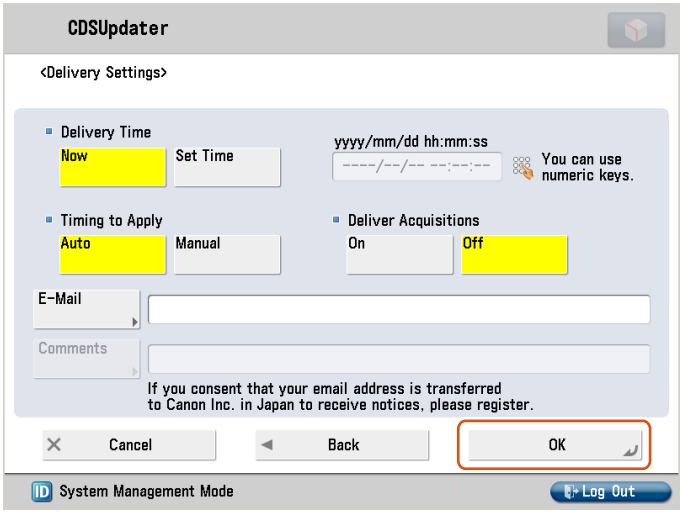



F-6-173

- [Version]:
  The current firmware version is shown.
- [Applicable Firmware]:
  Select the firmware applicable to the device from the dropdown list.
- [Additional Languages]:
  If there are any addtional languages, they are displayed.
  More than 1 language can be selected, and it is possible to add another language when upgrading the firmware.
  Up to 8 languages can be added. The languages already registered in the device are always selected, and SST is used to delete an unnecessary language from the device.
  Include English and Japnese in eight languages.
- [Release Note]:
  If any release note is published, the contents are shown here.

NOTE:
To update to the individual response edition, the firmware corresponding to the ID and password that you input is displayed in [Applicable Firmware].

7. [Delivery Settings] screen is shown as below. Enter the fields and press [OK] button.




F-6-174

- [Delivery Time]:
  Press either [Now] or [Set Time] button.
  - [Now]:
    The firmware is downloaded immediately after distribution schedule is set.
  - [Set Time]:
    Be sure to specify the date (within 30 days) and time. The firmware is downloaded on the specified date and time.
    Enter the date and time using the numeric keypad in the format of “yyyy/mm/dd hh:mm:ss”
- [Timing to Apply]:
  Press either [Auto] or [Manual] button.
  - [Auto]:
    The firmware is applied automatically upon firmware downloaded.
  - [Manual]:
    The firmware is automatically downloaded. Go to [Apply Firmware] to set up for updating the downloaded firmware.
- [Updated Module Only]:
  Press either [On] or [Off] button.
  - [On]:
    Only difference between the current and new firmware is downloaded.
  - [Off]:
    The firmware to be applied is wholly downloaded.

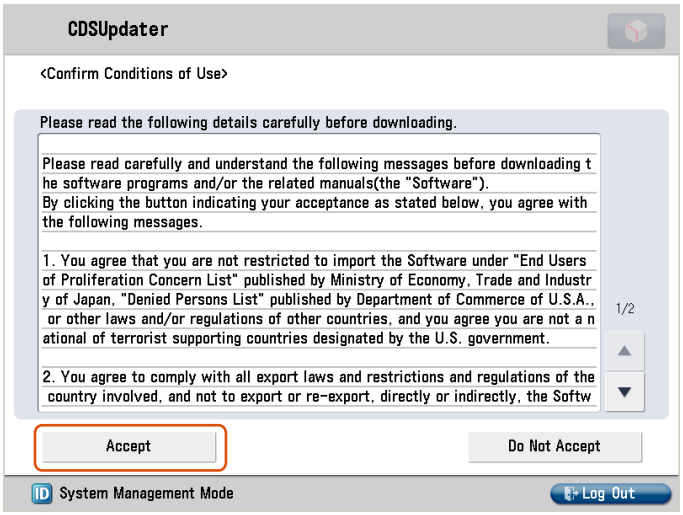
- [E-mail]:
  E-mails concerning update statuses are sent from the device to the contact registered here.
  Enter the E-mail address of the service technician in charge.
  Enter 1-byte alphanumeric or symbols up to 64 characters.
- [Comments]:
  Enter the comment in 1-byte alphanumeric or symbols up to 128 characters.
  Enter the comment to be automatically included in E-mail. Model Name in the comment will be helpful to identify the device relevant to the E-mail.

NOTE:
[Timing to Apply]
- For firmware versions with no remote update permission, [Auto] cannot be selected in [Timing to Apply]

[Updated Module Only]
- For firmware versions with difference-only delivery disabled, only [OFF] can be selected in [Updated Module Only].

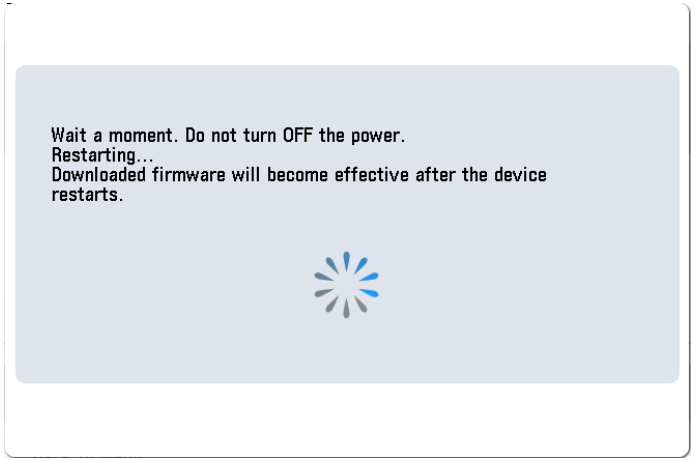
[E-mail]
- To send E-mails to multiple destinations, each E-mail address should be delimited with comma (,) or semi-colon (;).
- For E-mail addresses entered in this field, a notification E-mail is sent at the following timing.
  -Distribution Set
  -Distribution Started
  -Distribution Finished
  -Update Started
  -Update Finished
  -Error Occurred

8. Confirm Export Criteria screen is shown as below. Check the contents and press [Accept] button.



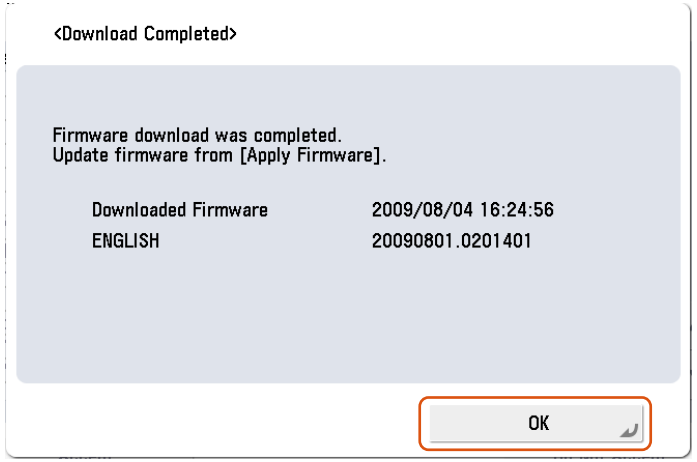

F-6-175

9. One of the screens below is shown according to the setting.
- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Auto], respectively:
  Firmware is downloaded and updated automatically to the device. The device is automatically restarted upon update completed. Now STEP 1 is successfully completed.



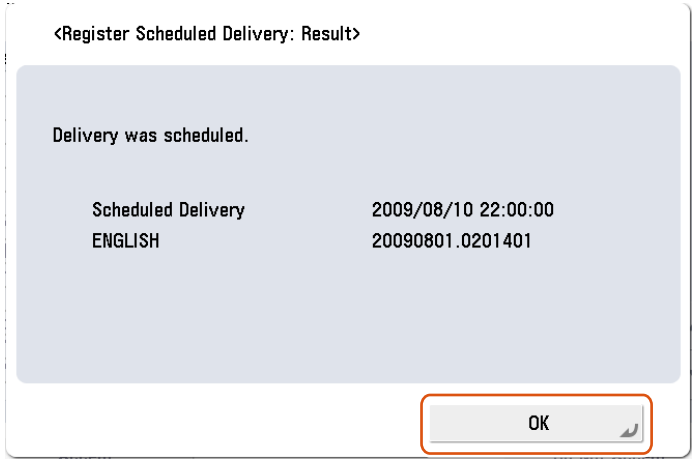

F-6-176

- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Manual], respectively:
  Confirm the firmware and press [OK] button. Now STEP 1 is successfully completed.




F-6-177

- When Distribution Time is set to [Set Time] in Distribution Setting:
  Confirm the distribution schedule and press [OK] button. Now STEP 1 is successfully completed.



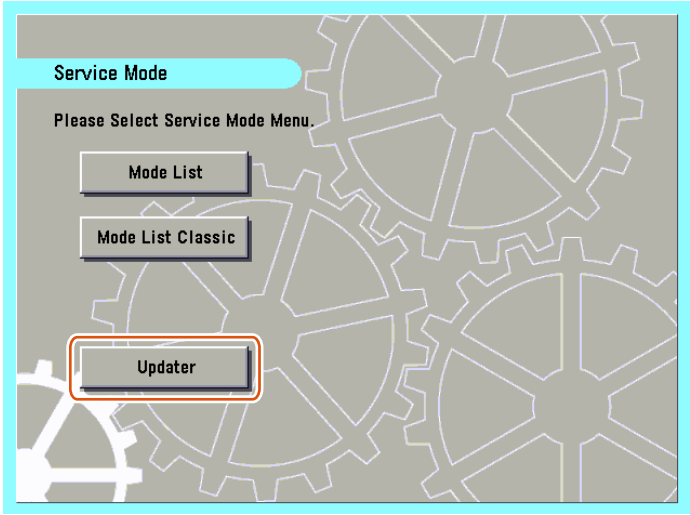

F-6-178

### STEP 2: Update using Updater

The firmware downloaded to the device can be updated using Updater functions.
When Timing to Apply is set to [Auto] in Distribution Setting in STEP 1, the firmware is updated automatically. Only when Timing to Apply is set to [Manual], follow the steps below to update the firmware.

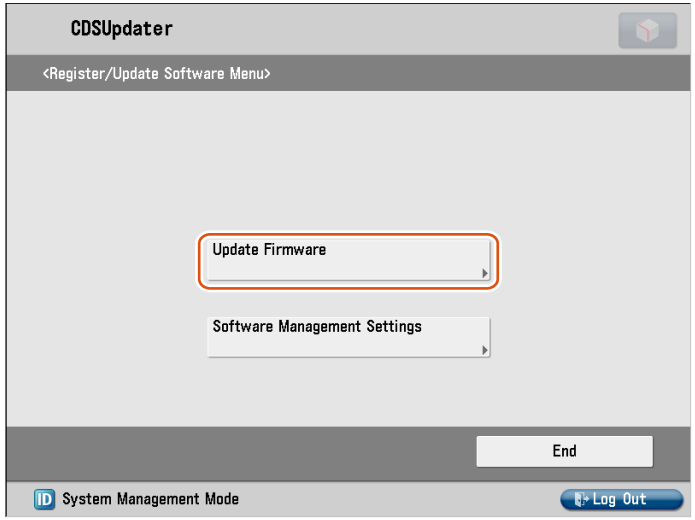
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



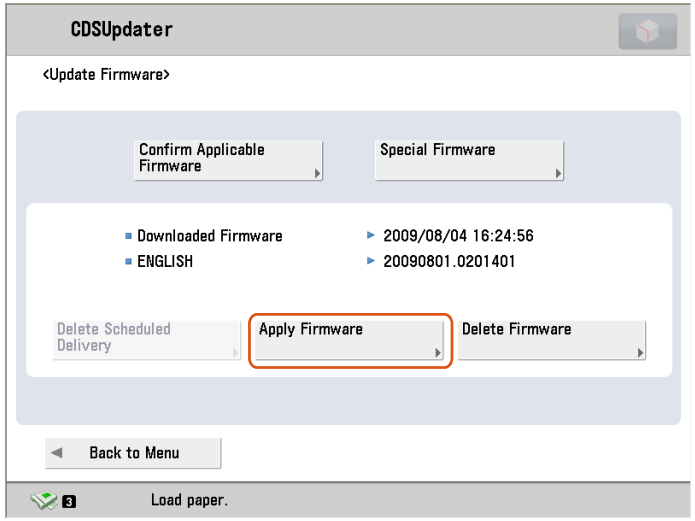

F-6-179

3. Press [Update Firmware] button.



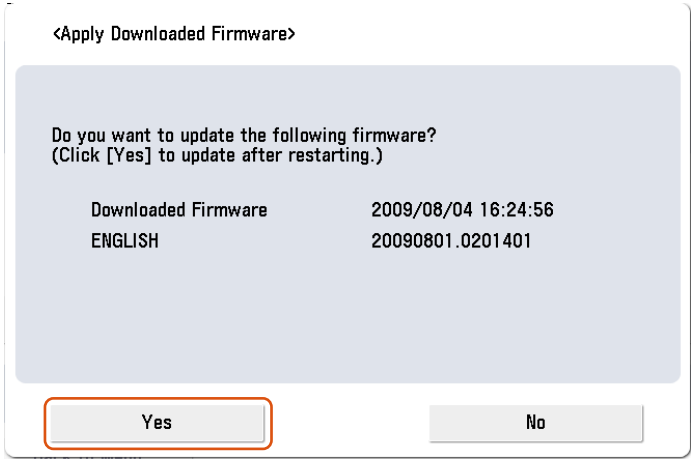

F-6-180

4. Press [Apply Firmware] button.




F-6-181

5. Confirm the downloaded firmware and press [Yes] button.




F-6-182

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.
7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of “Manual Download and Update”.

CAUTION:

Firmware update will not be triggered when any of the following jobs remains in the queue.

-Print
-Scan
-Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See the section of "Wait for EOJ (end of job) Function" under “Limitations and Cautions”, “Updater” of Chapter 2 “Technical Information” of this manual for more detailed information.

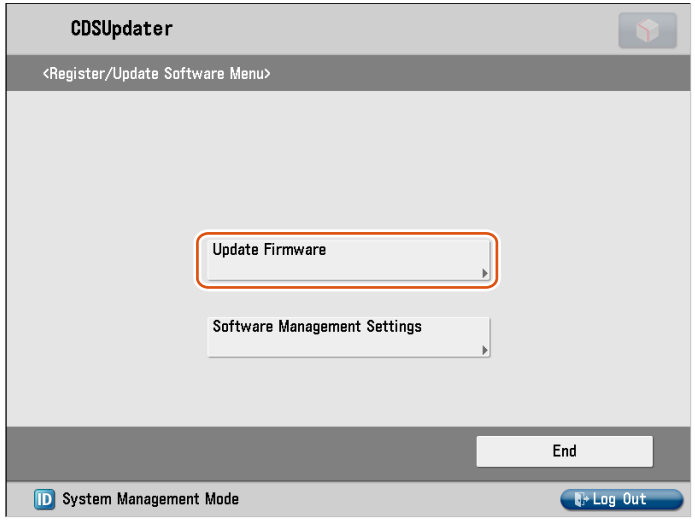
# Deleting Firmware Distribution Schedule

This section describes how to delete firmware distribution schedule set by Updater.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] button at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

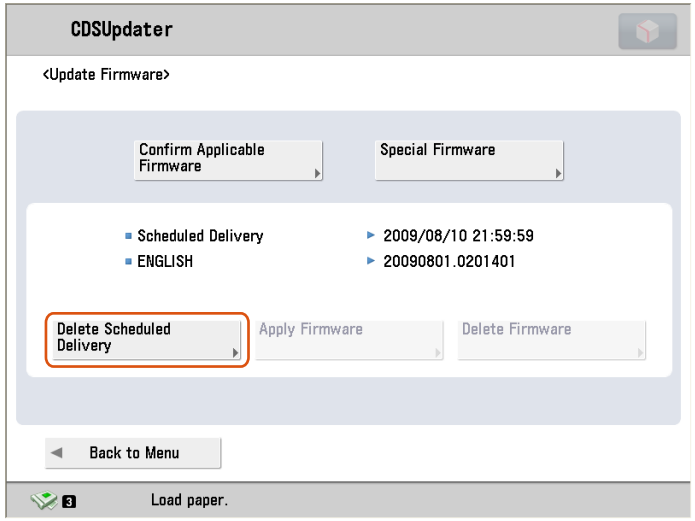
2. Press [Updater] button.

3. Press [Update Firmware] button.



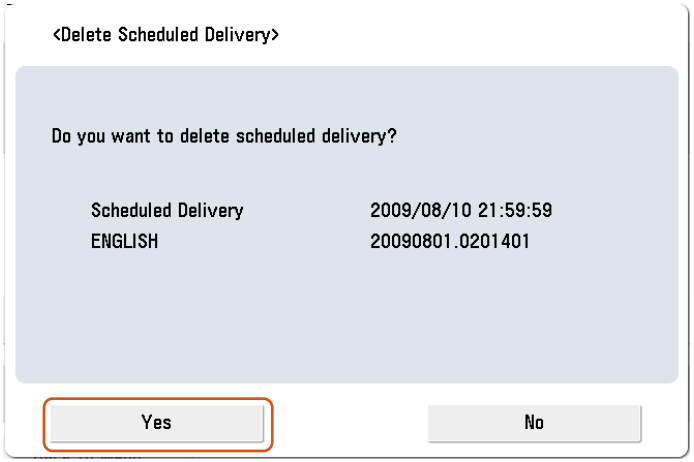

F-6-183

4. Press [Delete Scheduled Delivery] button.




F-6-184

5. Confirm the contents of the distribution schedule and press [Yes] button.




F-6-185

6. Confirm the result of deletion shown on the screen and press [OK] button. Now the firmware distribution schedule is successfully deleted.

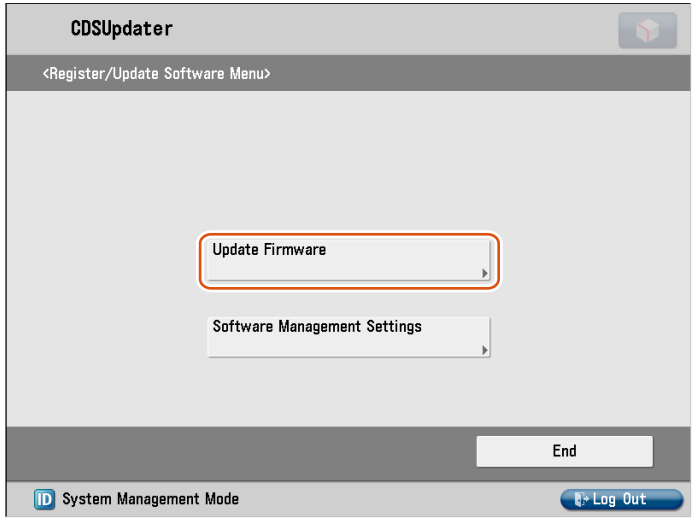
# Updating Downloaded Firmware (Applying Firmware)

This section describes how to update the downloaded firmware.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

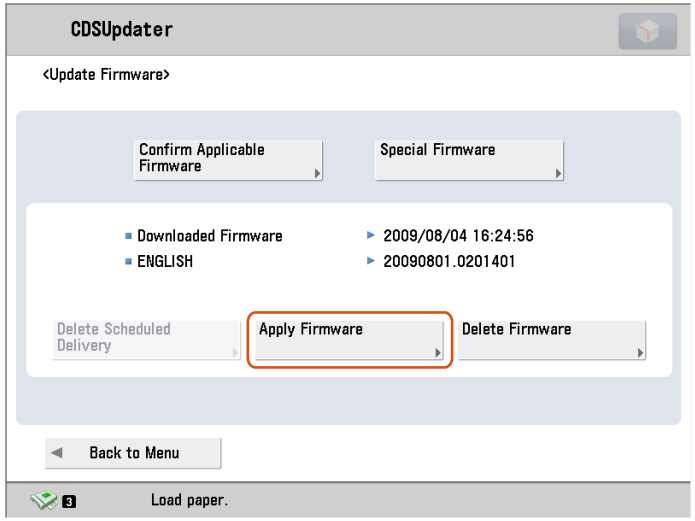
2. Press [Updater] button.

3. Press [Update Firmware] button.



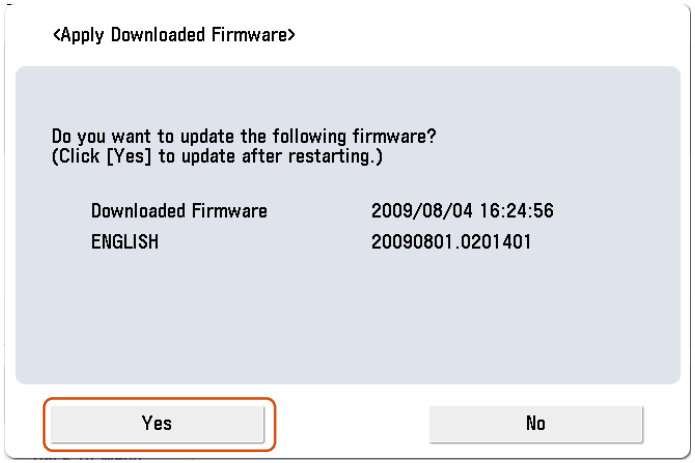

F-6-186

4. Press [Apply Firmware] button.




F-6-187

5. Confirm the downloaded firmware and press [Yes] button.




F-6-188

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method.

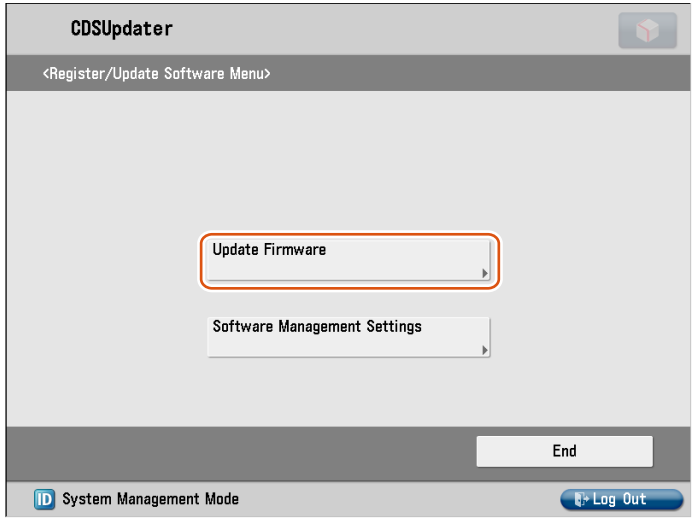
## Deleting Downloaded Firmware

This section describes how to delete the downloaded firmware using Updater.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] button at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

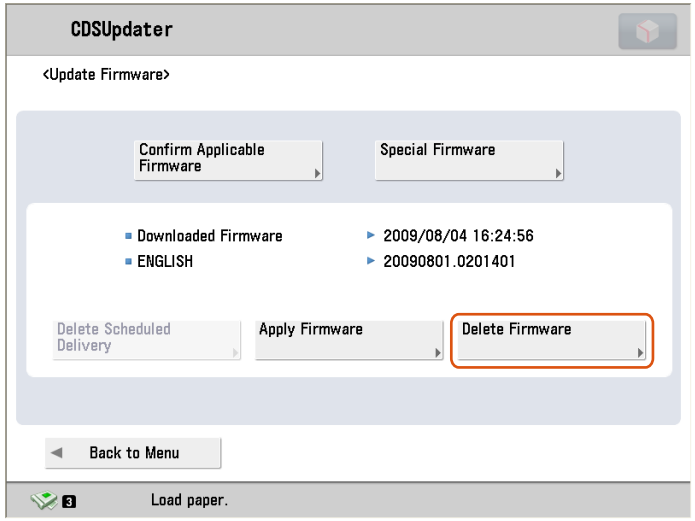
2. Press [Updater] button.

3. Press [Update Firmware] button.




F-6-189

4. Press [Delete Firmware] button.




F-6-190

5. Confirm the downloaded firmware to be deleted and press [Yes] button.

F-6-191

6. Confirm the result of deletion and press [OK] button. Now the downloaded firmware is successfully deleted.

## Troubleshooting on Firmware Installation

No.1

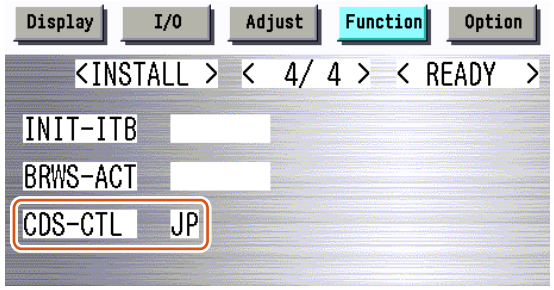
Symptom: I can't find the firmware to be updated using Updater.

Cause: Preparation has not been properly done.

Action: Confirm the setting of Sales Company's HQ bellow.

Setting of Device [SERVICE MODE] (Level1)

COPIER > FUNCTION > INSTALL > CDS-CTL




F-6-192

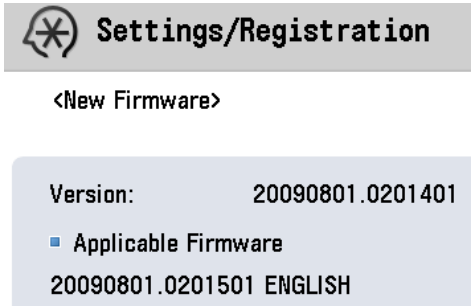
Cause: The version currently in use is not available for update.

Action: Download the release note from CDS separately to upgrade to the version available for update.

Cause: You try to download firmware from User mode.You can download only the latest version of firmware from User mode.

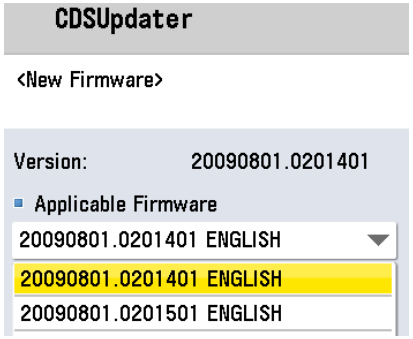
Action: Download from Service mode.

<User Mode>




F-6-193

<Service Mode>




F-6-194

No.2

Symptom: Firmware download is aborted during operation using Updater functions.

Cause: The network cable is disconnected or the power went off due to blackout and the like.

Action: Retry download. Firmware under download is cancelled upon aborted.

No.3

Symptom: Firmware update is aborted during operation using Updater functions and the device cannot be started.

Cause: The power went off due to blackout and the like.

Action: Service technicians should follow the steps below via SST.

1. Press [2] and [8] buttons at a time to start the device.
   1) Turn on the power and hold down [2] and [8] buttons at a time on the control panel.
   2) [Download Mode] is shown on Local UI.
      If the operation above does not trigger the download mode, BOOT (Flash Memory, service parts) should be replaced (takes up to 1 minute for rewriting).
      If the operation above successfully triggers the download mode, go to the next steps below.

2. Via SST, format the HDD of BOOT Dev only.

3. Via SST, install the firmware in the device.

No.4

Symptom: Firmware has not been downloaded according to the distribution schedule.

Cause: Other firmware distribution schedule is set.Since only 1 distribution schedule is held, the registered schedule may be overridden by the new firmware distribution schedule.

Action: Once the schedule is overridden, the firmware cannot be downloaded. Distribution should be rescheduled for the firmware.

Cause: At the scheduled distribution date and time, the firmware registered was not found on CDS.

Action: Distribution should be rescheduled for the firmware.

Cause: After distribution is scheduled, device is updated to other version of firmware via SST. (Status of the firmware in the device is changed.)

Action: Distribution should be rescheduled for the firmware.

Cause: The power of the device was off at scheduled date and time.

Action: Distribution should be rescheduled for the firmware.

No.5

Symptom: The firmware presumed to be downloaded to the device cannot be found.

Cause: Since only 1 firmware can be held on the device, the firmware previously downloaded was overridden by the newly downloaded one.

Action: Retry the firmware download.

# Information required for Reports

## Information required for Service Technicians to Obtain on Site

- Update Logs
- System Logs (Log Level: 4)

## Information to Report

- Symptom occurred
- Location of the device
- Date and Time that symptom occurred
- Steps taken for reproduction
- Firmware / Application you tried to install
- Occurrence frequency
- Model dependency (if the same symptom occurred in other models)
- Dependency on firmware/MEAP application/system option
- Conditions of symptom occurrence
  - Model
  - Firmware version installed on the device
  - List of MEAP applications installed on the device
  - Network setting information of the device
  - Service mode setting information

| | |
|---|---|
| Setting of device service mode (Level 1) | COPIER > FUNCTION > INSTALL > CDS-CTL |
| | COPIER > OPTION > FNC-SW > CDS-UGW |
| | COPIER > OPTION > FNC-SW > CDS-FIRM |
| | COPIER > OPTION > FNC-SW > CDS-MEAP |
| | COPIER > OPTION > FNC-SW > LOCLFIRM |

* As many as the items listed above should be obtained on site. More information provided will be helpful for investigation.

# Debug Logs

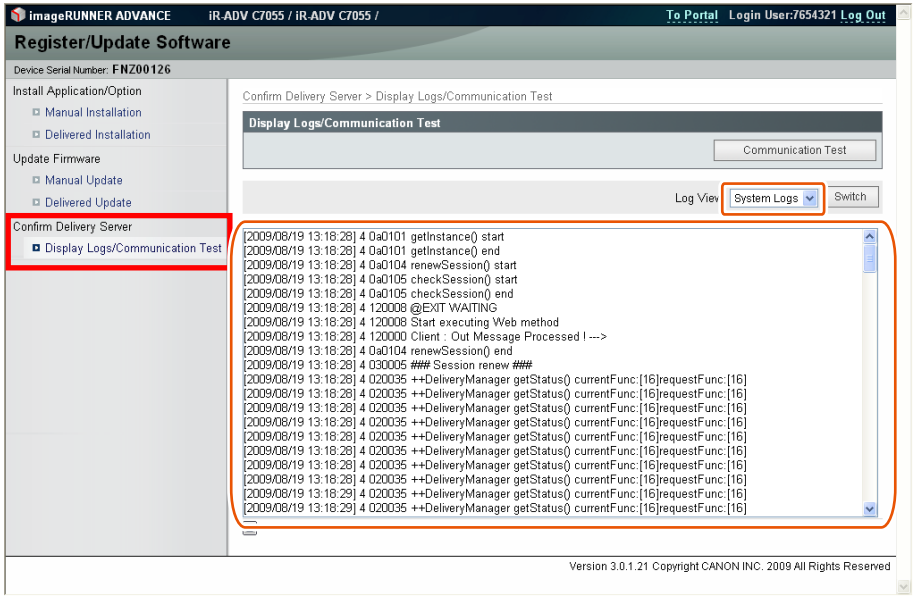
## Obtaining Log Files

Updater log files can be obtained by copy & paste from remote UI.
This procedure is shown below.

1. Check that the “CDS-MEAP” or “CDS-FIRM” is enabled in the service mode. If they are not enabled, change the value to “1” and then restart the device.
   Service mode (Level1) > Mode List
   - COPIER > OPTION > FNC-SW > CDS-MEAP: 1
   - COPIER > OPTION > FNC-SW > CDS-FIRM: 1

2. Log in the remote UI (URL: http://<device’s IP address or host name>) using the system administrator right.

3. From “Display Logs/Communication Test” screen, obtain System Logs (log level 4) and Update Logs by copy & paste.
   Top page (Remote UI) > [Settings/Registration] > [Management Settings] > [License/Others] > [Register/Update Software] > “Display Logs/Communication Test”




F-6-195

NOTE:
- See "Setting Log Level" in chapter 3 for details of changing Log Level

4. If the value of CDS-MEAP or CDS-FIRM was changed in the service mode, return to the original value and then restart the device to enable this setting.

Obtaining the log files is completed.

# Error Messages

Error messages displayed in LUI on a device are shown below. As to error codes, see the next list.

| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 1 | An error occurred with the delivery server.<br>Contact your sales representative.<br>Error Code: [xxx] | In communicating with the delivery server. | System error occurred in server. | Obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 2 | Delivery server is stopped.<br>Wait a while and then try to perform the operation again.<br>Check the following URL for details.<br><Stopped Delivery Server URL> | In communicating with the delivery server. | Delivery server stopped. | Check the delivery server stop information. After the delivery server starts, perform the operation from this application.<br>When the delivery server stop information is not available, contact the sales company's Support Department. |
| 3 | Failed to connect to delivery server.<br>Check the delivery server and network. | In communicating with the delivery server. | Communication error due to incorrect settings of CDS URL. | Set correct CDS URL in the Updater settings. |
| | | | Excluding delivery server stop, communication error to the delivery server occurred. | Check if the network environment is correct to solve the cause of the error occurrence.<br>If the network environment of the device is correct, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 4 | Download was stopped because an error occurred with the file server.<br>Check the network. | At the time of file download | Communication error to the delivery server occurred. | Check if the network environment is correct to solve the cause of the error occurrence.<br>If the network environment of the device is correct, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 5 | Downloaded files are invalid. Check the network. | At the time of file download | The received file is broken. | After checking the network environment of the device, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 6 | Failed to retrieve information of special firmware.<br>Check the retrieval ID and password. | Acquisition of applicable firmware information | No information exists about firmware for special firmware retrieval ID or Password is invalid. | Enter the correct firmware ID or Password applicable to the firmware information.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 7 | Scheduled delivery information of firmware does not exist.<br>Check it because it may already have been deleted. | Acquisition of applicable firmware information | Delivery information with specified delivery ID does not exist. | Register the delivery schedule again. If this occurs at the time of canceling file download, deleting downloaded firmware or deleting scheduled delivery, no remedy is required. |
| 8 | Failed to apply firmware. | Firmware application error | Error due to the application (NLM) | Obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |

| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 9 | Delivery Server : Connect Failed<br>File Server : Retrieve Failed<br>Error Code: [xxxx] | Communication test, etc. (communication test result dialogue) | In the communication test, failed to connect to the delivery server.<br>In SOAP communication, failed to success after 1 min retry. | Check the network environment of the device, and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | ID and Password required for proxy to connect to the internet are not configured in device. | Set proxy and restart the communication test.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | The access to the network is limited. | Set the user environment to make the access to the following domain available.<br>https://device.cdsknn.net/<br>http://cdsknn.net.edgesuite.net/<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Delivery server stopped. | Contact Field Support Group in the sale company.<br>After confirmation that the delivery server has been restored, restart the communication test.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company again. |
| 10 | Delivery Server : Connect OK<br>File Server : Retrieve Failed<br>Error Code: [xxxx] | Delivery Server : Connect OK<br>File Server : Retrieve Failed<br>Error Code: [XXXX] | Due to no return of data for the communication test, time-out (in HTTP communication, no response for 1min) occurred. After that, retried but failed to connect to server. | Check the network environment of the device and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | The network cable was disconnected during data download in the communication test. | Reconnect the network cable and then restart the communication test.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | The file server stopped during data download in the communication test. | Contact the sales company's Support Department.<br>After confirmation that the delivery server has been restored, restart the communication test.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company again. |
| | | | Hash value in the communication test file is incorrect. | Check the network environment and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |

| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 11 | An error occurred.<br>Error Code: [xxx] | communication test, etc. (main screen) | The max value (space/file) was exceeded and new log was not accepted.<br>Normally an old log file is deleted before the max value (space/file) is exceeded, but error may occur due to other element (e.g. I/O error). | Check if the log file exceeded the max value.<br><Update log><br>Max space: 128KB/file<br>Max file number: 4<br><br><System log><br>Max space: 512KB/file<br>Max file number: 4<br><br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Notice of version information (main screen) | Failed to acquire version information of device due to no CDS registration of firmware version of device. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | At the time of notifying version information, failed to connect to the delivery server. | Check if the network environment is correct to solve the cause of the error occurrence.<br>If the network environment of the device is correct, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | No return of notifying version information | |
| | | | Network cable was disconnected during notice of version information. | Re-connect the network cable and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Failed to send notice of version information since the main power was turned OFF and then ON during the sending. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Server stopped at the time of sending notice of version information. | Check the network environment of the device and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | An internal error occurred at the time of sending notice of version information. | Obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |

| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 11 | An error occurred.<br>Error Code: [xxx] | UGW linkage (main screen) | UGW linkage was turned ON when eRDS was OFF. | For a device using eRDS, turn ON the eRDS. For a device not using eRDS, turn OFF the UGW linkage.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | An internal error occurred at the time of acquiring delivery information. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | On-site (error dialogue) | An internal error occurred at the time of acquiring applicable firmware information. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | An internal error occurred at the time of sending approval information. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | An internal error occurred at the time of delivery order | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Immediate download (error dialogue) | An internal error occurred at the time of requesting firmware delivery information. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | During the download, all space in the storage disk was occupied. (DiskFull) | After adding vacant space of the storage disk, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | At the end of receipt, an internal error occurred. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Manual update (error dialogue) | At the update start, an internal error occurred. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company |
| | | Automatic update (error dialogue) | At the update start, an internal error occurred. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Deletion of downloaded firmware | At the time of notifying cancellation, an internal error occurred. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |

| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 12 | An error occurred. Check the Update Firmware screen. | UGW linkage (main screen) | eRDS sent an order but Updater failed to connect to server. | Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Delivery server stopped. | Contact the sales company's Support Department.<br>After confirming restoration of the delivery server, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Scheduled date and time acquired from the delivery server was before current time (15 or more min had passed.) | Do the delivery setting from UGW again.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | Scheduled data and time acquired from the delivery server did not exist. | Do the delivery setting from UGW again.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Immediate download (main screen) | At the time of immediate download, turned OFF and then ON the power of device main body. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Manual update (main screen)<br>Automatic update (main screen) | Updated version was different from the ordered version. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | After the update, failed to connect to the delivery server. | Check the network environment and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | After the update, delivery server stopped. | Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | After the update, the network cable was disconnected. | Re-connect the network cable and re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | After the update, server returned an error. | Obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | After the update, an internal error occurred. | If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |

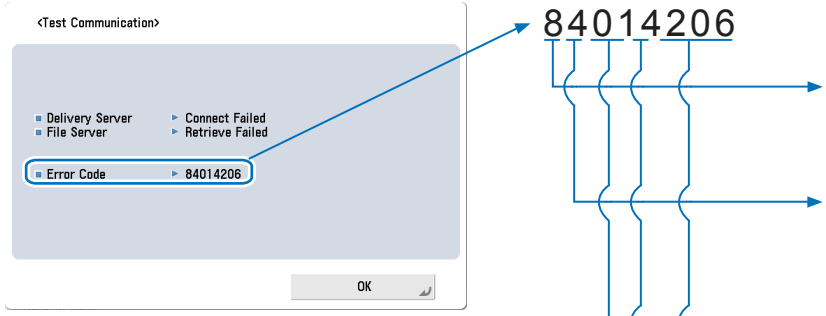
| No. | Messages | Timing of display | Cause | Remedy |
|---|---|---|---|---|
| 13 | Delivery Error<br>Error Code: [xxx] | UGW linkage (Update Firmware screen) | eRDS sent an order but Updater failed to connect to the server. | Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | The delivery server stopped. | Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | | The scheduled data and time acquired from delivery server does not exist. | Do the delivery setting from UGW again.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 14 | Delivery Error<br>Delivery Time<br>Delivery Firmware Label<br>Delivery Firmware version<br>Error Code: [ xxx ] | UGW linkage (Update Firmware screen) | The scheduled date and time acquired from delivery server was before current time (15 or more min had passed). | Do the delivery setting from UGW again.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Immediate download (Update Firmware screen) | At the time of immediate download, turned OFF and then ON the power of device main body. | Re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 15 | Applicable firmware is not registered. | On-site (error dialogue) | At the user site, no latest firmware exists. | This means the current firmware is the latest, so this error has no impact.<br>But when the latest firmware to be retrieved must exist e.g. released new firmware information has been notified, contact Field Support Group in the sales company. |
| | | | No applicable firmware exists on CDS, so the service person can't select any applicable firmware. | Contact the sales company's Support Department. |
| 16 | Restart failed.<br>Turn the main power OFF and ON. | Manual update (error dialogue) | An error occurred at the time of the device restart. | After turning OFF and then ON the main power of the device, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| | | Automatic update (error dialogue) | An error occurred at the time of the device restart. | After turning OFF and then ON the main power of the device, re-execute the job.<br>If it recurs, obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company. |
| 17 | Specify [E-Mail Address] with up to 64 characters. | At the time of periodical update setting | The specified E-mail address exceeded 64 characters. | Specify E-mail address within 64 characters. |
| 18 | The following characters cannot be used for the [E-Mail Address]:<br>, : ; “ ( ) [ ] < > \ | At the time of periodical update setting | | |
| 19 | Specify [Comments] with up to 128 characters. | At the time of periodical update setting | Comments exceeded 128 characters. | Specify comments within 128 characters. |
| 20 | The [Delivery Server URL] is incorrect. | In setting with the deliver server URL. | The specified deliver server URL is wrong. | Enter the right URL(https://device.c-cdsknn.net/cds_soap/updaterif) |

T-6-25

# Error Codes

Error Codes displayed on LUI in a device and how to read them.

## How to read an error code




84014206

| Code | Value | Contents |
|---|---|---|
| The first digit<br>Error field | 8 | Error |
| The second digit<br>Operator | 0<br>1<br>2<br>3<br>4<br>5 | Not defined.<br>CDS server<br>Updater<br>UGW<br>Service person<br>IT administrator (User) |
| The 3rd - 4th digits<br>Method category | xx | Method |
| The 5th digit<br>Category code | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7 | Category code |
| The 6 - 8th digits<br>Description code | 000- | See Error code list |

F-6-196

# Error Code

The error code list is shown below. Remedy are error codes of "-", and for all the error codes out of the list, contact Field Suppot Group in the sales company.

| Error Code (hex number) | | | | | | | | Description | Remedy | Cause of error | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The first digit Error field | The second digit Operator | The 3rd - 4th digits Method category | | The 5th digit Category code | The 6 - 8th digits Description code | | | | | CDS delivery server | UP DATER | CDS file server | Network |
| 8 | Error | | | | | | | | | | | | |
| | 0 | Not defined. | | | | | | | | | | | |
| | 1 | CDS server | | | | | | | | | | | |
| | | x | x | Relating method code | | | | | | | | | |
| | | | | 0 | Not categorized | | | | | | | | |
| | | | | | 0 | 0 | 1 | No value is set in a mandatory data entry item | - | - | ✓ | - | - |
| | | | | | 0 | 0 | 2 | In a string type of a data entry item, digit number and/or character type is/are set against the regulations | - | - | ✓ | - | - |
| | | | | | 0 | 0 | 3 | In an data entry item, the value is set against the regulations (E.g. the set value is other than "Operator: 4. Service person, 5. User") | - | - | ✓ | - | - |
| | | | | | 0 | 0 | 4 | No applicable delivery information exists | - | ✓ | - | - | - |
| | | | | 1 | Operation | | | | | | | | |
| | | | | | 0 | 0 | 1 | Inconsistency between the current firmware component in the data entry item and delivery information (E.g. the conditions for automatic update are not met. The settings of a mandatory additional set are invalid) | - | ✓ | ✓ | - | - |
| | | | | | 0 | 0 | 2 | In a notice of delivery-allowed information, an install-set was release to the market, but the market release was stopped during the delivery | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 3 | No mail template file exists | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 4 | The device serial number in the data entry item differs from that in delivery information | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 5 | User is selected as Operator in the data entry items and the retrieval type is other than the latest | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 6 | The retrieval type in the data entry item is special and registration ID and individual Password are not set (* Operator did not enter registration ID and individual Password) | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 7 | The retrieval type in the data entry item is special and Operator is not Service person | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 8 | As to the device serial number in the data entry items, there is no applicable device code product | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 9 | The retrieval type in the data entry items is special and there are no basic-set applicable to the registration ID and Password (* When wrong registration ID or Password was entered by an operator) | - | ✓ | - | - | - |
| | | | | | 0 | 0 | A | The delivery status is Applying | - | ✓ | - | - | - |
| | | | | | 0 | 0 | B | No approval information exists about EULA or the export criteria when the delivery is determined | - | ✓ | - | - | - |
| | | | | | 0 | 0 | C | The delivery status is Distributing/Distributed/Applying/ Finished/Failed | - | ✓ | - | - | - |
| | | | | | 0 | 0 | D | The delivery status is Distributing/Distributed/Applying/ Finished/Failed | - | ✓ | - | - | - |

| Error Code (hex number) | | | | | | | | Description | Remedy | Cause of error | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The first digit Error field | The second digit Operator | The 3rd - 4th digits Method category | | The 5th digit Category code | The 6 - 8th digits Description code | | | | | CDS delivery server | UP DATER | CDS file server | Network |
| | | | | | 0 | 0 | E | The delivery status is New/Waiting to Distribute/Distributed/ Applying/Finished/Failed | - | ✓ | - | - | - |
| | | | | | 0 | 0 | F | The delivery code is other than Distributing. (Firmware delivery) | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 0 | The delivery status is New/Waiting to Distribute/Distributing/ Applying/Finished/Failed | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 1 | The delivery status is Distributing/Distributed/Applying/ Finished/Failed | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 2 | Device is "Not applicable to CDS" (Firmware delivery) | - | ✓ | - | - | - |
| | | | | 2 | I/O | | | | | | | | |
| | | | | | 0 | 0 | 1 | The specified license access number does not exist in LMS | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 2 | The specified license access number has been deauthorized | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 3 | The package product of the entered license access number doesn't include MEAP application/System Option | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 4 | The sales company for the MEAP application isn't identical with the sale company for the package product | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 5 | The number of licenses to be issued will exceed the limit number allowed to register | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 6 | As for System Option for the same function, the license keys were issued more than the defined number of times for the same device serial number | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 7 | No device product exists applicable to the optional product | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 8 | No product exists applicable to the device serial number | - | ✓ | - | - | - |
| | | | | | 0 | 0 | 9 | The product of the entered license access number cannot be used with this device because the settings of the sales company are incorrect | - | ✓ | - | - | - |
| | | | | | 0 | 0 | A | No product linked to the license access number is registered in CDS for delivery | - | ✓ | - | - | - |
| | | | | | 0 | 0 | B | Although the product linked to the license access number is registered in CDS for delivery, the delivery is stopped now | - | ✓ | - | - | - |
| | | | | | 0 | 0 | C | No existence of optional product applicable to the device serial number. | - | ✓ | - | - | - |
| | | | | | 0 | 0 | D | The license access number has been registered for another device | - | ✓ | - | - | - |
| | | | | | 0 | 0 | E | For the device product applicable to the device serial number, no available software (MEAP application, System Option) exists | - | ✓ | - | - | - |
| | | | | | 0 | 1 | 0 | LMS system error | - | ✓ | - | - | - |
| | 2~5 | | | | | | | | | | | | |
| | | x | x | Relating method code | | | | | | | | | |
| | | | | 0 | Not cartelized | | | | | | | | |
| | | | | | 0 | 0 | 0 | Not defined | Normally not indicated | | | | |
| | | | | | 1 | 0 | 0 | Unknown error | Normally not indicated | | | | |
| | | | | 1 | Operation | | | | | | | | |
| | | | | | 0 | 0 | 1 | Processing exclusively | Start the operation again after terminating other Updater operations being executed simultaneously | - | ✓ | - | - |
| | | | | | 1 | 0 | 1 | Failed to process preparation for use | - | - | ✓ | - | - |

| Error Code (hex number) | | | | | | | | Description | Remedy | Cause of error | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The first digit Error field | The second digit Operator | The 3rd - 4th digits Method category | | The 5th digit Category code | The 6 - 8th digits Description code | | | | | CDS delivery server | UP DATER | CDS file server | Network |
| | | | | | 1 | 0 | 2 | Failed to process use end | - | - | ✓ | - | - |
| | | | | | 1 | 0 | 3 | Time out during restart of readiness preparation | - | - | ✓ | - | - |
| | | | | | 1 | 0 | 4 | Session time-out excluding after application inquiry (after issuing delivery ID) | Start the operation again from the beginning | | ✓ | - | - |
| | | | | | 1 | 0 | 5 | CDS URL is not set | Set CDS URL | - | ✓ | - | - |
| | | | | | 1 | 0 | 6 | There is another job | Start the operation again after terminating the job of the device | - | ✓ | - | - |
| | | | | 2 | I/O | | | | | | | | |
| | | | | | 1 | x | x | An internal error about file operation | - | - | ✓ | - | - |
| | | | | | 2 | x | x | An internal error about xML file operation | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 1 | Failed to output the license file | - | - | ✓ | - | - |
| | | | | 3 | Device | | | | | | | | |
| | | | | | 1 | x | x | An internal error in CPCA | - | - | ✓ | - | - |
| | | | | | 2 | x | x | An internal error in IMI | - | - | ✓ | - | - |
| | | | | | 3 | x | x | An internal error in SMS | - | - | ✓ | - | - |
| | | | | | 4 | x | x | An internal error in NLM | - | - | ✓ | - | - |
| | | | | 4 | SOAP communication | | | | | | | | |
| | | | | | 1 | 0 | 1 | The processing thread stopped | - | - | ✓ | - | - |
| | | | | | 1 | 0 | 2 | Processing SOAP communication now | - | - | ✓ | - | - |
| | | | | | 1 | 0 | 3 | The function type is not matched | - | - | ✓ | - | - |
| | | | | | 1 | 0 | 4 | An invalid SOAP response error | - | ✓ | - | - | - |
| | | | | | 2 | 0 | 1 | An internal error about application information | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 2 | config.xml is NOT FOUND | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 3 | type.xml is NOT FOUND | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 4 | An error in binding type.xml | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 5 | An error in creating a service tab | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 6 | A runtime error in performing the web method | - | - | ✓ | - | ✓ |
| | | | | | 2 | 0 | 7 | An unknown host error in performing the web method | • Check the network environment of the device and start the operation again<br>• Check if the URL settings of the CDS server are correct, and start the operation again after resetting | ✓ | ✓ | - | ✓ |
| | | | | | 3 | 0 | 1 | The delivery server is stopped | - | ✓ | - | - | - |
| | | | | | 3 | 0 | 2 | An error occurrence in the delivery server | - | ✓ | ✓ | - | - |
| | | | | 5 | HTTP communication | | | | | | | | |
| | | | | | 1 | 0 | 1 | Specified Hash Algorithm is unknown | - | - | ✓ | - | - |
| | | | | | 2 | 0 | 1 | Invalid HTTP request | - | - | ✓ | ✓ | ✓ |
| | | | | | 2 | 0 | 2 | Failed to connect to the server | Check the network environment of the device and start the operation again | - | ✓ | ✓ | ✓ |
| | | | | | 2 | 0 | 3 | Failed to find the server | Check the network environment of the device and start the operation again | - | ✓ | ✓ | ✓ |
| | | | | | 2 | 0 | 4 | An input/output error occurred during the connecting process to the server | - | - | ✓ | ✓ | ✓ |
| | | | | | 2 | 0 | 5 | Failed to read a HTTP response | - | - | ✓ | ✓ | ✓ |
| | | | | | 2 | 0 | 6 | Error in a HTTP response | - | - | ✓ | ✓ | ✓ |
| | | | | | 3 | 0 | 1 | Failed to retrieve the data stream | - | - | ✓ | - | ✓ |
| | | | | | 3 | 0 | 2 | Failed to create the file object for receipt | - | - | ✓ | - | ✓ |
| | | | | | 3 | 0 | 3 | Failed to create the data stream of the file for receipt | - | - | ✓ | - | ✓ |
| | | | | | 3 | 0 | 4 | Failed to receive the data | Check the network environment of the device and start the operation again | - | ✓ | ✓ | ✓ |

| Error Code (hex number) | | | | | | | | Description | Remedy | Cause of error | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The first digit Error field | The second digit Operator | The 3rd - 4th digits Method category | | The 5th digit Category code | The 6 - 8th digits Description code | | | | | CDS delivery server | UP DATER | CDS file server | Network |
| | | | | | 3 | 0 | 5 | An error about reserving the file data for receipt | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 6 | Failed to close the data stream | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 7 | Failed to close the file data for receipt | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 8 | Invalid hash code of the download file | Check the network environment of the device and start the operation again | ✓ | ✓ | ✓ | ✓ |
| | | | | | 3 | 0 | 9 | The prosy authorization method is not applicable | Check the proxy authentication method used, and start the operation again after changing the settings to use the corresponding proxy anthentication | - | ✓ | - | ✓ |
| | | | | 6 | Socket communication | | | | | | | | |
| | | | | | 1 | 0 | 1 | Failed to connect the eRDS | - | - | ✓ | - | ✓ |
| | | | | | 1 | 0 | 2 | No response from eRDS | - | - | ✓ | - | ✓ |
| | | | | | 1 | 0 | 3 | No notice of start from the eRDS | - | - | ✓ | - | ✓ |
| | | | | | 1 | 0 | 4 | Error of socket reading | - | - | ✓ | - | ✓ |
| | | | | | 1 | 0 | 5 | Socket communication time-out | - | - | ✓ | - | ✓ |
| | | | | 7 | Other internal codes | | | | | | | | |
| | | | | | 0 | 0 | 2 | One of installation, start or authorization failed (When installation or authorization failed, it is regarded as an error) * | - | - | ✓ | - | - |
| | | | | | 0 | 3 | x | An internal error in processing the installation | - | - | ✓ | - | - |
| | | | | | 1 | x | x | An error by using invalid API | - | - | ✓ | - | - |
| | | | | | 2 | x | x | An internal error in SMS | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 1 | No existence of delivery ID | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 2 | Invalid delivery ID | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 3 | The updated firmware information is not identical with the firmware information after activation of the Updater | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 4 | The process of firmware download is incomplete | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 5 | The update process is incomplete | - | - | ✓ | - | - |
| | | | | | 3 | 0 | 6 | The installment process is incomplete | - | - | ✓ | - | - |
| | | | | | 4 | 0 | 1 | Failed to retrieve delivery information | - | - | ✓ | - | - |
| | | | | | 5 | 0 | 1 | Failed to execute the delivery process | - | - | ✓ | - | - |
| | | | | | 5 | 0 | 2 | The scheduled delivery was not executed within the defined period of time | Scheduled deliveries not executed within the defined period of time are abandoned, so register a scheduled delivery again.<br>When setting the date and time of the scheduled delivery, be sure to designate a time when the device is ON | - | ✓ | - | - |

T-6-26

* Not displayed on a device UI

# Debug log

## Scope of Application

### Purpose

- When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.
- This is intended to improve efficiency in log collection when a trouble occurs.

## Overview

### Function Overview

Debug log is an integrated log for failure analysis that gathers logs prepared by the software modules in the device for debug purpose.
In the case of a field failure that is hard to be reproduced, this measure is intended to improve efficiency in failure analysis and reduce the time for failure support by collecting debug log at the user site (which was created immediately after the failure) and sending it to the R&D.
When the Canon quality-appointed staff determines the need for an analysis of firmware debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.

#### Effective Instances of Collecting Debug Log

- The error occurs only at the customer site and cannot be reproduced by the sales company or the Canon staff who is in charge of quality follow-up.
- When the error frequency is low.
- When the error is suspected of links with firmware rather than a mechanical/electrical failure.
  * Collection of Sublog is not necessary when the reproduction procedure is identified and the error can be reproduced by the sales company HQ or the Canon staff who is in charge of quality follow-up.

#### Types of Logs

There are continuous logs, event logs, and manual logs.

| Type | Collecting method | Number/size of logs collected | Setting |
|---|---|---|---|
| Continuous log | The behaviors of the Main Controller, Reader Controller, and DC Controller are recorded on the HDD. | 800 KB x 200 files (160 MB) | n/a |
| Event log | Automatically recorded in accordance with the conditions specified in DEBUG-1. | 800 KB x 10 files (80 MB) | Service mode Lev2: COPIER > FUNCTION > SYSTEM > DEBUG-1 > 3 (default)<br>3: Exception + E code + Reboot<br>Make movement same as 3 even if you change setting of it.<br>USB-FAX Board:<br>FAX--SSSW--SW01--bit5<br>0: File size 256-512KB<br>1: File size 4MB-8MB |
| Manual log | Perform the following procedure.<br>1. Hold down the [Counter] button (10 seconds or longer).<br>2. Press 1 on the numeric keypad.<br>3. Press 2 on the numeric keypad.<br>4. Press 3 on the numeric keypad. | | n/a |

T-6-27

#### Conditions of Log Collection

- Logs can be collected on a PCB-by-PCB basis. (SUBLOG, SUBLOG_RCON, SUBLOG_DCON)
- As for continuous logs, only SUBLOG is collected.
- When restriction has occurred, SUBLOG_RCON and SUBLOG_DCON are collected.

| Location | File name | Automatic collection | | | Manual collection |
|---|---|---|---|---|---|
| | | Continuous log | Event log | | Manual log |
| | | | When an event has occurred | When restriction has occurred | |
| Main Controller | SUBLOG | Yes | Yes | No | Yes |
| Reader Controller | SUBLOG_RCON | No | Yes | Yes | Yes |
| DC Controller | SUBLOG_DCON | No | Yes | Yes | Yes |
| USB-FAX Board | SUBLOG<br>USBFAX_LOG | Yes | Yes | No | Yes |

T-6-28

### Collection of Logs

Connect SST or a USB memory device,
and select COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK to collect logs.

### Description of Log to be Collected

As for SUBLOG, up to 200 logs can be stored on the HDD.
As for SUBLOG_RCON and SUBLOG_DCON, up to 10 logs can be stored on the HDD.

Logs are stored from the latest one, and the latest file is always stored.
Logs earlier than those logs are overwritten and deleted from the oldest log.
When collecting logs from the machine, the log file in the machine is deleted.

F-6-197

## Collecting System Information

### Collection Destination

To retrieve debug log to an external location from the device, use a USB memory device, FTP server or SST (Ver. 4.63 or later).

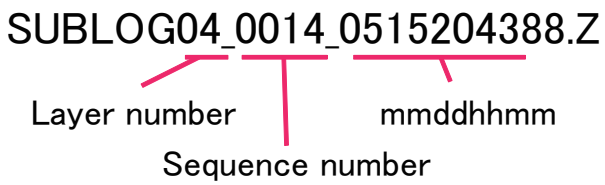
### Collection Method

Retrieve debug log from the machine by any of the following methods.

- Make the machine recognize the USB memory device. Select the following in service mode Lev1: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and click OK.
- Use SST on a PC with the network cable connected to transfer the debug log.
- Transfer the debug log to a USB memory device that stores the system of the machine.

### File Name of Sublog

Whether the file is new or old can be judged by the year, month, day, hour, and minute.




F-6-198

### Collecting Debug Log (USB memory device)

NOTE:
When the data is sent to the USB memory device:
USB memory where the system software for this machine has been registered using the SST.

1) Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK
Connect the USB memory device to the machine.
2) [5] Execute [BACKUP].

```
[[[[[ download Menu (USB) ]]]]]]]]]]]
-------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[5] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-199

3) [1] Execute [Sublog].

```
[[[[[ Backup Menu (USB) ]]]]]]]]]]]
-------------------------------------
[1]: Sublog
[4]: ServicePrint
[5]: Netcap
[6]: SRAM(HDD)
[7]: SRAM(USB)

[C]: Return to Main Menu
```

F-6-200

## ● When the data is sent to the USB memory device

A folder of the year, month, day, hour, and minute is created in the USB memory device. The log file is saved in the folder.

Example: Folder 201205241821

| | |
|---|---|
| SUBLOG_DCON.TXT | 254 KB |
| SUBLOG_DCON01.TXT | 254 KB |
| SUBLOG_USBFAX_LOG.TXT | 239 KB |
| SUBLOG00_0129_0706093688SHT.TXT | 3,009 KB |
| SUBLOG00_0130_0706094388SHT.TXT | 2,695 KB |
| SUBLOG00_0131_0706095588SHT.TXT | 2,860 KB |
| SUBLOG00_0132_0706100188SHT.TXT | 2,691 KB |
| SUBLOG00_0133_0706110119.TXT | 3,111 KB |
| SUBLOG00_0134_0706132632.TXT | 3,088 KB |
| SUBLOG00_0135_0706132945.TXT | 3,050 KB |
| SUBLOG00_0136_0706133304.TXT | 3,041 KB |
| SUBLOG00_0137_0706133635.TXT | 3,026 KB |
| SUBLOG00_0138_0706134001.TXT | 3,030 KB |
| SUBLOG00_0139_0706134317.TXT | 3,065 KB |
| SUBLOG00_0140_0706134635.TXT | 3,035 KB |
| SUBLOG00_0141_0706150088SHT.TXT | 3,042 KB |
| SUBLOG00_0142_0706200433.TXT | 2,980 KB |
| SUBLOG00_0143_0706200535.TXT | 2,932 KB |
| SUBLOG00_0144_0706200688SHT.TXT | 456 KB |
| SUBLOG00_0145_0706151028.TXT | 3,090 KB |
| SUBLOG00_0146_0706151141.TXT | 3,115 KB |
| SUBLOG00_0147_0706152759.TXT | 3,321 KB |
| SUBLOG00_0148_0706155588SHT.TXT | 1,283 KB |

F-6-201

## ■ Uploading Data by SST

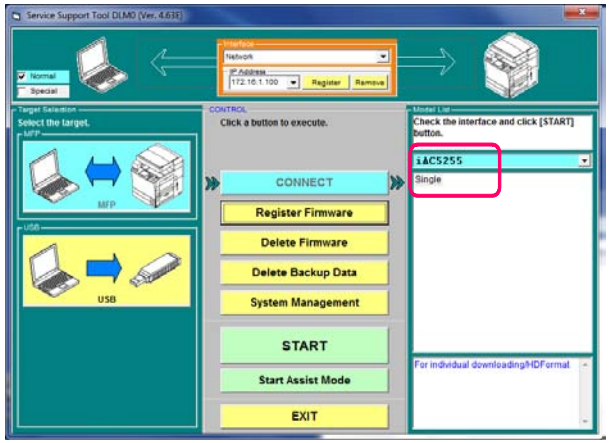
The following shows a method to collect a log by connecting a PC with SST (Ver. 4.63 or later) running to the machine.

## ■ Preconditions:

In addition to continuous logs, obtained manual logs (holding down the counter + 1, 2, and 3 keys) and event logs (DEBUG-1) are stored in the machine.
A PC where SST is running is connected to the machine, and the machine is in download mode.

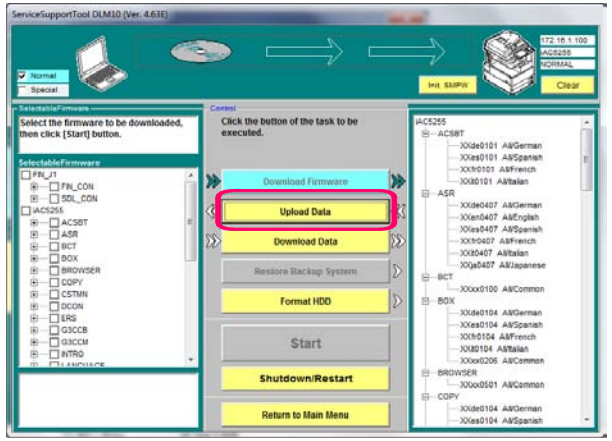
> Note:
> Executing a log collection by SST deletes logs in the machine.

1. Start SST (Ver. 4.63 or later) and select iRC5051 from Model List. Press the Start button.




F-6-202

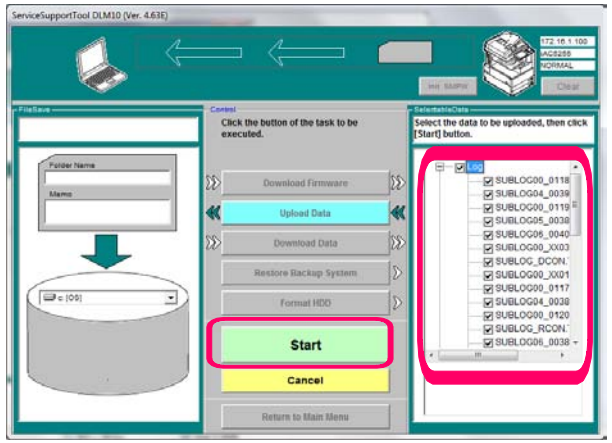
2. Press the Upload Data button.




F-6-203

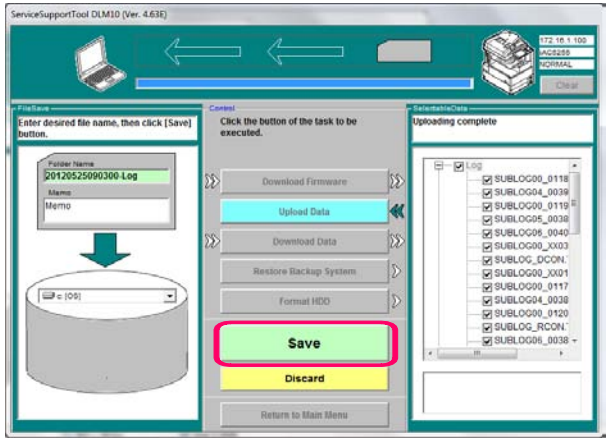
3. Select the data to be uploaded, then click [Start] button.
When there is no log in the machine, it results in blank option items for "data to upload".
When the file name is longer than the frame, it displays that it is a log in the comment column just below.
It is displayed as "log" in the figure below.

Note:
The log is not stored when You cancel it before pushing the Start button.
It is deleted from the main body.



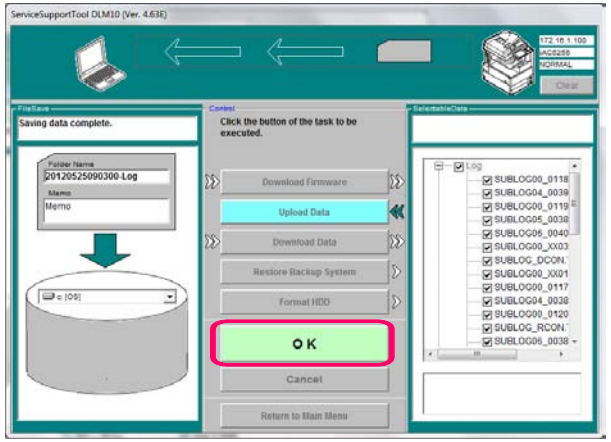

F-6-204

4. Press the "Save" button.




F-6-205

5. Check that the data storage is completed and click the "OK" button.




F-6-206

6. Check that the log is stored in the specified location in the PC.
   In the initial setting:
   Windows(C:) > ServData > iAxxxx(Model) > JWH00003(Serial number) > 20120524192934-Log(yymmddhhmm)

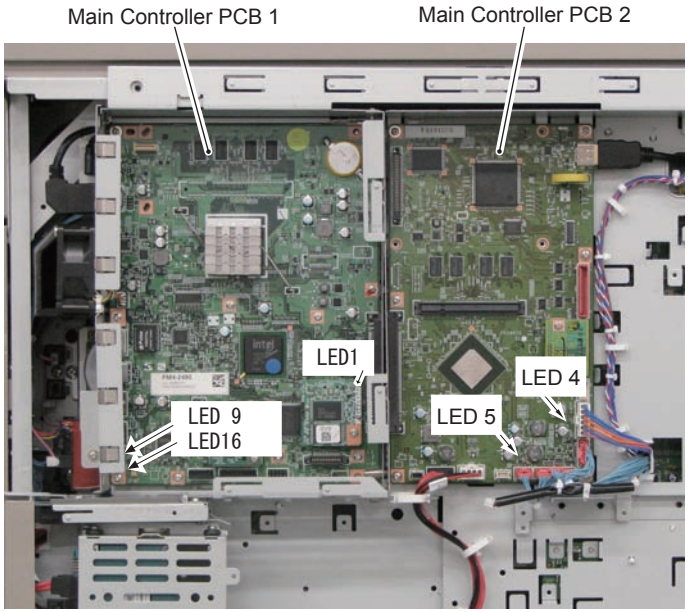
| | |
|---|---|
| SUBLOG_DCON.TXT | 254 KB |
| SUBLOG_DCON01.TXT | 254 KB |
| SUBLOG_USBFAX_LOG.TXT | 239 KB |
| SUBLOG00_0129_0706093688SHT.TXT | 3,009 KB |
| SUBLOG00_0130_0706094388SHT.TXT | 2,695 KB |
| SUBLOG00_0131_0706095588SHT.TXT | 2,860 KB |
| SUBLOG00_0132_0706100188SHT.TXT | 2,691 KB |
| SUBLOG00_0133_0706110119.TXT | 3,111 KB |
| SUBLOG00_0134_0706132632.TXT | 3,088 KB |
| SUBLOG00_0135_0706132945.TXT | 3,050 KB |
| SUBLOG00_0136_0706133304.TXT | 3,041 KB |
| SUBLOG00_0137_0706133635.TXT | 3,026 KB |
| SUBLOG00_0138_0706134001.TXT | 3,030 KB |
| SUBLOG00_0139_0706134317.TXT | 3,065 KB |
| SUBLOG00_0140_0706134635.TXT | 3,035 KB |
| SUBLOG00_0141_0706150088SHT.TXT | 3,042 KB |
| SUBLOG00_0142_0706200433.TXT | 2,980 KB |
| SUBLOG00_0143_0706200535.TXT | 2,932 KB |
| SUBLOG00_0144_0706200688SHT.TXT | 456 KB |
| SUBLOG00_0145_0706151028.TXT | 3,090 KB |
| SUBLOG00_0146_0706151141.TXT | 3,115 KB |
| SUBLOG00_0147_0706152759.TXT | 3,321 KB |
| SUBLOG00_0148_0706155588SHT.TXT | 1,283 KB |

F-6-207

# Operation Check of the Main Controller LEDs

You may be able to determine the remedies against Main Controller-related troubles by checking the lighting status of LEDs on the PCB.

## Location of LEDs

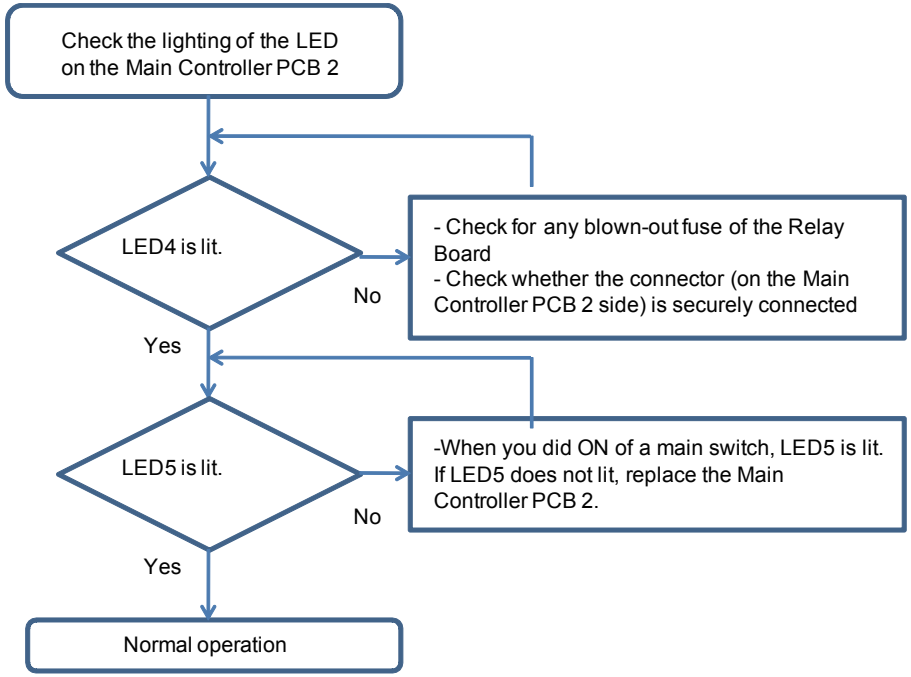



F-6-208

## Preconditions

Check whether the Main Controller PCB 1 and the Main Controller PCB 2 are properly inserted.
Check whether the connectors are securely connected. LEDs are not lit when the contaction is poor. (Power-on is not possible)
When the LED of the Control Panel main power is not lit, check the connection of cables (such as UI Cable).

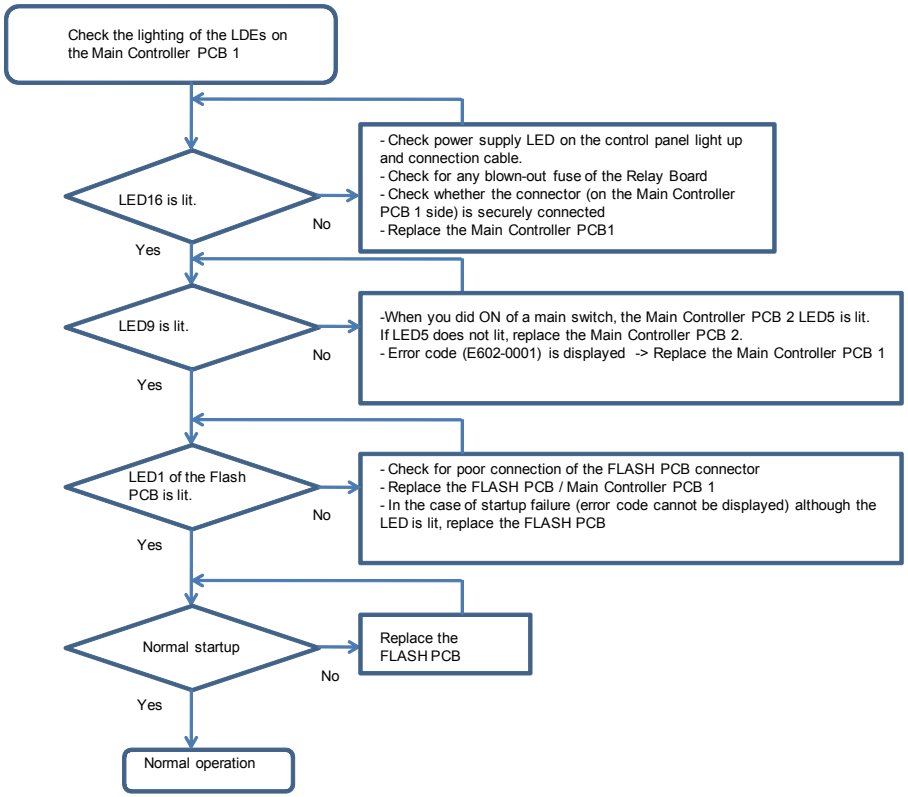
## Checking the lighting of the LED4, LED5 on the Main Controller 2




F-6-209

## Check the lighting of the LDEs on the Main Controller PCB 1

- Main Controller PCB 1 - LED9, LED16
- Flash PCB - LED1




F-6-210

7

# Error Code


- Overview
- Error Code
- Jam Code
- Alarm Code

# Overview

## Outline

This chapter describes various codes which are displayed when a failure occurs on the product. These are classified into 3 codes as follows.

| Code type | Explanation | Reference |
|---|---|---|
| Error code | This code is displayed when an error occurs on the machine. | p. 7-3 |
| Jam code | This code is displayed when a jam occurs inside the machine. | p. 7-83 |
| Alarm code | This code is displayed when a function of the machine is malfunctioned. | p. 7-98 |

T-7-1

- Error code notation

An error code is shown in 7-digit [E000XXX] on the display on the operation panel. However, [000] in 2 to 4 digit is not used. Thus, an error code is described as [EXXX] using 5 to 7 digit in the service manual. (e.g.: E012 = E000012)

### Location code

Error code, jam code, and alarm code include the location information.
Location information is displayed as 2-digit numbers as follows.
In the jam display screen, the “L” row corresponds to the location code.

| Device | JAM | ERR | ALARM |
|---|---|---|---|
| imageRUNNER ADVANCE 8105/8095/8085 Series | 00 | Main Controller = 00<br>Printer engine = 05 | Others of listed below |
| Duplex Color Image Reader Unit-C1 | 01 | 04 | 02 |
| Paper Deck Unit-C1 | 00 | 05 | 04 |
| POD Deck Lite-A1 | 00 | 05 | 04 |
| Document Insertion Unit-K1 | IPC : 02<br>ARCNET : 71 | 05 | - |
| Paper Folding Unit-H1 | 02 | 05 | - |
| Professional Puncher-C1/Professional Puncher Integration Unit-B1 | IPC : 02<br>ARCNET : 31 | 05 | 65 |
| Staple Finisher-D1/Booklet Finisher-D1 | 02 | 05 | 61, 62 |
| Staple Finisher-F1/Booklet Finisher-F1 | 02 | 05 | 61, 62 |
| Booklet Trimmer-D1 | 02 | 05 | - |

T-7-2

### Pickup position code

When jam occurs, pickup location is indicated with the following pickup position code.
In the jam display screen, the “P” row corresponds to the pickup position code.

| Pickup position | Pickup position code |
|---|---|
| At Finisher jam/At error avoidance jam/At ADF jam without pickup operation (at SEND, Inbox, etc.) | 00 |
| Right Deck | 01 |
| Left Deck | 02 |
| Cassette 3 | 03 |
| Cassette 4 | 04 |
| Multi-purpose Tray | 05 |
| Side Paper Deck | 06 |
| Duplex (At duplex printing, jam occurs after paper passes through the Duplex Paper Sensor (PS38).) | F0 |

T-7-3

### Points to Note When Clearing MN-CON

- Execution of clearing MN-COM deletes all data in Address Book, Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. Before execution of this operation, ask user to back up the data and get approval for this operation.

- When clearing MN-CON while any login application other than Default Authentication is, error such as not displayed login screen occurred. In this case, access SMS once and switch login application to Default Authentication to recover to the normal status.

### Points to Note When Clearing HDD

As a remedy for error codes (E602-XXXX, E611-0000), HDD partition is selected and the target partition may be cleared.
When clearing partition, be sure to check which data will be deleted by referring Detail of HDD partition and explain to the user before starting work.

# Error Code

## Error Code Details

### E000 to E069

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E000 | -0001 | -05 | Title | Fixing Assembly low temperature error |
| | | | Detection description | Temperature of the Fixing Main Thermistor (THM1) does not reach 70 degC although 35 seconds have passed after starting the Fixing Roller temperature control. |
| | | | Remedy | 1. Check the connection of the Fixing Assembly. (Connection error of the Drawer, connector disconnection, open circuit) -> Replace the Heater Assembly.<br>2. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10) (connector disconnection, open circuit, the caught cable).<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1). |
| E000 | -0002 | -05 | Title | Fixing Assembly low temperature error |
| | | | Detection description | Temperature of the Fixing Main Thermistor (THM1) does not reach 10 degC although 35 seconds have passed after starting the Fixing Roller temperature control. |
| | | | Remedy | 1. Check the connection of the Fixing Assembly. (Connection error of the Drawer, connector disconnection, open circuit) -> Replace the Heater Assembly.<br>2. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10) (connector disconnection, open circuit, the caught cable).<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1). |
| E000 | -0010 | -05 | Title | Fixing Assembly low temperature error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |
| E001 | -0002 | -05 | Title | Fixing Assembly high temperature error (software detection) |
| | | | Detection description | • The Fixing Main Thermistor (THM1) detects 230 degC or higher.<br>• The Fixing Sub Thermistor 1 (THM2)/Fixing Sub Thermistor 2 (THM4) detects 230 degC or higher for 2 consecutive seconds. |
| | | | Remedy | 1. Check if the cable of the Thermistor is caught. -> Replace the Thermistors. -> Replace the Fixing Upper Unit.<br>2. IH control error. -> Replace the Fixing Power Supply PCB (PCB10), the DC Controller PCB (PCB1), or the Main Driver PCB (PCB2). |
| E001 | -0003 | -05 | Title | Fixing Assembly high temperature error (hardware detection) |
| | | | Detection description | • The Fixing Main Thermistor (THM1) detects hardware overheating.<br>• The Fixing Sub Thermistor 1 (THM2)/Fixing Sub Thermistor 2 (THM4) detects hardware overheating. |
| | | | Remedy | 1. Check if the cable of the Thermistor is caught. -> Replace the Thermistors. -> Replace the Fixing Upper Unit.<br>2. Replace the Main Driver PCB (PCB2).<br>3. Replace the DC Controller PCB (PCB1). |
| E001 | -0004 | -05 | Title | Fixing Assembly high temperature error (hardware detection) |
| | | | Detection description | Abnormal temperature difference among the Thermistors was detected. |
| | | | Remedy | 1. Check if the cable of the Thermistor is caught or is open circuit. -> Replace the Thermistors. -> Replace the Fixing Upper Unit.<br>2. Replace the Main Driver PCB (PCB2).<br>3. Replace the DC Controller PCB (PCB1). |
| E001 | -0010 | -05 | Title | Fixing Assembly high temperature error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E002 | -0001 | -05 | Title | Fixing Assembly temperature rise error |
| | | | Detection description | • Temperature of the Fixing Main Thermistor (THM1) does not reach 100 degC although 25 seconds have passed since it reached above 70 degC after starting the Fixing Roller temperature control.<br>• Temperature of the Fixing Main Thermistor does not reach 130 degC although 25 seconds have passed since it reached above 100 degC after starting the Fixing Roller temperature control.<br>• Temperature of the Fixing Main Thermistor does not reach 150 degC although 20 seconds have passed since it reached above 130 degC after starting the Fixing Roller temperature control. |
| | | | Remedy | 1. Check the connection of the Fixing Main Thermistor (THM1). -> Replace the Fixing Main Thermistor Unit.<br>2. Check the installation of the Fixing Main Thermistor. -> Replace the Fixing Upper Unit.<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1).<br>6. Replace the Relay PCB (PCB5). |
| E002 | -0010 | -05 | Title | Fixing Assembly temperature rise error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |
| E003 | -0000 | -05 | Title | Fixing Assembly temperature decrease error |
| | | | Detection description | The Fixing Main Thermistor (THM1) detects 70 degC or lower for 2 seconds or longer although the temperature reached above 100 degC after starting the Fixing Roller temperature control. |
| | | | Remedy | 1. Check the connection of the Fixing Main Thermistor (THM1). -> Replace the Fixing Main Thermistor Unit.<br>2. Check the installation of the Fixing Main Thermistor. -> Replace the Fixing Upper Unit.<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1).<br>6. Replace the Relay PCB (PCB5). |
| E003 | -0010 | -05 | Title | Fixing Assembly temperature decrease error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |
| E004 | -0010 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E004 | -0102 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Fixing current error. |
| | | | Remedy | Replace the Fixing Power Supply PCB (PCB10).<br>Replace the Main Driver PCB (PCB2). |
| E004 | -0205 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Detect that the Fixing Main Thermistor (THM1) is not connected. |
| | | | Remedy | 1. Check the harness of the Fixing Main Thermistor (THM1) in the Fixing Assembly.<br>2. Check the connection of the harness of the Fixing Assembly on the host machine side.<br>3. Replace the Main Driver PCB (PCB2). |
| E005 | -0000 | -05 | Title | Fixing Cleaning Web absent error |
| | | | Detection description | After noticing the Fixing Cleaning Web absent, the web was pulled out 2000 times. |
| | | | Remedy | 1. Replace the Fixing Cleaning Web.<br>2. Replace the Fixing Cleaning Web Level Sensor (PS45).<br>3. Replace the DC Controller PCB (PCB1).<br>After executing the measures, clear the Fixing Cleaning Web counter (COPIER> COUNTER> MISC> FIXWEB). |
| E005 | -0001 | -05 | Title | Error in Fixing Cleaning Web Drive Solenoid connection |
| | | | Detection description | Connection of the Fixing Cleaning Web Drive Solenoid (SL9) is not detected when the power is turned ON. |
| | | | Remedy | 1. Check the Connector of the Fixing Cleaning Web Drive Solenoid.<br>2. Check the output of the DC Power Supply PCB (24V) (PCB31).<br>Using a tester, check whether 24V is output from 3PIN through 6PIN of J513 on the Relay PCB. In case of error, replace the DC Power Supply PCB (24V) (PCB31) (on the right).<br>3. Replace the Fixing Cleaning Web Drive Solenoid (SL9). |
| E005 | -0010 | -05 | Title | Fixing Cleaning Web error |
| | | | Detection description | Turning OFF and then ON the power without clearing the error. |
| | | | Remedy | Clear the error. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E012 | -0001 | -05 | Title | Drum Motor (M1) error |
| | | | Detection description | Lock error of the Drum Motor (M1). |
| | | | Remedy | 1. Check the connection of the Main Driver PCB (PCB2) and the Drum Motor (M1).<br>Motor side: J2138, PCB side: J109<br>2. Check the voltage of the Drum Motor (M1) J2151.<br>If voltage is 0V, check the connection of the Relay PCB J520.<br>3. Replace the Drum Motor (M1).<br>4. Check the gear of the Drum Drive Shaft.<br>If the load is too much, replace the Process Unit and the Drum Drive Unit (Shaft).<br>5. Replace the Main Driver PCB (PCB2).<br>6. Replace the DC Controller PCB (PCB1). |
| E013 | -0001 | -05 | Title | Error in Waste Toner Lock Detection Connector disconnection |
| | | | Detection description | The Waste Toner Lock Detection Switch (SW5) detects locked state 3 times for 200 msec at power-on. |
| | | | Remedy | Check the connection of the Waste Toner Lock Detection Switch (SW5) and the Main Driver PCB (PCB2).<br>Switch side: J3050, PCB side: J103 |
| E013 | -0002 | -05 | Title | Error in Waste Toner Feed Screw Lock detection |
| | | | Detection description | The Waste Toner Lock Detection Switch detects locked state 3 times for 200 msec while the Developing Assembly is driven. |
| | | | Remedy | 1. Check the Waste Toner Container and the Waste Toner Container Pipe.<br>If toner overflowed from the Waste Toner Container clogs the outlet of the Waste Toner Pipe, remove the clogged toner.<br>After removing it, check that the screw can be seen from the outlet of the pipe.<br>2. Check the connection of the Waste Toner Lock Detection Switch (SW5) and the Main Driver PCB (PCB2).<br>3. Check the connection of the Main Driver PCB (PCB2) and the DC Controller PCB (PCB1).<br>Main Controller side: J3050, DC Controller side: J103<br>4. Replace the Waste Toner Lock Detection Switch (SW5).<br>5. Replace the Waste Toner Feed Unit.<br>6. Replace the Main Driver PCB (PCB2).<br>7. Replace the DC Controller PCB (PCB1). (When the error is still displayed after replacing the Waste Toner Feed Unit and the Main Driver PCB (PCB2).) |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E014 | -0001 | -05 | Title | Fixing Motor error |
| | | | Detection description | Lock error of the Fixing Motor (M3). |
| | | | Remedy | 1. Check the gear of the Fixing Drive Unit. -> Replace the gear.<br>2. Replace the Fixing Motor (M3).<br>3. Check the connection drawer between the Fixing Assembly and the host machine.<br>4. Replace the Main Driver PCB (PCB2). |
| E017 | -0001 | -05 | Title | ETB disengagement error |
| | | | Detection description | Disengagement of the ETB is not completed within the specified period of time. |
| | | | Remedy | 1. Check the connection of the ETB Disengage Sensor (PS56).<br>Sensor side: J2101, J3270, PCB side: J343 (Duplex Driver PCB (PCB4))<br>2. Check the connection of the Duplex Feed Left Motor (M19).<br>Motor side: J2107, J3044 (relay), PCB side: J330 (Duplex Driver PCB (PCB4))<br>3. Replace the ETB Disengage Sensor (PS56).<br>4. Replace the Duplex Feed Left Motor (M19).<br>5. Replace the Duplex Driver PCB (PCB4).<br>6. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>Check if the Disengagement Cam is stained. If necessary, clean it.<br>Check if the drive system (gear, Motor, one-way) is failed. If necessary, replace it.<br>Check if the link with the Fixing Feed Handle is failed. If necessary, replace it. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E017 | -0002 | -05 | Title | ETB engagement error |
| | | | Detection description | Engagement of the ETB is not completed within the specified period of time. |
| | | | Remedy | 1. Check the connection of the ETB Disengage Sensor (PS55). Sensor side: J2100, J3270, PCB side: J343 (Duplex Driver PCB (PCB4))<br>2. Check the connection of the Duplex Feed Left Motor (M19). Motor side: J2107, J3044 (relay), PCB side: J330 (Duplex Driver PCB (PCB4))<br>3. Replace the ETB Engage Sensor (PS55).<br>4. Replace the Duplex Feed Left Motor (M19).<br>5. Replace the Duplex Driver PCB (PCB4).<br>6. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>Check if the Disengagement Cam is stained. If necessary, clean it.<br>Check if the drive system (gear, Motor, one-way) is failed. If necessary, replace it.<br>Check if the link with the Fixing Feed Handle is failed. If necessary, replace it. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E017 | -0003 | -05 | Title | ETB HP error |
| | | | Detection description | Engagement of the ETB was not completed at initialization. |
| | | | Remedy | If this error occurs at installation, the ETB Disengage Member (Transfer Frame Stopper) may be left unremoved. Refer to the troubleshooting “Remedy to be implemented when the ETB Disengage Member (Transfer Frame Stopper) is left unremoved” in the Service Manual, and check whether the ETB Disengage Member is left unremoved or not and implement appropriate procedure.<br>If this error occurs at times other than installation, follow the following steps to implement check and remedy.<br>1. Check the connection of the ETB Disengage Sensor (PS56). Sensor side: J2101, J3270, PCB side: J343 (Duplex Driver PCB (PCB4))<br>2. Check the connection of the Duplex Feed Left Motor (M19). Motor side: J2107, J3044 (relay), PCB side: J330 (Duplex Driver PCB (PCB4))<br>3. Replace the ETB Disengage Sensor (PS56).<br>4. Replace the Duplex Feed Left Motor (M19).<br>5. Replace the Duplex Driver PCB (PCB4).<br>6. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>Check if the Disengagement Cam is stained. If necessary, clean it.<br>Check if the drive system (gear, Motor, one-way) is failed. If necessary, replace it.<br>Check if the link with the Fixing Feed Handle is failed. If necessary, replace it. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E020 | -0000 | -05 | Title | Developing Assembly toner absent error |
| | | | Detection description | Toner in the Developing Assembly was empty for 4 minutes. |
| | | | Remedy | 1. Check the connection of the Developing Toner Sensor (TS1). Sensor side: J2133, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>2. Check the connection of the Magnet Roller Clutch (CL5). Sensor side: J2036, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>3. Check the connection of the Toner Feed Motor (M28). Motor side: J2035, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>4. Check the connection of the Buffer Toner Sensor (TS3). Sensor side: J2039, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>5. Replace the Developing Toner Sensor (TS1).<br>6. Replace the Magnet Roller Clutch (CL5).<br>7. Replace the Toner Feed Motor (M28).<br>8. Replace the Buffer Toner Sensor (TS3).<br>9. Replace the Main Driver PCB (PCB2).<br>10. Replace the DC Controller PCB (PCB1). |
| E020 | -0001 | -05 | Title | Error in Developing Toner Sensor connection detection |
| | | | Detection description | The connection detection port was OFF at power-on. |
| | | | Remedy | 1. Check the connection of the Developing Toner Sensor (TS1). Sensor side: J2133, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>2. Replace the Developing Toner Sensor (TS1).<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |
| E020 | -0002 | -05 | Title | Error in Buffer Toner Sensor connection detection |
| | | | Detection description | The connection detection port was OFF at power-on. |
| | | | Remedy | 1. Check the connection of the Buffer Toner Sensor (TS3). Sensor side: J2039, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>2. Replace the Buffer Toner Sensor (TS3).<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E020 | -0003 | -05 | Title | Error in the Toner Excess Supply Sensor connection detection |
| | | | Detection description | The connection detection port was OFF at power-on. |
| | | | Remedy | 1. Check the connection of the Toner Excess Supply Sensor (TS2). Sensor side: J2038, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>2. Replace the Toner Excess Supply Sensor (TS2).<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |
| E020 | -0004 | -05 | Title | Error in Magnet Roller Clutch connection detection |
| | | | Detection description | The connection detection port was OFF at power-on. |
| | | | Remedy | 1. Check the connection of the Magnet Roller Clutch (CL5). Sensor side: J2036, J3124 (relay), J3090 (relay) PCB side: J3091(relay), J115 (Main Driver PCB (PCB2))<br>2. Replace the Magnet Roller Clutch (CL5).<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |
| E020 | -0020 | -05 | Title | Error in Developing Assembly Toner Sensor Cleaning Scraper displacement |
| | | | Detection description | State without toner was detected continuously. |
| | | | Remedy | 1. Turn OFF the main power.<br>2. Replace the Developing Assembly.<br>3. Turn ON the main power. |
| E020 | -0021 | -05 | Title | Error in Developing Assembly Toner Sensor Cleaning Scraper displacement |
| | | | Detection description | State with toner was detected continuously. |
| | | | Remedy | 1. Turn OFF the main power.<br>2. Replace the Developing Assembly.<br>3. Turn ON the main power. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E023 | -0001 | -05 | Title | Developing Motor error |
| | | | Detection description | Lock error of the Developing Motor (M2). |
| | | | Remedy | 1. Check the connection of the Connector.<br>Motor side: J2319, Main Driver PCB (PCB2) side: J109<br>2. Check the voltage of the Developing Motor (M2) J2152.<br>If voltage is 0V, check the connection of the Relay PCB J520.<br>3. Check the load of the Developing Motor (M2).<br>Manually turn the Developing Motor (M2) located at the rear of the host machine to check it.<br>4. Replace the Developing Motor (M2).<br>5. Replace the Developing Clutch (CL1). (When an error occurs while the Developing Clutch is ON.)<br>6. Replace the Main Driver PCB (PCB2).<br>7. Replace the DC Controller PCB (PCB1). |
| E023 | -0002 | -05 | Title | Error in Magnet Roller Clutch connection detection |
| | | | Detection description | Connection of the Magnet Roller Clutch (CL5) cannot be detected 5 times with 20 msec time interval. |
| | | | Remedy | 1. Check the connection of the Magnet Roller Clutch (CL5).<br>Sensor side: J2006, Main Driver PCB (PCB2) side: J109<br>2. Replace the Magnet Roller Clutch (CL5).<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |
| E025 | -0001 | -05 | Title | Toner Feed Motor error |
| | | | Detection description | Overcurrent of the Toner Feed Motor (M28) was detected. |
| | | | Remedy | 1. Check the connection of the Connector.<br>Motor side: J2036, Buffer Unit relay: J3124, Front side relay: J3090, Rear side relay: J3091, Main Driver PCB (PCB2) side: J115<br>2. Replace the Toner Feed Motor (M28).<br>3. Check if toner is clogged inside of the Buffer.<br>Turn the Drive Shaft of the Motor with your hand to check it. If the load is too much, inside of the Buffer may be clogged, so clean inside of it.<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E027 | -0001 | -05 | Title | Toner Supply Motor error |
| | | | Detection description | Lock error of the Toner Supply Motor (M10). |
| | | | Remedy | 1. Check the connection of the Connector.<br>Motor side: J2037, Front side relay: J3080, Rear side relay: J3063, Main Driver PCB (PCB2) side: J117<br>2. Remove the Toner Container, and check if an error occurs.<br>If an error does not occur, reinstall the Toner Container and check again. If an error occurs, check the driving area of connection point of the container.<br>If an error occurs, go on to 3.<br>3. Replace the Toner Supply Motor (M10).<br>4. Replace the Main Driver PCB (PCB2).<br>5. Replace the DC Controller PCB (PCB1). |
| E032 | -0001 | -00 | Title | Failure of NE Controller Counter |
| | | | Detection description | Detection of open circuit of count pulse signal. |
| | | | Remedy | Disconnection of cable. |
| E041 | -0001 | -05 | Title | Right Deck Lifter Motor error |
| | | | Detection description | Overcurrent of the Right Deck Lifter Motor was detected. |
| | | | Remedy | 1. Check for displacement of the Lifter Wire of the Right Deck.<br>2. Check for hindrance to smooth movement of the Deck Base Plate of the Right Deck. |
| E041 | -0002 | -05 | Title | Left Deck Lifter Motor error |
| | | | Detection description | Overcurrent of the Left Deck Lifter Motor was detected. |
| | | | Remedy | 1. Check for displacement of the Lifter Wire of the Left Deck.<br>2. Check for hindrance to smooth movement of the Deck Base Plate of the Left Deck. |
| E041 | -0003 | -05 | Title | Cassette 3 Lifter Motor error |
| | | | Detection description | Overcurrent of the Cassette 3 Lifter Motor was detected. |
| | | | Remedy | 1. Check for error around the Lifter of the Cassette 3.<br>2. Check for hindrance to smooth movement of the Cassette Base Plate of the Cassette 3. |
| E041 | -0004 | -05 | Title | Cassette 4 Lifter Motor error |
| | | | Detection description | Overcurrent of the Cassette 4 Lifter Motor was detected. |
| | | | Remedy | 1. Check for error around the Lifter of the Cassette 4.<br>2. Check for hindrance to smooth movement of the Cassette Base Plate of the Cassette 4. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E053 | -0001 | -05 | Title | Error in Reverse Upper Flapper Solenoid connection detection |
| | | | Detection description | Connection of the Reverse Upper Flapper Solenoid (SL5) cannot be detected 5 times with 20 msec time interval. |
| | | | Remedy | 1. Check the connection of the Reverse Upper Flapper Solenoid (SL5).<br>Solenoid side: J2115, Duplex Driver PCB side: J340<br>2. Replace the Reverse Upper Flapper Solenoid (SL5).<br>3. Replace the Duplex Driver PCB (PCB4).<br>4. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E060 | -0001 | -05 | Title | Primary Charging Shutter HP open error |
| | | | Detection description | The Primary Charging Shutter Sensor (PS94) detects that the shutter is opened although it is moved to the close position. |
| | | | Remedy | 1. Check the position of the Primary Charging Shutter and the Cleaning Pad.<br>1-A. In the case that the Primary Charging Shutter and the Cleaning Pad fail to operate (stopped at HP at front side)<br>1-A-1. Check the connection of the Primary Charging Wire Cleaning Motor (M6).<br>Motor side: J3017, J3060 (iR-ADV 8xxx)/J3160 (iR-ADV 6xxx) (relay), PCB side: J3177 (relay), J107 (Main Driver PCB (PCB2))<br>1-A-2. Replace the Primary Charging Wire Cleaning Motor (M6).<br>1-B. In the case that the Primary Charging Shutter and the Cleaning Pad are stopped at rear side (close operation position)<br>1-B-1. Check the connection of the Primary Charging Shutter Sensor (PS94).<br>Sensor side: J2029, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>1-B-2. Replace the Primary Charging Shutter Sensor (PS94).<br>1-C. In the case that the Primary Charging Shutter and the Cleaning Pad are stopped along the way<br>1-C-1. Check the loosening of screw on the Slider Pin and abrasion of the pin. Tighten the screw or replace the Slider Pin.<br>1-C-2. Replace the Primary Charging Assembly.<br>1-D. In the case that the Primary Charging Shutter stops at front side and the Cleaning Pad moves to rear side<br>1-D-1. Check if the Shutter Mounting Plate is deformed. If so, replace the Shutter Unit.<br>1-D-2. Check the loosening of screw on the Slider Pin and abrasion of the pin. Tighten the screw or replace the Slider Pin.<br>1-D-3. Replace the Primary Charging Assembly.<br>2. Replace the Main Driver PCB (PCB2).<br>3. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E060 | -0002 | -05 | Title | Primary Charging Shutter HP close error |
| | | | Detection description | The Primary Charging Shutter Sensor (PS94) detects that the shutter is closed although it is moved to the open position. |
| | | | Remedy | 1. Check the position of the Primary Charging Shutter and the Cleaning Pad.<br>1-A. In the case that the Primary Charging Shutter and the Cleaning Pad fail to operate (stopped at HP at front side)<br>1-A-1. Check the connection of the Primary Charging Wire Cleaning Motor (M6).<br>Motor side: J3017, J3060 (iR-ADV 8xxx)/J3160 (iR-ADV 6xxx) (relay), PCB side: J3177 (relay), J107 (Main Driver PCB (PCB2))<br>1-A-2. Replace the Primary Charging Wire Cleaning Motor (M6).<br>1-B. In the case that the Primary Charging Shutter and the Cleaning Pad are stopped at rear side (close operation position)<br>1-B-1. Check the connection of the Primary Charging Shutter Sensor (PS94).<br>Sensor side: J2029, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>1-B-2. Replace the Primary Charging Shutter Sensor (PS94).<br>1-C. In the case that the Primary Charging Shutter and the Cleaning Pad are stopped along the way<br>1-C-1. Check the loosening of screw on the Slider Pin and abrasion of the pin. Tighten the screw or replace the Slider Pin.<br>1-C-2. Replace the Primary Charging Assembly.<br>2. Replace the Main Driver PCB (PCB2).<br>3. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E061 | -0001 | -05 | Title | Potential control error (VL) |
| | | | Detection description | The measured value in the dark area (VL) differs +/-30 V or higher than the target potential at potential control.<br>NOTE:<br>If the difference is somewhere between +/-10 V and less than 30 V, alarm is indicated. |
| | | | Remedy | 1. Check the connection of the Pre-exposure LED (connector connection, open circuit, the caught cable).<br>2. Check the installation of the Primary Charging Assembly (connector connection, open circuit, the caught cable).<br>3. Check the fixation state of the Drum and the Drum Shaft. (Check if the drum fixation cylinder is properly installed.)<br>4. Check if the Dustproof Glass is soiled. If necessary, clean it.<br>5. Check the installation of the Laser Scanner Unit (connector connection, open circuit, the caught cable).<br>6. Check the installation of the Primary Charging High Voltage PCB (PCB11), and its connection (connector connection, open circuit, the caught cable).<br>7. Check the installation of the Potential Sensor (connector connection, open circuit, the caught cable).<br>8. Check the installation of the Drum Motor (M1), and its connection (connector connection, open circuit, the caught cable).<br>9. Replace the parts.<br>• Primary Charging Assembly<br>• Laser Scanner Unit<br>• Potential Sensor<br>• Primary Charging High Voltage PCB (PCB11)<br>• Drum Motor (M1)<br>• Main Driver PCB (PCB2)<br>• DC Controller PCB (PCB1) |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E061 | -0101 | -05 | Title | Potential control error (VD) |
| | | | Detection description | Potential in the dark area did not fall within the range (target value +/-10 V) although retry was executed 8 times at VD potential control. |
| | | | Remedy | 1. Check the connection of the Pre-exposure LED (connector connection, open circuit, the caught cable).<br>2. If the current value of the Primary Charging Roller (COPIER> DISPLAY> DPOT> PRIM-C) is 1550 micro A or higher, execute 2-1 to 3.<br>2-1. Increase the grid voltage of the Primary Charging Assembly by 100 V (COPIER> ADJUST> HV-PRI> PRI-GRID).<br>2-2. Execute the potential control (COPIER> FUNCTION> DPC> DPC).<br>2-3. Turn OFF and then ON the power.<br>3. Check the installation of the Primary Charging Assembly (connector connection, open circuit, the caught cable).<br>4. Check the installation of the Primary Charging High Voltage PCB (PCB11), and its connection (connector connection, open circuit, the caught cable).<br>5. Check the installation of the Drum Motor (M1), and its connection (connector connection, open circuit, the caught cable).<br>6. Replace the parts.<br>• Primary Charging Assembly<br>• Primary Charging High Voltage PCB<br>• Drum Motor (M1)<br>• Main Driver PCB (PCB2)<br>• DC Controller PCB (PCB1) |
| E064 | -00FF | -05 | Title | High voltage setting error |
| | | | Detection description | With the state in which the developing AC is output, 600 V or higher developing DC output was detected.<br>(Basically, this error is not detected. However, to detect that the image formation-related backup data is corrupted or to protect the hardware in case of 600 V or higher developing DC output, this is to be an error.) |
| | | | Remedy | 1. Turn OFF and then ON the main power.<br>2. Replace the DCON PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E065 | -0001 | -05 | Title | Primary charging/grid high voltage output leak error |
| | | | Detection description | The leak detection signal was detected 5 times in a row for every 20 msec. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the High Voltage Unit.<br>Main Driver side: J111, High Voltage Unit side: J3097<br>2. Check the connection between the Relay PCB (PCB5) and the High Voltage Unit.<br>Relay side: J519, High Voltage Unit side: J3099<br>3. Replace the Primary Charging Assembly.<br>4. Check the connection inside of the High Voltage Unit.<br>High Voltage Unit Relay (J3097) and Primary Charging High Voltage PCB (PCB11) (J3501)<br>High Voltage Unit relay (J3099) and Pre-transfer Charging PCB (PCB26) (J3545, J3500)<br>5. Replace the Main Driver PCB (PCB2).<br>6. Replace the Primary Grid High Voltage Connector (FM4-1006). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E066 | -0001 | -05 | Title | Pre-transfer Charging Shutter HP open error |
| | | | Detection description | The Pre-transfer Charging Shutter Sensor (PS95) detects that the shutter is opened although it is moved to the close position. |
| | | | Remedy | 1. Check the position of the Pre-transfer Charging Shutter.<br>1-A. In the case that the Pre-transfer Charging Shutter fails to operate (stopped at HP at front side)<br>Check the connection of the Pre-transfer Charging Wire Cleaning Motor (M7).<br>Sensor side: J3108, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>1-B. In the case that the Pre-transfer Charging Shutter is stopped at rear side (close operation position)<br>1-B-1. Check that the Primary Fan Duct is closed. Close the Primary Fan Duct.<br>1-B-2. Check movement of the pin to push the Pre-transfer Charging Shutter Sensor (PS95). Replace the Pin.<br>1-B-3. Check movement of the flag on the Pre-transfer Charging Shutter Sensor (PS95). Replace the flag/spring.<br>1-B-4. Check the connection of the Pre-transfer Charging Shutter Sensor (PS95).<br>Sensor side: J2114, J3215 (relay), J3067 (relay) PCB side: J3066 (relay), J130 (Main Driver PCB (PCB2))<br>1-C. In the case that the Pre-transfer Charging Shutter is stopped along the way<br>1-C-1. Check abrasion of the Slider Pin. Replace the Slider Pin.<br>1-C-2. Replace the Pre-transfer Charging Assembly.<br>2. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E066 | -0002 | -05 | Title | Pre-transfer Charging Shutter HP close error |
| | | | Detection description | The Pre-transfer Charging Shutter Sensor (PS95) detects that the shutter is closed although it is moved to the open position. |
| | | | Remedy | 1. Check the position of the Pre-transfer Charging Shutter.<br>1-A. In the case that the Pre-transfer Charging Shutter fails to operate (stopped at HP at front side)<br>Check the connection of the Pre-transfer Charging Wire Cleaning Motor (M7).<br>Sensor side: J3108, J3089 (relay), PCB side: J3088 (relay), J114 (Main Driver PCB (PCB2))<br>1-B. In the case that the Pre-transfer Charging Shutter is stopped at rear side (close operation position)<br>1-B-1. Check that the Primary Fan Duct is closed. Close the Primary Fan Duct.<br>1-B-2. Check movement of the pin to push the Pre-transfer Charging Shutter Sensor (PS95). Replace the Pin.<br>1-B-3. Check movement of the flag on the Pre-transfer Charging Shutter Sensor (PS95). Replace the flag/spring.<br>1-B-4. Check the connection of the Pre-transfer Charging Shutter Sensor (PS95).<br>Sensor side: J2114, J3215 (relay), J3067 (relay) PCB side: J3066 (relay), J130 (Main Driver PCB (PCB2))<br>1-C. In the case that the Pre-transfer Charging Shutter is stopped along the way<br>1-C-1. Check abrasion of the Slider Pin. Replace the Slider Pin.<br>1-C-2. Replace the Pre-transfer Charging Assembly.<br>2. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E067 | -0001 | -05 | Title | Developing high voltage output leak error |
| | | | Detection description | The leak detection signal was detected 5 times in a row for every 20 msec. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the High Voltage Unit.<br>Main Driver side: J112, High Voltage Unit side: J3098<br>2. Check the connection between the Relay PCB (PCB5) and the High Voltage Unit.<br>Relay side: J519, High Voltage Unit side: J3099<br>3. Replace the Developing Assembly.<br>4. Check the connection point of the Developing Assembly. If it is soiled, clean it.<br>5. Check the connection inside of the High Voltage Unit.<br>Check the connection of the High Voltage Unit Relay (J3097) and the Developing High Voltage PCB (J3511).<br>High Voltage Unit Relay (J3099) and Pre-transfer Charging PCB (J3545, J3500, J3510)<br>6. Replace the Main Driver PCB (PCB2). |
| E068 | -0001 | -05 | Title | Pre-transfer charging high voltage output leak error |
| | | | Detection description | The leak detection signal was detected 5 times in a row for every 20 msec. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the High Voltage Unit.<br>Main Driver side: J112, High Voltage Unit side: J3098<br>2. Check the connection between the Relay PCB (PCB5) and the High Voltage Unit.<br>Relay side: J519, High Voltage Unit side: J3099<br>3. Replace the Pre-transfer Charging Assembly.<br>4. Check the connection inside of the High Voltage Unit.<br>Check the connection of the High Voltage Unit Relay (J3098) and the Transfer High Voltage PCB (J3544).<br>Check the connection of the High Voltage Unit Relay (J3099) and the Pre-transfer Charging PCB (J3545, J3500)<br>5. Replace the Main Driver PCB (PCB2).<br>6. Replace the Pre-transfer High Voltage Connector (FM4-1007).<br>7. Replace the Pre-transfer Transformer (Post Charging Trance) of the High Voltage Unit. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E069 | -0001 | -05 | Title | Transfer high voltage output leak error |
| | | | Detection description | The leak detection signal was detected 5 times in a row for every 20 msec. |
| | | | Remedy | 1. Check the connection between the Duplex Driver PCB (PCB4) and the High Voltage Unit.<br>Check the connection at Duplex Driver side (J343) and the Transfer High Voltage side (J3066).<br>Check the connection at Duplex Driver side (J311) and the Transfer High Voltage side (J3061). (In addition, check that 24 V is output.)<br>2. Check the connection of the Transfer High Voltage PCB (J3306).<br>3. Replace the ETB Unit.<br>4. Replace the Duplex Driver PCB (PCB4). |

T-7-4

## E100 to E199

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E100 | -11xx | -05 | Title | BD unlock error |
| | | | Detection description | Locked state was not detected within the specified period of time at start-up. |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connection between the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor and BD PCB: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>When condensation occurs inside of the machine or the Laser Scanner Unit, this error also occurs.<br>When condensation occurs, leave the machine or the unit as it is until condensation disappears. (Use the machine or the unit in an environment where condensation does not occur.) |
| E100 | -12xx | -05 | Title | BD unlock error |
| | | | Detection description | After the BD range was specified, lock was unlocked for 1 second or longer. |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connection between the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor and BD PCB: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>When condensation occurs inside of the machine or the Laser Scanner Unit, this error also occurs.<br>When condensation occurs, leave the machine or the unit as it is until condensation disappears. (Use the machine or the unit in an environment where condensation does not occur.) |
| E100 | -13xx | -05 | Title | Polygon Motor BD unlock error (Laser diode is not lit up/failure of the BD PCB/power supply error, or condensation) |
| | | | Detection description | During the Polygon speed change, lock was unlocked for 1 second or longer. (Laser diode is not lit up/failure of the BD PCB/power supply error, or condensation) |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connection between the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor and BD PCB: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1).<br>NOTE:<br>When condensation occurs inside of the machine or the Laser Scanner Unit, this error also occurs.<br>When condensation occurs, leave the machine or the unit as it is until condensation disappears. (Use the machine or the unit in an environment where condensation does not occur.) |
| E100 | -FFFF | -05 | Title | Polygon Motor BD unlock error |
| | | | Detection description | Failed to get the Detailed Code (communication error, power supply error, PCB failure, etc.). |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |
| E102 | -0001 | -05 | Title | EEPROM writing error |
| | | | Detection description | Failed to write to EEPROM (Power is not supplied/EEPROM failure). |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E103 | -0001 | -05 | Title | Different Laser Scanner Unit model error |
| | | | Detection description | The scanner for 6275/6265/6255 models was installed to the imageRUNNER ADVANCE 8205/8295/8285 models, and vice versa. |
| | | | Remedy | Replace the Laser Scanner Unit with the one for the correct model. |
| E110 | -11xx | -05 | Title | Polygon Motor FG unlock error |
| | | | Detection description | Locked state was not detected within the specified period of time at start-up. (Power is not supplied/Polygon Motor signal error) |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |
| E110 | -12xx | -05 | Title | Polygon Motor FG unlock error |
| | | | Detection description | After the BD range was specified, lock was unlocked for 1 second or longer. (Power is not supplied/Polygon Motor signal error) |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E110 | -13xx | -05 | Title | Polygon Motor FG unlock error |
| | | | Detection description | During the Polygon speed change, lock was unlocked for 1 second or longer. (Power is not supplied/Polygon Motor signal error) |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |
| E110 | -FFFF | -05 | Title | Polygon Motor FG unlock error |
| | | | Detection description | Failed to get the Detailed Code (communication error, power supply error, PCB failure). |
| | | | Remedy | 1. Check if the door is opened. Close the door.<br>2. Check the connector connection, open circuit, and the caught cable of the DC Controller PCB (PCB1) and the Laser Driver PCB (PCB35).<br>DC Controller side: J471, J472, Laser Driver side: J5100, J5101, Relay Harness connection to Polygon Motor (M44) and BD Sensor: J3011<br>3. Replace the Laser Scanner Unit.<br>4. Replace the Laser Driver PCB (PCB35).<br>5. Replace the DC Controller PCB (PCB1). |
| E121 | -0001 | -05 | Title | Laser Scanner Cooling Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Laser Scanner Cooling Fan (FM16) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Laser Scanner Cooling Fan (FM16). |
| E197 | -0001 | -05 | Title | Error in Main Driver PCB connection detection |
| | | | Detection description | Failed to establish a communication between the DC Controller PCB (PCB1) and the Main Driver PCB (PCB2). |
| | | | Remedy | 1. Check the connection of the DC Controller PCB (PCB1) and the Main Driver PCB (PCB2).<br>DC Controller side: J411, J412, Main Driver side: J125, J126<br>2. Check the Main Driver PCB (PCB2) power supply connection.<br>Check the connection at the Main Driver side (J128) and the DC Controller side (J414), and check the voltage.<br>3. Replace the Main Driver PCB (PCB2).<br>4. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E197 | -0002 | -05 | Title | Error in Feed Driver PCB connection detection |
| | | | Detection description | Failed to establish a communication between the DC Controller PCB (PCB1) and the Feed Driver Pub (PCB3). |
| | | | Remedy | 1. Check the connection of the DC Controller PCB (PCB1) and the Feed Driver PCB (PCB3).<br>DC Controller side: J421, Feed Driver side: J204<br>2. Check the connection of the Feed Driver PCB (PCB3) and the DC-DC Converter PCB.<br>Check the connection at the Feed Driver side (J218) and the DC-DC Converter side (J9033).<br>3. Check the power supply of the Feed Driver PCB (PCB3).<br>Check if appropriate voltages are applied to the Feed Driver side (12 V to 1pin, 5 V to 3pin, 3.3 V to 4pin). -> If not, replace the DC-DC Converter PCB.<br>4. Replace the Feed Driver PCB (PCB3).<br>5. Replace the DC Controller PCB (PCB1). |
| E197 | -0003 | -05 | Title | Error in Duplex Driver PCB connection detection |
| | | | Detection description | Failed to establish a communication between the DC Controller PCB (PCB1) and the Duplex Driver PCB (PCB4). |
| | | | Remedy | 1. Check the connection between the DC Controller PCB (PCB1) and the Fixing Feed Drawer.<br>DC Controller side: J431, J432, Fixing Feed Drawer (host machine side): J3002D<br>Fixing Feed Drawer (Fixing Feed side): J3002L, Duplex Driver side: J300, J301<br>2. Check the connection of the Duplex Driver PCB (PCB4) and the DC-DC Converter PCB.<br>Check the connection at the Duplex Driver side (J311) and the DC-DC Converter side (J9034).<br>3. Check the power supply of the Duplex Driver PCB (PCB4).<br>Check if appropriate voltages are applied to the Duplex Driver side (12 V to 1pin, 5 V to 3pin, 3.3 V to 4pin). -> If not, replace the DC-DC Converter PCB.<br>4. Replace the Duplex Driver PCB (PCB4).<br>5. Replace the DC Controller PCB (PCB1). |
| E197 | -0004 | -05 | Title | Error in Relay PCB connection detection |
| | | | Detection description | Connection between the DC Controller PCB (PCB1) and the Relay PCB (PCB5) is disconnected. |
| | | | Remedy | 1. Check the connection of the DC Controller PCB (PCB1) and the Relay PCB (PCB5).<br>DC Controller side: J451, Relay side: J514<br>2. Replace the Relay PCB (PCB5).<br>3. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E197 | -0005 | -05 | Title | Error in Main Driver PCB Analog Connector connection detection |
| | | | Detection description | Connection between the DC Controller PCB (PCB1) and the Main Driver PCB (PCB2) is disconnected. |
| | | | Remedy | 1. Check the connection of the DC Controller PCB (PCB1) and the Main Driver PCB (PCB2).<br>DC Controller side: J413, Main Driver side: J124<br>2. Replace the Main Driver PCB (PCB2).<br>3. Replace the DC Controller PCB (PCB1). |
| E197 | -0006 | -05 | Title | Error in Feed Driver PCB Drawer Connector connection detection |
| | | | Detection description | Connection between the DC Controller PCB (PCB1) and the Feed Driver PCB (PCB3) is disconnected. |
| | | | Remedy | 1. Check the connection between the DC Controller PCB (PCB1) and the Fixing Feed Drawer.<br>DC Controller side: J431, J432, Fixing Feed Drawer (host machine side): J3002D<br>Fixing Feed Drawer (Fixing Feed side): J3002L, Feed Driver side: J300, J301<br>2. Replace the Feed Driver PCB (PCB3).<br>3. Replace the DC Controller PCB (PCB1). |
| E197 | -0008 | -05 | Title | Error in Fixing Drawer Connector connection detection |
| | | | Detection description | Connection between the DC Controller PCB (PCB1) and the Main Driver PCB (PCB2) is disconnected. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Fixing Drawer.<br>Main Driver side: J105, Fixing Drawer (host machine side): J3001D<br>Check the Harness of the Fixing Drawer (Fixing side) (J3001L).<br>2. Replace the Main Driver PCB (PCB2). |
| E197 | -0009 | -05 | Title | Error in the Process Unit connection detection |
| | | | Detection description | Connection between the Main Driver PCB (PCB2) and the Process Unit is disconnected. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Process Unit.<br>PCB side: J107, Process Unit side: J3060<br>2. Replace the Process Unit. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E197 | -0010 | -05 | Title | Error in Primary Charging High Voltage PCB connection detection |
| | | | Detection description | Connection between the Main Driver PCB (PCB2) and the Primary Charging High Voltage PCB (PCB11) is disconnected. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Primary Charging High Voltage PCB (PCB11). Main Driver side: J111, Primary Charging High Voltage side: J3501<br>2. Replace the Primary Charging High Voltage PCB (PCB11). |
| E197 | -0011 | -05 | Title | Error in Developing High Voltage PCB connection detection |
| | | | Detection description | Connection between the Main Driver PCB (PCB2) and the Developing High Voltage PCB (PCB12) is disconnected. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Developing High Voltage PCB (PCB12). Main Driver side: J112, Developing High Voltage side: J3511<br>2. Replace the Developing High Voltage PCB (PCB12). |
| E197 | -0012 | -05 | Title | Error in Transfer High Voltage PCB connection detection |
| | | | Detection description | Connection between the Duplex Driver PCB (PCB4) and the Transfer High Voltage PCB (PCB13) is disconnected. |
| | | | Remedy | 1. Check the connection between the Duplex Driver PCB (PCB4) and the Transfer High Voltage PCB (PCB13). Duplex Driver side: J343, Transfer High Voltage side: J3062<br>2. Replace the Transfer High Voltage PCB (PCB13). |
| E197 | -0181 | -05 | Title | Serial communication error |
| | | | Detection description | Failure of reception from the video signal control ASIC. Data reception was failed 5 times in a row when reading data from the video signal control ASIC (at FG lock detection, BD lock detection). |
| | | | Remedy | Replace the DC Controller PCB (PCB1). |
| E199 | -0000 | -05 | Title | - |
| | | | Detection description | - |
| | | | Remedy | Collect the sublog and contact the sales company. |

T-7-5

## E202 to E280

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E202 | -0001 | -04 | Title | Scanner HP error |
| | | | Detection description | An error occurs during the Scanner Unit (Paper Front) HP detection operation (outward). |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner HP Sensor (SR2).<br>2. Failure of the Scanner HP Sensor (SR2).<br>3. Failure of the Scanner Motor (M1).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E202 | -0002 | -04 | Title | Scanner HP error |
| | | | Detection description | An error occurs during the Scanner Unit (Paper Front) HP detection operation (homeward). |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner HP Sensor (SR2).<br>2. Failure of the Scanner HP Sensor (SR2).<br>3. Failure of the Scanner Motor (M1).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E202 | -0101 | -04 | Title | Glass HP error |
| | | | Detection description | An error occurs during the Glass HP detection operation (outward). |
| | | | Remedy | 1. Connector disconnection/open circuit of the Glass Shift HP Sensor (SR11).<br>2. Failure of the Glass Shift HP Sensor (SR11).<br>3. Failure of the Glass Shift Motor (M9).<br>4. Failure of the DADF Driver PCB (PCB1). |
| E202 | -0102 | -04 | Title | Glass HP error |
| | | | Detection description | An error occurs during the Glass HP detection operation (homeward). |
| | | | Remedy | 1. Connector disconnection/open circuit of the Glass Shift HP Sensor (SR11).<br>2. Failure of the Glass Shift HP Sensor (SR11).<br>3. Failure of the Glass Shift Motor (M9).<br>4. Failure of the DADF Driver PCB (PCB1). |
| E227 | -0001 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when the power is turned ON. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Reader Power Supply.<br>2. Failure of power supply. |
| E227 | -0002 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when a job is started. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Reader Power Supply.<br>2. Failure of power supply. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E227 | -0003 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when a job is ended. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Reader Power Supply.<br>2. Failure of power supply. |
| E227 | -0004 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when loading. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Reader Power Supply.<br>2. Failure of power supply. |
| E227 | -0101 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when the power of DADF is turned ON. |
| | | | Remedy | 1. Connection error between the DADF Driver PCB (PCB1) and the Reader Controller PCB (PCB1).<br>2. Connector disconnection/open circuit of the Reader Power Supply.<br>3. Failure of power supply. |
| E227 | -0102 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when a job is started in the DADF. |
| | | | Remedy | 1. Connection error between the DADF Driver PCB (PCB1) and the Reader Controller PCB (PCB1).<br>2. Connector disconnection/open circuit of the Reader Power Supply.<br>3. Failure of power supply. |
| E227 | -0103 | -04 | Title | Power supply (24 V) error |
| | | | Detection description | 24 V port is OFF when a job is ended in the DADF. |
| | | | Remedy | 1. Connection error between the DADF Driver PCB (PCB1) and the Reader Controller PCB (PCB1).<br>2. Connector disconnection/open circuit of the Reader Power Supply.<br>3. Failure of power supply. |
| E240 | -0000 | -05 | Title | Communication error between Main Controller and DC Controller |
| | | | Detection description | Communication error occurs between the CPU of the Main Controller PCB and the DC Controller PCB (PCB1). |
| | | | Remedy | 1. Check the connection of the Main Controller PCB and the DC Controller PCB (PCB1).<br>Main Controller side: J712, DC Controller side: J442<br>2. Replace the DC Controller PCB (PCB1).<br>3. Replace the Main Controller PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E240 | -0001 | -05 | Title | 3 minutes passed with pickup request waiting status |
| | | | Detection description | It was detected that 3 minutes passed with pickup request waiting status. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Check the connection of the Sub PCB in the Main Controller PCB 1 Box.<br>3. Check the connections of the DC Controller PCB and the Main Controller PCB 1. Replace the PCB(s) if necessary. |
| E240 | -0002 | -05 | Title | 3 minutes passed with image output request waiting status |
| | | | Detection description | It was detected that 3 minutes passed with image output request waiting status. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Check the connection of the Sub PCB in the Main Controller PCB 1 Box.<br>3. Check the connections of the DC Controller PCB and the Main Controller PCB 1. Replace the PCB(s) if necessary. |
| E240 | -0003 | -05 | Title | Software sequence error after the jam |
| | | | Detection description | A software sequence error (engine bug) was detected after the jam. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Check the connection of the Sub PCB in the Main Controller PCB 1 Box.<br>3. Check the connections of the DC Controller PCB and the Main Controller PCB 1. Replace the PCB(s) if necessary. |
| E246 | -0001 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E246 | -0002 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E246 | -0003 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E246 | -0005 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E247 | -0001 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E247 | -0002 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E247 | -0003 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E247 | -0004 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E248 | -0000 | -00 | Title | SRAM error |
| | | | Detection description | SRAM check error when the power is turned ON. |
| | | | Remedy | Main Controller PCB 2. |
| E248 | -0001 | -04 | Title | EEPROM error |
| | | | Detection description | An error when EEPROM power for the Reader Controller PCB (PCB1) is turned ON. |
| | | | Remedy | Failure of the Reader Controller PCB (PCB1). |
| E248 | -0002 | -04 | Title | EEPROM error |
| | | | Detection description | EEPROM writing error for the Reader Controller PCB (PCB1). |
| | | | Remedy | Failure of the Reader Controller PCB (PCB1). |
| E248 | -0003 | -04 | Title | EEPROM error |
| | | | Detection description | Reading error after writing to EEPROM for the Reader Controller PCB (PCB1). |
| | | | Remedy | Failure of the Reader Controller PCB (PCB1). |
| E263 | -0000 | -05 | Title | Error in Current Sensor reference voltage generation |
| | | | Detection description | When CP54 on the Main Driver PCB was measured with a tester, the reference voltage (normally 2.5 V) was not within the range of reference value (2.2 to 2.7 V). |
| | | | Remedy | 1. Check the connection between the AC Driver PCB and the Main Driver PCB (connector disconnection, open circuit, short circuit of harness).<br>AC Driver side: J615, Main Driver side: J103<br>2. Replace the AC Driver PCB.<br>3. Replace the Main Driver PCB (PCB2). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E263 | -0001 | -05 | Title | Current Sensor error |
| | | | Detection description | An error is detected in the value of the Current Sensor (SE601) (the value remains at the upper limit). |
| | | | Remedy | 1. Check the connection between the AC Driver PCB and the Main Driver PCB (connector disconnection, open circuit, short circuit of harness).<br>AC Driver side: J615, Main Driver side: J103<br>2. Replace the AC Driver PCB.<br>3. Replace the Main Driver PCB (PCB2). |
| E263 | -0002 | -05 | Title | Current Sensor error |
| | | | Detection description | An error is detected in the value of the Current Sensor (SE601) (the value remains at the lower limit). |
| | | | Remedy | 1. Check the connection between the AC Driver PCB and the Main Driver PCB (connector disconnection, open circuit, short circuit of harness).<br>AC Driver side: J615, Main Driver side: J103<br>2. Replace the AC Driver PCB.<br>3. Replace the Main Driver PCB (PCB2). |
| E270 | -0001 | -04 | Title | Error in paper front vertical scanning synchronous signal |
| | | | Detection description | Vertical scanning synchronous signal (VSYNC) is not sent appropriately from the CMOS PCB (Scanner Unit (Paper Front)), so the image error occurs or the operation stops abnormally. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (Reader).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (Reader).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E270 | -0002 | -04 | Title | Error in horizontal scanning/vertical scanning synchronous signal |
| | | | Detection description | Due to the horizontal scanning synchronous signal (HSYNC) error, the vertical scanning synchronous signal (VSYNC) is not sent, so the image error occurs or the operation stops abnormally. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (Reader/DADF).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (Reader/DADF).<br>4. Failure of the Reader Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E270 | -0101 | -04 | Title | Error in paper back vertical scanning synchronous signal |
| | | | Detection description | Vertical scanning synchronous signal (VSYNC) is not sent appropriately from the CMOS PCB (Scanner Unit (Paper Back)), so the image error occurs or the operation stops abnormally. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (DADF).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (DADF).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E280 | -0001 | -04 | Title | Communication error between Reader Controller PCB (PCB1) and Scanner Unit (Reader) |
| | | | Detection description | Within the specified period of time, communication between the Reader Controller PCB and Scanner Unit (Paper Front) is not started. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (Reader).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (Reader).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E280 | -0101 | -04 | Title | Communication error between Reader Controller PCB (PCB1) and Scanner Unit (DADF) |
| | | | Detection description | Within the specified period of time, communication between the Reader Controller PCB and Scanner Unit (Paper Back) is not started. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (DADF).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (DADF).<br>4. Failure of the Reader Controller PCB (PCB1). |

T-7-6

## E301 to E355

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E301 | 0001 | -04 | Title | Paper front light intensity NG |
| | | | Detection description | Light intensity is below the reference level at paper front shading. |
| | | | Remedy | Failure of the Scanner Unit (Reader). |
| E301 | 0101 | -04 | Title | Paper back light intensity NG |
| | | | Detection description | Light intensity is below the reference level at paper back shading. |
| | | | Remedy | Failure of the Scanner Unit (DADF). |
| E302 | 0001 | -04 | Title | Error in paper front shading |
| | | | Detection description | Error in shading RAM access, or the shading value is either below or higher than the reference level. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (Reader).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Failure of the Scanner Unit (Reader).<br>4. Failure of the Reader Controller PCB (PCB1). |
| E302 | 0101 | -04 | Title | Error in paper back shading |
| | | | Detection description | Error in shading RAM access, or the shading value is either below or higher than the reference level. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Scanner Unit (DADF).<br>2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1).<br>3. Operation error of the Glass Shift Motor (M9).<br>4. Failure of the Scanner Unit (DADF).<br>5. Failure of the Reader Controller PCB (PCB1). |
| E315 | 0007 | -00 | Title | Codec error |
| | | | Detection description | JBIG encode error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 000d | -00 | Title | Codec error |
| | | | Detection description | JBIG decode error. |
| | | | Remedy | 1. Replacement of SDRAM.<br>2. Replacement of HDD.<br>3. Replacement of the Main Controller PCB. |
| E315 | 000e | -00 | Title | Codec error |
| | | | Detection description | Software decode error. |
| | | | Remedy | 1. Replacement of SDRAM.<br>2. Replacement of HDD.<br>3. Replacement of the Main Controller PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E315 | 0025 | -00 | Title | Codec error |
| | | | Detection description | ROTU hardware error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 0027 | -00 | Title | Codec error |
| | | | Detection description | ROTU timeout error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 0033 | -00 | Title | MemFill hardware error |
| | | | Detection description | MemFill hardware error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 0035 | -00 | Title | Codec error |
| | | | Detection description | MemFill timeout error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 0100 | -00 | Title | Codec error |
| | | | Detection description | PrcOverRun error. |
| | | | Remedy | Replacement of the Main Controller PCB. |
| E315 | 0500 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0501 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0510 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0511 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0520 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0521 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E315 | 0530 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0531 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0540 | -00 | Title | JPEG decode error |
| | | | Detection description | This error occurs when images buffered in the HDD or memory were corrupted when performing image processing. JPEG decode is used when handling color (or gray) images. Therefore, the error does not occur for normal copy or PDL print. But it may occur with SEND. |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>If it is not recovered or it occurs frequently, perform the following measures.<br>2. Format the HDD. If it is not recovered, replace the HDD.<br>3. Replace the memory on the Main Controller 2 (DDR2-SDRAM).<br>4. Replace the Main Controller PCB 2. |
| E315 | 0541 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0550 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0551 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0560 | -00 | Title | Codec error |
| | | | Detection description | Interruption does not occur although 2 minutes have passed after starting the operation. |
| | | | Remedy | jcdImage device. |
| E315 | 0561 | -00 | Title | Codec error |
| | | | Detection description | Abnormal interruption is detected after starting the operation. |
| | | | Remedy | jcdImage device. |
| E350 | 0000 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E350 | 0001 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E350 | 0002 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E350 | 0003 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E350 | 3000 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E351 | 0000 | -00 | Title | Main Controller PCB 2 communication error |
| | | | Detection description | Main Controller PCB 2 communication error. |
| | | | Remedy | 1. Disconnect and then connect the connector of the Main Controller PCB 2.<br>2. Replace the Main Controller PCB 2. |
| E354 | 0001 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E354 | 0002 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E355 | 0001 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E355 | 0003 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |
| E355 | 0004 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies. |

T-7-7

## E400 to E490

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E400 | -0001 | -04 | Title | Communication error between Reader Controller PCB (PCB1) and DADF |
| | | | Detection description | Reception error occurs at the time of communication between the Reader Controller PCB and the DADF. |
| | | | Remedy | 1. Connection error between the DADF Driver PCB (PCB1) and the Reader Controller PCB (PCB1).<br>2. Failure of the DADF Driver PCB (PCB1).<br>3. Failure of the Reader Controller PCB (PCB1). |
| E400 | -0002 | -04 | Title | Communication error between Reader Controller PCB (PCB1) and DADF |
| | | | Detection description | Reception error occurs at the time of communication between the Reader Controller PCB and the DADF. |
| | | | Remedy | 1. Connection error between the DADF Driver PCB (PCB1) and the Reader Controller PCB (PCB1).<br>2. Failure of the DADF Driver PCB (PCB1).<br>3. Failure of the Reader Controller PCB (PCB1). |
| E401 | -0001 | -04 | Title | Pickup Roller Unit lifting error |
| | | | Detection description | The level of the Pickup Roller Unit Lifter HP Sensor (SR12) does not change within the specified period of time although the Pickup Roller Unit Lifter Motor (M10) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Pickup Roller Unit Lifter HP Sensor (SR12).<br>2. Connector disconnection/open circuit of the Pickup Roller Unit Lifter Motor (M10).<br>3. Failure of the Pickup Roller Unit Lifter HP Sensor (SR12).<br>4. Failure of the Pickup Roller Unit Lifter Motor (M10). |
| E401 | -0002 | -04 | Title | Pickup Roller Unit lifting error |
| | | | Detection description | The level of the Pickup Roller Unit Lifter HP Sensor (SR12) does not change within the specified period of time although the Pickup Roller Unit Lifter Motor (M10) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Pickup Roller Unit Lifter HP Sensor (SR12).<br>2. Connector disconnection/open circuit of the Pickup Roller Unit Lifter Motor (M10).<br>3. Failure of the Pickup Roller Unit Lifter HP Sensor (SR12).<br>4. Failure of the Pickup Roller Unit Lifter Motor (M10). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E407 | -0001 | -04 | Title | Tray Lifter Motor (M8) error |
| | | | Detection description | The Tray HP Sensor (SR13) is not turned ON or OFF within the specified period of time although the Tray Lifter Motor (M8) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Tray HP Sensor (SR13).<br>2. Connector disconnection/open circuit of the Tray Lifter Motor (M8).<br>3. Failure of the Tray HP Sensor (SR13).<br>4. Failure of the Tray Lifter Motor (M8). |
| E407 | -0002 | -04 | Title | Tray Lifter Motor (M8) error |
| | | | Detection description | The Paper Surface Sensor (SR6) is not turned ON within the specified period of time although the Tray Lifter Motor (M8) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Paper Surface Sensor (SR6).<br>2. Connector disconnection/open circuit of the Tray Lifter Motor (M8).<br>3. Failure of the Paper Face Sensor (SR6).<br>4. Failure of the Tray Lifter Motor (M8). |
| E413 | -0001 | -04 | Title | DADF Disengagement Motor 1 (M6) error |
| | | | Detection description | The DADF Disengagement HP Sensor 1 (SR15) is not turned ON within the specified period of time although the DADF Disengagement Motor 1 (M6) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Disengagement HP Sensor 1 (SR15).<br>2. Connector disconnection/open circuit of the Disengagement Motor 1 (M6).<br>3. Failure of the Disengagement HP Sensor 1 (SR15).<br>4. Failure of the Disengagement Motor 1 (M6).<br>5. Failure of the DADF Driver PCB (PCB1). |
| E413 | -0002 | -04 | Title | DADF Disengagement Motor 1 (M6) error |
| | | | Detection description | The DADF Disengagement HP Sensor 1 (SR15) is not turned OFF within the specified period of time although the DADF Disengagement Motor 1 (M6) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Disengagement HP Sensor 1 (SR15).<br>2. Connector disconnection/open circuit of the Disengagement Motor 1 (M6).<br>3. Failure of the Disengagement HP Sensor 1 (SR15).<br>4. Failure of the Disengagement Motor 1 (M6).<br>5. Failure of the DADF Driver PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E413 | -0011 | -04 | Title | DADF Disengagement Motor 2 (M7) error |
| | | | Detection description | The DADF Disengagement HP Sensor 2 (SR16) is not turned ON within the specified period of time although the DADF Disengagement Motor 2 (M7) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Disengagement HP Sensor 2 (SR16).<br>2. Connector disconnection/open circuit of the Disengagement Motor 2 (M7).<br>3. Failure of the Disengagement HP Sensor 2 (SR16).<br>4. Failure of the Disengagement Motor 2 (M7).<br>5. Failure of the DADF Driver PCB (PCB1). |
| E413 | -0012 | -04 | Title | DADF Disengagement Motor 2 (M7) error |
| | | | Detection description | The DADF Disengagement HP Sensor 2 (SR16) is not turned OFF within the specified period of time although the DADF Disengagement Motor 2 (M7) is driven. |
| | | | Remedy | 1. Connector disconnection/open circuit of the Disengagement HP Sensor 2 (SR16).<br>2. Connector disconnection/open circuit of the Disengagement Motor 2 (M7).<br>3. Failure of the Disengagement HP Sensor 2 (SR16).<br>4. Failure of the Disengagement Motor 2 (M7).<br>5. Failure of the DADF Driver PCB (PCB1). |
| E423 | -0001 | -04 | Title | DADF SDRAM error |
| | | | Detection description | SDRAM access error. |
| | | | Remedy | Error in SDRAM (video image memory) on the Reader Controller PCB (PCB1). |
| E423 | -0002 | -04 | Title | DADF SDRAM error |
| | | | Detection description | SDRAM Verify error. |
| | | | Remedy | Error in SDRAM (video image memory) on the Reader Controller PCB (PCB1). |
| E490 | -0001 | -04 | Title | Different DADF model error |
| | | | Detection description | Not proper DADF is installed. |
| | | | Remedy | 1. Installed DADF is a different model.<br>2. Failure of the Reader Controller PCB (PCB1).<br>3. Failure of the DC Controller PCB.<br>4. Failure of the Main Controller PCB. |

T-7-8

## E500 to E5FE

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E500 | -0000 | -05 | Title | Error in IPC communication (Finisher-N1) |
| | | | Detection description | Communication failed between the host machine and the Finisher. |
| | | | Remedy | 1. IPC cable is disconnected.<br>2. IPC cable is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The host machine Controller PCB is faulty. |
| E500 | -0001 | -05 | Title | a. Error in ARCNET communication<br>b. Error in IPC communication |
| | | | Detection description | a. Communication failed between the host machine and the Finisher / Paper Folding Unit / Booklet Trimmer.<br>b. Timeout error of communication with the host machine |
| | | | Remedy | a-1. Connection failure of the ARCNET cable connection.<br>a-2. ARCNET PCB<br>a-3. Finisher controller PCB<br>a-4. Connection between Finisher and Paper Folding Unit / Booklet Trimmer<br>a-5. DC controller PCB / Booklet Trimmer controller PCB<br>b-1. IPC cable communication<br>b-2. Finisher controller PCB<br>b-3. Host machine controller PCB<br>b-4. Failure in the IPC communication cable<br>b-5. Connection between Finisher and Paper Folding Unit / Booklet Trimmer<br>b-6. DC controller PCB / Booklet Trimmer controller PCB<br>* If any of those is not assumed as a cause, this error might have occurred on another option. |
| E500 | -0001 | -05 | Title | Error in communication between the host machine - ACC |
| | | | Detection description | Communication failed between the host machine and the Professional Puncher / Integration Unit. |
| | | | Remedy | 1. Connection failure between the host machine and the Professional Puncher Integration Unit<br>2. Failure of interface PCB (PCB5) of Professional Puncher Integration Unit<br>3. Communication between Professional Puncher and Integration Unit<br>4. Professional Puncher controller PCB<br>* If any of those is not assumed as a cause, this error might have occurred on another option. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E500 | -0001 | -05 | Title | Error in ARCNET communication |
| | | | Detection description | Communication failed between the host machine and the Document Insertion Unit. |
| | | | Remedy | 1. Connection failure of Inserter DC controller PCB/Option controller PCB<br>2. Connection failure of Communication cable<br>3. Connection failure of Communication driver PCB<br>4. Failure in Inserter DC controller PCB/Option controller PCB<br>5. Failure in communication cable<br>6. Failure in Communication driver PCB<br>* If any of those is not assumed as a cause, this error might have occurred on another option. |
| E500 | -0022 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -0098 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -0099 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -00A1 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -00A2 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -00A3 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E500 | -00A4 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E500 | -00D4 | -05 | Title | Error due to unexpected operation |
| | | | Detection description | - |
| | | | Remedy | If an error cannot be released by turning OFF/ON the power, contact a sales company. |
| E503 | -0001 | -05 | Title | Error in communication between the Finisher - Saddle Stitcher (Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher and the Saddle Stitcher |
| | | | Remedy | 1. The connector on the wiring between the Finisher Controller PCB and the Saddle Stitcher Controller PCB is disconnected.<br>2. The wiring between the Finisher Controller PCB and the Saddle Stitcher Controller PCB is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Saddle Stitcher Controller PCB is faulty. |
| E503 | -0002 | -05 | Title | Error in communication between the Finisher - Saddle Stitcher (Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher and the Saddle Stitcher |
| | | | Remedy | 1. The connector on the wiring between the Finisher Controller PCB and the Saddle Stitcher Controller PCB is disconnected.<br>2. The wiring between the Finisher Controller PCB and the Saddle Stitcher Controller PCB is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Saddle Stitcher Controller PCB is faulty. |
| E503 | -0003 | -05 | Title | Professional Puncher-C1 communication/connection error |
| | | | Detection description | The power of the Professional Puncher-C1 was OFF, or a serial communication error was detected at the puncher side. |
| | | | Remedy | 1. Check that the power of the Professional Puncher-C1 is ON.<br>2. Check the connection between the Professional Puncher-C1 and the Professional Puncher Integration Unit-B1.<br>3. Replace the communication cable between the Professional Puncher-C1 and the Professional Puncher Integration Unit-B1. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E503 | -0006 | -05 | Title | Error in communication between the finisher - paper folding unit |
| | | | Detection description | Communication failed between the finisher - paper folding unit |
| | | | Remedy | 1. Connector on the finisher controller PCB is disconnected.<br>2. Connector on the paper folding unit DC controller PCB is disconnected.<br>3. Finisher controller PCB is faulty.<br>4. Paper folding unit DC controller PCB is faulty. |
| E503 | -0021 | -05 | Title | Error in communication between the Finisher - Insertion Unit (Finisher-N1) |
| | | | Detection description | Communication failed between Finisher - Insertion Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Insertion Unit is disconnected.<br>2. The cable between the Finisher and the Insertion Unit is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Insertion Unit Controller PCB is faulty. |
| E503 | -0022 | -05 | Title | Error in communication between the Finisher - Insertion Unit (Finisher-N1/Document Insertion Unit-K1) |
| | | | Detection description | Communication failed between Finisher - Insertion Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Insertion Unit is disconnected.<br>2. The cable between the Finisher and the Insertion Unit is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Insertion Unit Controller PCB is faulty. |
| E503 | -0041 | -05 | Title | Error in communication between the Finisher - Integration Unit (Finisher-N1) |
| | | | Detection description | Communication failed between Finisher - Integration Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Integration Unit is disconnected.<br>2. The cable between the Finisher and the Integration Unit is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Integration Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E503 | -0042 | -05 | Title | Error in communication between the Finisher - Integration Unit (Finisher-N1) |
| | | | Detection description | Communication failed between Finisher - Integration Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Integration Unit is disconnected.<br>2. The cable between the Finisher and the Integration Unit is faulty.<br>3. The Integration Controller PCB is faulty.<br>4. The Finisher Controller PCB is faulty. |
| E503 | -0051 | -05 | Title | Error in communication between the Integration Unit - Professional Puncher (Finisher-N1) |
| | | | Detection description | Communication failed between the Integration Unit - Professional Puncher |
| | | | Remedy | 1. The connector on the cable between the Integration Unit and the Professional Puncher is disconnected.<br>2. The cable between the Integration Unit and the Professional Puncher is faulty.<br>3. The Integration Controller PCB is faulty.<br>4. The Professional Puncher Controller PCB is faulty. |
| E503 | -0053 | -05 | Title | Error in communication between the Integration Unit - Professional Puncher (Professional Puncher Integration Unit-B1) |
| | | | Detection description | Communication failed between the Integration Unit - Professional Puncher (Error in communication of Professional Puncher) |
| | | | Remedy | 1. The connector on the cable between the Integration Unit and the Professional Puncher is disconnected.<br>2. The cable between the Integration Unit and the Professional Puncher is faulty.<br>3. The Integration Controller PCB is faulty.<br>4. The Professional Puncher Controller PCB is faulty. |
| E503 | -0061 | -05 | Title | Error in communication between the Finisher - Paper Folding Unit (Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher - Paper Folding Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Paper Folding Unit is disconnected.<br>2. The cable between the Finisher and the Paper Folding Unit is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Paper Folding Unit Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E503 | -0062 | -05 | Title | Error in communication between the Finisher - Paper Folding Unit (Paper Folding Unit-H1/Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher - Paper Folding Unit |
| | | | Remedy | 1. The connector on the cable between the Finisher and the Paper Folding Unit is disconnected.<br>2. The cable between the Finisher and the Paper Folding Unit is faulty.<br>3. The Finisher Controller PCB is faulty.<br>4. The Paper Folding Unit Controller PCB is faulty. |
| E503 | -0081 | -05 | Title | Error in communication between the Saddle Stitcher - Trimmer (Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher - Trimmer |
| | | | Remedy | 1. The connector on the wiring between the Saddle Stitcher and the Trimmer is disconnected.<br>2. The wiring between the Saddle Stitcher and the Trimmer is faulty.<br>3. The Trimmer Controller PCB is faulty.<br>4. The Saddle Stitcher Controller PCB is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E503 | -0082 | -05 | Title | Error in communication between the Saddle Stitcher - Trimmer (Finisher-N1) |
| | | | Detection description | Communication failed between the Finisher - Trimmer |
| | | | Remedy | 1. The connector on the wiring between the Saddle Stitcher and the Trimmer is disconnected.<br>2. The wiring between the Saddle Stitcher and the Trimmer is faulty.<br>3. The Trimmer Controller PCB is faulty.<br>4. The Saddle Stitcher Controller PCB is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E503 | -8004 | -05 | Title | Error in option communication (trimmer) |
| | | | Detection description | Communication cannot be make with trimmer. |
| | | | Remedy | 1. Check the connection of ARCNET cable<br>2. Communication PCB<br>3. Finisher controller PCB |
| E505 | -0001 | -05 | Title | Finisher back-up RAM (EEPROM) error (Finisher-N1) |
| | | | Detection description | The checksum for the EEPROM data has an error. (The value written in EEPROM and the value extracted from EEPROM doesn't conform.) |
| | | | Remedy | The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E505 | -0003 | -05 | Title | Insertion unit back-up RAM error (Finisher-N1) |
| | | | Detection description | The value written in EEPROM and the value extracted from EEPROM doesn't conform. |
| | | | Remedy | The Insertion Unit Controller PCB is faulty. |
| E505 | -0005 | -05 | Title | Paper Folding Unit backup RAM error (Paper Folding Unit-H1/ Finisher-N1) |
| | | | Detection description | The value written in EEPROM and the value extracted from EEPROM doesn't conform. |
| | | | Remedy | The Paper Folding Unit Controller PCB is faulty. |
| E505 | -0008 | -05 | Title | Error in reading of multi functional folding machine |
| | | | Detection description | Reading of EEPROM of multi functional folding machine failed. |
| | | | Remedy | EEPROM |
| E505 | -0009 | -05 | Title | Error in writing of multi functional folding machine |
| | | | Detection description | Writing of EEPROM of multi functional folding machine failed. |
| | | | Remedy | EEPROM |
| E509 | -0002 | -05 | Title | Error in BootROM |
| | | | Detection description | Combination of finisher controller and BootROM is mismatch. |
| | | | Remedy | BootROM |
| E509 | -0002 | -05 | Title | Name mismatch between BOOTROM of integration unit and firmware |
| | | | Detection description | Software combination error of BOOTROM and firmware is detected. |
| | | | Remedy | Failure in DC controller PCB (PCB1) of integration unit |
| E509 | -0004 | -05 | Title | Error in trimmer B1 connection |
| | | | Detection description | Trimmer B1 is connected. |
| | | | Remedy | Different trimmer (trimmer B1) connection |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E514 | -8001 | -05 | Title | a. Error in assist operation (Finisher-Q1)<br>b. Error in the Gripper Base Motor (Finisher-N1) |
| | | | Detection description | a. Assist HP sensor does not come ON within 5 sec after the assist motor starts operation.<br>b. The gripper does not come off the Gripper Base Rear Sensor when the Gripper Base Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector of assist HP sensor<br>a-2. Connector of assist motor<br>a-3. Replacement of assist HP sensor<br>a-4. Replacement of assist motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Gripper Base Rear Sensor (S117) or the Gripper Base Motor (M116) are disconnected.<br>b-2. The wiring of the Gripper Base Rear Sensor (S117) or the Gripper Base Motor (M116) are faulty.<br>b-3. The Gripper Base Rear Sensor (S117) is faulty.<br>b-4. The Gripper Base Motor (M116) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E514 | -8002 | -05 | Title | a. Error in assist operation (Finisher-Q1)<br>b. Error in the Gripper Base Motor (Finisher-N1) |
| | | | Detection description | a. Assist HP sensor does not go OFF within 5 sec after the assist motor starts operation.<br>b. The Gripper Base Rear Sensor dose not detect the gripper when the Gripper Base Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector of assist HP sensor<br>a-2. Connector of assist motor<br>a-3. Replacement of assist HP sensor<br>a-4. Replacement of assist motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Gripper Base Rear Sensor (S117) or the Gripper Base Motor (M116) are disconnected.<br>b-2. The wiring of the Gripper Base Rear Sensor (S117) or the Gripper Base Motor (M116) are faulty.<br>b-3. The Gripper Base Rear Sensor (S117) is faulty.<br>b-4. The Gripper Base Motor (M116) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E514 | -8003 | -05 | Title | Error in the Gripper Motor (Finisher-N1) |
| | | | Detection description | The gripper does not come off the Gripper HP Sensor when the Gripper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Gripper HP Sensor (S140) or the Gripper Motor (M117) are disconnected.<br>2. The wiring of the Gripper HP Sensor (S140) or the Gripper Motor (M117) are faulty.<br>3. The Gripper HP Sensor (S140) is faulty.<br>4. The Gripper Motor (M117) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E514 | -8004 | -05 | Title | Error in the Gripper Motor (Finisher-N1) |
| | | | Detection description | The Gripper HP Sensor does not detect the gripper when the Gripper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Gripper HP Sensor (S140) or the Gripper Motor (M117) are disconnected.<br>2. The wiring of the Gripper HP Sensor (S140) or the Gripper Motor (M117) are faulty.<br>3. The Gripper HP Sensor (S140) is faulty.<br>4. The Gripper Motor (M117) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E514 | -8005 | -05 | Title | Error in the Gripper Motor (Finisher-N1) |
| | | | Detection description | The gripper does not come off the Position Sensor when the Gripper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Gripper Position Sensor (S115) or the Gripper Motor (M117) are disconnected.<br>2. The wiring of the Gripper Position Sensor (S115) or the Gripper Motor (M117) are faulty.<br>3. The Gripper Position Sensor (S115) is faulty.<br>4. The Gripper Motor (M117) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E514 | -8006 | -05 | Title | Error in the Gripper Motor (Finisher-N1) |
| | | | Detection description | The Gripper Position Sensor does not detect the gripper when the Gripper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Gripper Position Sensor (S115) or the Gripper Motor (M117) are disconnected.<br>2. The wiring of the Gripper Position Sensor (S115) or the Gripper Motor (M117) are faulty.<br>3. The Gripper Position Sensor (S115) is faulty.<br>4. The Gripper Motor (M117) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E518 | -8001 | -05 | Title | Error in Folding Feed Motor lock (Paper Folding Unit-H1) |
| | | | Detection description | The lock signal turns on for the specified time from the drive start of Folding Feed Motor. |
| | | | Remedy | 1. Connector of the Folding Feed Motor (M11) is disconnected.<br>2. Folding Feed Motor (M11) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E530 | -8000 | -05 | Title | Error in the Front or Rear Alignment Motor (Finisher-N1) |
| | | | Detection description | The Front or Rear Alignment Motor operate abnormally during initialization. |
| | | | Remedy | 1. The connector of the Front/Rear Alignment HP Sensor (S108/S109) or the Front/Rear Alignment Motor (M108/M109) are disconnected.<br>2. The wiring of the Front/Rear Alignment HP Sensor (S108/S109) or the Front/Rear Alignment Motor (M108/M109) are faulty.<br>3. The Front/Rear Alignment HP Sensor (S108/S109) is faulty.<br>4. The Front/Rear Alignment Motor (M108/M109) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E530 | -8001 | -05 | Title | a. Error in front alignment motor (Finisher-Q1)<br>b. Error in the Front Alignment Motor (Finisher-N1) |
| | | | Detection description | a. Front alignment guide HP sensor does not go OFF within 5 sec after the front alignment motor starts operation.<br>b. The front alignment plate does not come off the Front Alignment HP Sensor when the Front Alignment Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector check of front alignment guide HP sensor<br>a-2. Connector check of front alignment motor<br>a-3. Replacement of front alignment guide HP sensor<br>a-4. Replacement of front alignment motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Front Alignment HP Sensor (S108) or the Front Alignment Motor (M108) are disconnected.<br>b-2. The wiring of the Front Alignment HP Sensor (S108) or the Front Alignment Motor (M108) are faulty.<br>b-3. The Front Alignment HP Sensor (S108) is faulty.<br>b-4. The Front Alignment Motor (M108) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E530 | -8002 | -05 | Title | a. Error in alignment operation (Finisher-Q1)<br>b. Error in the Front Alignment Motor (Finisher-N1) |
| | | | Detection description | a. Rear alignment guide HP sensor does not go OFF within 5 sec after the rear alignment motor starts operation.<br>b. The Front Alignment HP Sensor does not detect the Front Alignment plate when the Front Alignment Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector of rear alignment guide HP sensor<br>a-2. Connector of rear alignment motor<br>a-3. Replacement of rear alignment guide HP sensor<br>a-4. Replacement of rear alignment motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Front Alignment HP Sensor (S108) or the Front Alignment Motor (M108) are disconnected.<br>b-2. The wiring of the Front Alignment HP Sensor (S108) or the Front Alignment Motor (M108) are faulty.<br>b-3. The Front Alignment HP Sensor (S108) is faulty.<br>b-4. The Front Alignment Motor (M108) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E531 | -8001 | -05 | Title | a. Error in staple (Finisher-Q1)<br>b. Error in the Staple Motor (Finisher-N1) |
| | | | Detection description | a. Staple position HP sensor does not come ON within 500 msec after the staple motor starts operation.<br>b. The staple unit does not come off the Staple HP Sensor when the Staple Motor has been driven for 400 msec. |
| | | | Remedy | a-1. Connector check of staple unit<br>a-2. Replacement of staple unit<br>a-3. Connector check of staple position HP sensor<br>a-4. Replacement of staple position HP sensor<br>a-5. Replacement of finisher controller PCB.<br>b-1. The connector of the staple position switch (SW103) is disconnected.<br>b-2. The wiring of the staple position switch (SW103) is faulty.<br>b-3. The staple position switch (SW103) is installation failure or faulty.<br>b-4. The connector of the staple unit is disconnected.<br>b-5. The wiring of the staple unit is faulty.<br>b-6. The staple unit is faulty.<br>b-7. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E531 | -8002 | -05 | Title | a. Error in staple (Finisher-Q1)<br>b. Error in the Staple Motor (Finisher-N1) |
| | | | Detection description | a. Staple HP sensor does not go OFF within 500 msec after the staple motor starts operation.<br>b. The Staple HP Sensor does nor detect the staple unit when the Staple Motor has been driven for 400 msec. |
| | | | Remedy | a-1. Connector check of staple unit<br>a-2. Replacement of staple unit<br>a-3. Connector check of staple HP sensor<br>a-4. Replacement of staple HP sensor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the staple unit is disconnected.<br>b-2. The wiring of the staple unit is faulty.<br>b-3. The staple unit is faulty.<br>b-4. The Finisher Controller PCB is faulty. |
| E532 | -8000 | -05 | Title | Error in the Staple Shift Motor (Finisher-N1) |
| | | | Detection description | The Staple Shift Motor operate abnormally during initialization. |
| | | | Remedy | 1. The connector of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are disconnected.<br>2. The wiring of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are faulty.<br>3. The Stapler Shift HP Sensor (S107) is faulty.<br>4. The Staple Shift Motor (M107) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E532 | -8001 | -05 | Title | a. Error in staple slide (Finisher-Q1)<br>b. Error in the Stapler Shift Motor (Finisher-N1) |
| | | | Detection description | a. Staple HP sensor does not come ON within 500 msec after the staple shift motor starts operation.<br>b. The staple unit does not come off the Stapler Shift HP Sensor when the Staple Shift Motor has been driven for 5 seconds. |
| | | | Remedy | a-1. Connector check of staple shift motor<br>a-2. Replacement of staple shift motor<br>a-3. Connector check of staple HP sensor<br>a-4. Replacement of staple HP sensor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are disconnected.<br>b-2. The wiring of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are faulty.<br>b-3. The Stapler Shift HP Sensor (S107) is faulty.<br>b-4. The Staple Shift Motor (M107) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E532 | -8002 | -05 | Title | a. Error in staple slide (Finisher-Q1)<br>b. Error in the Stapler Shift Motor (Finisher-N1) |
| | | | Detection description | a. Staple HP sensor does not go OFF within 500 msec after the staple shift motor starts operation.<br>b. The Stapler Shift HP Sensor does not detect the staple unit when the Staple Shift Motor has been driven for 5 seconds. |
| | | | Remedy | a-1. Connector check of staple shift motor<br>a-2. Replacement of staple shift motor<br>a-3. Connector check of staple HP sensor<br>a-4. Replacement of staple HP sensor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are disconnected.<br>b-2. The wiring of the Stapler Shift HP Sensor (S107) or the Staple Shift Motor (M107) are faulty.<br>b-3. The Stapler Shift HP Sensor (S107) is faulty.<br>b-4. The Staple Shift Motor (M107) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E535 | -0001 | -05 | Title | Error in the Swing Guide Motor (Finisher-N1) |
| | | | Detection description | The swing guide does not come off the Swing Guide HP Sensor when the Swing Guide Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Swing Guide HP Sensor (S110) or the Swing Guide Motor (M110) are disconnected.<br>2. The wiring of the Swing Guide HP Sensor (S110) or the Swing Guide Motor (M110) are faulty.<br>3. The Swing Guide HP Sensor (S110) is faulty.<br>4. The Swing Guide Motor (M110) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E535 | -0002 | -05 | Title | Error in the Swing Guide Motor (Finisher-N1) |
| | | | Detection description | The Swing Guide HP Sensor does not detect the swing guide when the Swing Guide Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Swing Guide HP Sensor (S110) or the Swing Guide Motor (M110) are disconnected.<br>2. The wiring of the Swing Guide HP Sensor (S110) or the Swing Guide Motor (M110) are faulty.<br>3. The Swing Guide HP Sensor (S110) is faulty.<br>4. The Swing Guide Motor (M110) is faulty.<br>5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E535 | -0003 | -05 | Title | Error in the Swing Guide Motor (Finisher-N1) |
| | | | Detection description | The Swing Guide Height Detection Sensor failed to be ON even though specified period of time has passed when lowering the swing guide. |
| | | | Remedy | 1. The connector of the Swing Guide Height Detection Sensor (S118) or the Swing Guide Motor (M110) are disconnected.<br>2. The wiring of the Swing Guide Height Detection Sensor (S118) or the Swing Guide Motor (M110) are faulty.<br>3. The Swing Guide Height Detection Sensor (S118) is faulty.<br>4. The Swing Guide Motor (M110) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E535 | -0004 | -05 | Title | Error in the Swing Guide Motor (Finisher-N1) |
| | | | Detection description | The Swing Guide Height Detection Sensor failed to be OFF even though specified period of time has passed when raising the swing unit. |
| | | | Remedy | 1. The connector of the Swing Guide Height Detection Sensor (S118) or the Swing Guide Motor (M110) are disconnected.<br>2. The wiring of the Swing Guide Height Detection Sensor (S118) or the Swing Guide Motor (M110) are faulty.<br>3. The Swing Guide Height Detection Sensor (S118) is faulty.<br>4. The Swing Guide Motor (M110) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E535 | -8001 | -05 | Title | Error in swing guide motor |
| | | | Detection description | Swing guide HP sensor does not come ON within 2 sec after the swing guide motor starts operation. |
| | | | Remedy | 1. Connector check of swing guide motor<br>2. Replacement of swing guide motor<br>3. Connector check of swing guide HP sensor<br>4. Replacement of swing guide HP sensor<br>5. Replacement of finisher controller PCB |
| E535 | -8002 | -05 | Title | Error in swing guide motor |
| | | | Detection description | Swing guide HP sensor does not go OFF within 2 sec after the swing guide motor starts operation. |
| | | | Remedy | 1. Connector check of swing guide motor<br>2. Replacement of swing guide motor<br>3. Connector check of swing guide HP sensor<br>4. Replacement of swing guide HP sensor<br>5. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E537 | -8001 | -05 | Title | a. Error in front alignment motor (Finisher-Q1)<br>b. Error in the Rear Alignment Motor (Finisher-N1) |
| | | | Detection description | a. Front alignment guide HP sensor does not come ON within 5 sec after the front alignment motor starts operation.<br>b. The rear alignment plate does not come off the Rear Alignment HP Sensor when the Rear Alignment Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector check of front alignment guide HP sensor<br>a-2. Connector check of front alignment motor<br>a-3. Replacement of front alignment guide HP sensor<br>a-4. Replacement of front alignment motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Rear Alignment HP Sensor (S109) or the Rear Alignment Motor (M109) are disconnected.<br>b-2. The wiring of the Rear Alignment HP Sensor (S109) or the Rear Alignment Motor (M109) are faulty.<br>b-3. The Rear Alignment HP Sensor (S109) is faulty.<br>b-4. The Rear Alignment Motor (M109) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E537 | -8002 | -05 | Title | a. Error in alignment operation (Finisher-Q1)<br>b. Error in the Rear Alignment Motor (Finisher-N1) |
| | | | Detection description | a. Rear alignment guide HP sensor does not come ON within 5 sec after the rear alignment motor starts operation.<br>b. The Rear Alignment HP Sensor does not detect the rear alignment plate when the Rear Alignment Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector of rear alignment guide HP sensor<br>a-2. Connector of rear alignment motor<br>a-3. Replacement of rear alignment guide HP sensor<br>a-4. Replacement of rear alignment motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connector of the Rear Alignment HP Sensor (S109) or the Rear Alignment Motor (M109) are disconnected.<br>b-2. The wiring of the Rear Alignment HP Sensor (S109) or the Rear Alignment Motor (M109) are faulty.<br>b-3. The Rear Alignment HP Sensor (S109) is faulty.<br>b-4. The Rear Alignment Motor (M109) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E539 | -8001 | -05 | Title | Error in delivery angle adjustment motor (HP sensor delay) |
| | | | Detection description | HP sensor does not come ON within 5 sec after the operation start. |
| | | | Remedy | 1. Connector check of delivery angle HP sensor<br>2. Connector check of delivery angle adjustment motor<br>3. Replacement of delivery angle HP sensor<br>4. Replacement of delivery angle adjustment motor<br>5. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E539 | -8002 | -05 | Title | Error in delivery angle adjustment motor (HP sensor stationary) |
| | | | Detection description | HP sensor does not go OFF within 5 sec after the operation start. |
| | | | Remedy | 1. Connector check of delivery angle HP sensor<br>2. Connector check of delivery angle adjustment motor<br>3. Replacement of delivery angle HP sensor<br>4. Replacement of delivery angle adjustment motor<br>5. Replacement of finisher controller PCB |
| E540 | -8001 | -05 | Title | a. Error in tray A (upper tray) (Finisher-Q1)<br>b. Tray 1 time out error (Finisher-N1) |
| | | | Detection description | a. Tray A up/down motor rotation sensor does not come ON within 300 msec after the tray A up/down motor starts operation.<br>b. The tray 1 does not return to home position when the Tray 1 Shift Motor has been driven for 20 seconds.<br>The tray 1 does not come off the Tray 1 Area Sensor at the same area when the Tray 1 Shift Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector check of tray A up/down motor rotation sensor<br>a-2. Connector check of tray A up/down motor<br>a-3. Replacement of tray A up/down motor rotation sensor<br>a-4. Replacement of tray A up/down motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connectors of the Tray 1 Area Sensors (S122/S123/S124) or the Tray 1 Shift Motor (M105) are disconnected.<br>b-2. The wiring of the Tray 1 Area Sensors (S122/S123/S124) or the Tray 1 Shift Motor (M105) are faulty.<br>b-3. The Tray 1 Area Sensors (S122/S123/S124) is faulty.<br>b-4. The Tray 1 Shift Motor (M105) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E540 | -8002 | -05 | Title | a. Error in tray A (upper tray) (Finisher-Q1)<br>b. Tray 1 area error (Finisher-N1) |
| | | | Detection description | a. Detected position of tray A is below the tray B.<br>b. The tray 1 detects the discontinuous area with the Tray 1 Area Sensors. |
| | | | Remedy | a-1. Connector check of tray A area sensor<br>a-2. Replacement of tray A area sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connectors of the Tray 1 Area Sensors (S122/S123/S124) or the Tray 1 Shift Motor (M105) are disconnected.<br>b-2. The wiring of the Tray 1 Area Sensors (S122/S123/S124) or the Tray 1 Shift Motor (M105) are faulty.<br>b-3. The Tray 1 Area Sensors (S122/S123/S124) is faulty.<br>b-4. The Tray 1 Shift Motor (M105) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E540 | -8003 | -05 | Title | a. Error in tray A (upper tray) (Finisher-Q1)<br>b. Error in the Tray 1 Lower Safety Switch (Finisher-N1) |
| | | | Detection description | a. Tray adjacent switch is activated.<br>b. The Tray 1 Lower Safety Switch is turned ON while the tray 1 operates. |
| | | | Remedy | a-1. Connector check of tray adjacent switch<br>a-2. Replacement of tray adjacent switch<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Tray 1 Lower Safety Switch (SW110) or the Tray 1 Shift Motor (M105) are disconnected.<br>b-2. The wiring of the Tray 1 Lower Safety Switch (SW110) or the Tray 1 Shift Motor (M105) are faulty.<br>b-3. The Tray 1 Lower Safety Switch (SW110) is faulty.<br>b-4. The Tray 1 Shift Motor (M105) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E540 | -8013 | -05 | Title | Error in the Swing Guide Safety Switch (Finisher-N1) |
| | | | Detection description | The Swing Guide Safety Switch (front/rear) is turned ON while the tray 1 operates. |
| | | | Remedy | 1. The connector of the Swing Guide Safety Switch (front/rear) (SW102/SW104) or the Staple Position Switch (SW103) are disconnected.<br>2. The connector of the Swing Guide Solenoid (SL101) or the Tray 1 Shift Motor (M105) are disconnected.<br>3. The wiring of the Swing Guide Safety Switch (front/rear) (SW102/SW104) or the Staple Position Switch (SW103) are faulty.<br>4. The wiring of the Swing Guide Solenoid (SL101) or the Tray 1 Shift Motor (M105) are faulty.<br>5. The Swing Guide Safety Switch (front/rear) (SW102/SW104) is faulty.<br>6. The Staple Position Switch (SW103) is faulty.<br>7. The Swing Guide Solenoid (SL101) is faulty.<br>8. The Tray 1 Shift Motor (M105) is faulty.<br>9. The Finisher Controller PCB is faulty. |
| E540 | -80FF | -05 | Title | Error in tray A (upper tray) |
| | | | Detection description | Up/down operation is not completed within 25 sec after the tray A up/down motor starts operation. |
| | | | Remedy | 1. Connector check of tray A up/down motor rotation sensor<br>2. Connector check of tray A up/down motor<br>3. Replacement of tray A up/down motor rotation sensor<br>4. Replacement of tray A up/down motor<br>5. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E542 | -8001 | -05 | Title | a. Error in tray B (lower tray) (Finisher-Q1)<br>b. Tray 2 time out error (Finisher-N1) |
| | | | Detection description | a. Tray B up/down motor rotation sensor does not come ON within 300 msec after the tray B up/down motor starts operation.<br>b. The tray 2 does not return to home position when the Tray 2 Shift Motor has been driven for 20 seconds.<br>The tray 2 does not come off the Tray 2 Area Sensor at the same area when the Tray 2 Shift Motor has been driven for 4 seconds. |
| | | | Remedy | a-1. Connector check of tray B up/down motor rotation sensor<br>a-2. Connector check of tray B up/down motor<br>a-3. Replacement of tray B up/down motor rotation sensor<br>a-4. Replacement of tray B up/down motor<br>a-5. Replacement of finisher controller PCB<br>b-1. The connectors of the Tray 2 Area Sensors (S125/S126/S127) or the Tray 2 Shift Motor (M217) are disconnected.<br>b-2. The wiring of the Tray 2 Area Sensors (S125/S126/S127) or the Tray 2 Shift Motor (M217) are faulty.<br>b-3. The Tray 2 Area Sensors (S125/S126/S127) is faulty.<br>b-4. The Tray 2 Shift Motor (M217) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E542 | -8002 | -05 | Title | a. Error in tray B (lower tray) (Finisher-Q1)<br>b. Tray 2 area error (Finisher-N1) |
| | | | Detection description | a. Detected position of tray B is above tray A.<br>b. The tray 2 detects the discontinuous area with the Tray 2 Area Sensors. |
| | | | Remedy | a-1. Connector check of tray B area sensor<br>a-2. Replacement of tray B area sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connectors of the Tray 2 Area Sensors (S125/S126/S127) or the Tray 2 Paper Sensor (S105) are disconnected.<br>b-2. The connector of the Tray 2 Shift Motor (M217) is disconnected.<br>b-3. The wiring of the Tray 2 Area Sensors (S125/S126/S127) or the Tray 2 Paper Sensor (S105) are faulty.<br>b-4. The wiring of the Tray 2 Shift Motor (M217) is faulty.<br>b-5. The Tray 2 Area Sensors (S125/S126/S127) is faulty.<br>b-6. The Tray 2 Paper Sensor (S105) is faulty.<br>b-7. The Tray 2 Shift Motor (M217) is faulty.<br>b-8. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E542 | -8003 | -05 | Title | a. Error in tray B (lower tray) (Finisher-Q1)<br>b. Error in the Tray 1 Lower Safety Switch (Finisher-N1) |
| | | | Detection description | a. Tray adjacent switch is activated.<br>b. The Tray 1 Lower Safety Switch is turned ON while the tray 2 operates. |
| | | | Remedy | a-1. Connector check of tray adjacent switch<br>a-2. Replacement of tray adjacent switch<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Tray 1 Lower Safety Switch (SW110) or the Tray 2 Shift Motor (M217) are disconnected.<br>b-2. The wiring of the Tray 1 Lower Safety Switch (SW110) or the Tray 2 Shift Motor (M217) are faulty.<br>b-3. The Tray 1 Lower Safety Switch (SW110) is faulty.<br>b-4. The Tray 2 Shift Motor (M217) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E542 | -8013 | -05 | Title | Error in the Swing Guide Safety Switch (Finisher-N1) |
| | | | Detection description | The Swing Guide Safety Switch (front/rear) is turned ON while the tray 2 operates. |
| | | | Remedy | 1. The connector of the Swing Guide Safety Switch (front/rear) (SW102/SW104) or the Staple Position Switch (SW103) are disconnected.<br>2. The connector of the Swing Guide Solenoid (SL101) or the Tray 2 Shift Motor (M217) are disconnected.<br>3. The wiring of the Swing Guide Safety Switch (front/rear) (SW102/SW104) or the Staple Position Switch (SW103) are faulty.<br>4. The wiring of the Swing Guide Solenoid (SL101) or the Tray 2 Shift Motor (M217) are faulty.<br>5. The Swing Guide Safety Switch (front/rear) (SW102/SW104) is faulty.<br>6. The Staple Position Switch (SW103) is faulty.<br>7. The Swing Guide Solenoid (SL101) is faulty.<br>8. The Tray 2 Shift Motor (M217) is faulty.<br>9. The Finisher Controller PCB is faulty. |
| E542 | -80FF | -05 | Title | Error in tray B (lower tray) |
| | | | Detection description | Up/down operation is not completed within 25 sec after the tray B up/down motor starts operation. |
| | | | Remedy | 1. Connector check of tray B up/down motor rotation sensor<br>2. Connector check of tray B up/down motor<br>3. Replacement of tray B up/down motor rotation sensor<br>4. Replacement of tray B up/down motor<br>5. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E544 | -0001 | -05 | Title | Error in Upper Neat Stack Unit Return Roller (Finisher-Q1) |
| | | | Detection description | The HP has not been detected within 1 second after the start of the operation of the Lifting Motor of the Upper Neat Stack Unit Return Roller. |
| | | | Remedy | 1. Check for any disconnection/improper connection of the following connectors. => Disconnect and then connect them if necessary.<br>• Upper Neat Stack Unit Return Roller HP Sensor (PS209)<br>• Upper Neat Stack Unit Return Roller Lifting Motor (M209)<br>2. Replace the Upper Neat Stack Unit Return Roller HP Sensor.<br>3. Replace the Upper Neat Stack Unit Return Roller Lifting Motor.<br>4. Replace the Finisher Controller PCB (UN3). |
| E544 | -0002 | -05 | Title | Error in Upper Neat Stack Unit Return Roller (Finisher-Q1) |
| | | | Detection description | The roller does not move away from the HP within 1 second after the start of the operation of the Lifting Motor of the Upper Neat Stack Unit Return Roller. |
| | | | Remedy | 1. Check for any disconnection/improper connection of the following connectors. => Disconnect and then connect them if necessary.<br>• Upper Neat Stack Unit Return Roller HP Sensor (PS209)<br>• Upper Neat Stack Unit Return Roller Lifting Motor (M209)<br>2. Replace the Upper Neat Stack Unit Return Roller HP Sensor.<br>3. Replace the Upper Neat Stack Unit Return Roller Lifting Motor.<br>4. Replace the Finisher Controller PCB (UN3). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E548 | -0001 | -05 | Title | Error in Lower Neat Stack Unit Return Roller (Finisher-Q1) |
| | | | Detection description | The HP has not been detected within 1 second after the start of the operation of the Lifting Motor of the Lower Neat Stack Unit Return Roller. |
| | | | Remedy | 1. Check for any disconnection/improper connection of the following connectors. => Disconnect and then connect them if necessary.<br>• Lower Neat Stack Unit Return Roller HP Sensor (PS208)<br>• Lower Neat Stack Unit Return Roller Lifting Motor (M208)<br>2. Replace the Lower Neat Stack Unit Return Roller HP Sensor.<br>3. Replace the Lower Neat Stack Unit Return Roller Lifting Motor.<br>4. Replace the Finisher Controller PCB (UN3). |
| E548 | -0002 | -05 | Title | Error in Lower Neat Stack Unit Return Roller (Finisher-Q1) |
| | | | Detection description | The roller does not move away from the HP within 1 second after the start of the operation of the Lifting Motor of the Lower Neat Stack Unit Return Roller. |
| | | | Remedy | 1. Check for any disconnection/improper connection of the following connectors. => Disconnect and then connect them if necessary.<br>• Lower Neat Stack Unit Return Roller HP Sensor (PS208)<br>• Lower Neat Stack Unit Return Roller Lifting Motor (M208)<br>2. Replace the Lower Neat Stack Unit Return Roller HP Sensor.<br>3. Replace the Lower Neat Stack Unit Return Roller Lifting Motor.<br>4. Replace the Finisher Controller PCB (UN3). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E551 | -0001 | -05 | Title | a. Error in power fan of the integration unit<br>b. Error in Power Supply Cooling Fan (Document Insertion Unit-K1)<br>c. Error in the Power Supply Fan of the Finisher (Finisher-N1) |
| | | | Detection description | b. The lock detection signal is detected ON while the Power Supply Cooling Fan is driven, or the fan lock detection signal is detected OFF while the Power Supply Cooling Fan is stopped.<br>c. The loch signal is detected 1.2 sec. or more while the fan operates. |
| | | | Remedy | a-1. Contact failure on connector of power fan (FM1)<br>a-2. Failure of power fan (FM1)<br>b-1. Connector of the Power Supply Cooling Fan (F1) is disconnected<br>b-2. Power Supply Cooling Fan (F1) is faulty<br>c-1. The connector of the Power Supply Fan (FAN101) is disconnected.<br>c-2. The wiring of the Power Supply Fan (FAN101) is faulty.<br>c-3. The Power Supply Fan (FAN101) is faulty.<br>c-4. The Finisher Controller PCB is faulty. |
| E551 | -0001 | -05 | Title | Error in power fan |
| | | | Detection description | Fan lock detection signal is detected ON. |
| | | | Remedy | 1. Contact failure on connector of power fan (FM1) on the integration unit<br>2. Failure of power fan (FM1) on the integration unit |
| E551 | -0001 | -05 | Title | Error in power supply fan (F1) of the insertion unit |
| | | | Detection description | Fan lock detection signal is detected ON while the power supply fan is driven |
| | | | Remedy | 1. Power supply fan is faulty<br>2. Connector of the power supply fan is disconnected |
| E551 | -0002 | -05 | Title | a. Error in Power Supply Cooling Fan of Paper Folding Unit (Paper Folding Unit-H1)<br>b. Error in the Power Supply Fan of the Finisher (Finisher-N1) |
| | | | Detection description | a. The lock detection signal is detected ON while the Power Supply Cooling Fan is driven, or the fan lock detection signal is detected OFF while the Power Supply Cooling Fan is stopped.<br>b. The lock status is released when the fan stops. |
| | | | Remedy | a-1. Connector of the Power Supply Cooling Fan (F1) is disconnected<br>a-2. Power Supply Cooling Fan (F1) is faulty<br>b-1. The connector of the Power Supply Fan (FAN101) is disconnected.<br>b-2. The wiring of the Power Supply Fan (FAN101) is faulty.<br>b-3. The Power Supply Fan (FAN101) is faulty.<br>b-4. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E551 | -0002 | -05 | Title | Error in power fan on the integration unit |
| | | | Detection description | The lock status is released when the fan stops. |
| | | | Remedy | 1. Contact failure on connector of power fan (FM1)<br>2. Failure of power fan (FM1) |
| E551 | -0004 | -05 | Title | Cooling fan (F1) error in paper folding unit |
| | | | Detection description | Power fan lock signal is detected. |
| | | | Remedy | 1. Disconnection of connector on cooling fan<br>2. Breakage of cooling fan |
| E551 | -0011 | -05 | Title | Error in the Power Supply Fan of the Insertion Unit |
| | | | Detection description | The loch signal is detected for the specified times while the fan operates. |
| | | | Remedy | 1. The connector of the Fan (F1) is disconnected.<br>2. The wiring of the Fan (F1) is faulty.<br>3. The Fan (F1) is faulty.<br>4. The Insertion Unit Controller PCB is faulty. |
| E551 | -0011 | -05 | Title | Error in the Power Supply Fan of the Insertion Unit |
| | | | Detection description | The loch signal is detected for the specified times while the fan operates. |
| | | | Remedy | 1. The connector of the Fan (F1) is disconnected.<br>2. The wiring of the Fan (F1) is faulty.<br>3. The Fan (F1) is faulty.<br>4. The Insertion Unit Controller PCB is faulty. |
| E551 | -0021 | -05 | Title | Error in the Power Supply Fan of the Paper Folding Unit |
| | | | Detection description | The loch signal is detected for the specified times while the fan operates. |
| | | | Remedy | 1. The connector of the Fan (F1) is disconnected.<br>2. The wiring of the Fan (F1) is faulty.<br>3. The Fan (F1) is faulty.<br>4. The Paper Folding Unit Controller PCB is faulty. |
| E562 | -8001 | -05 | Title | Error in Slowing Timing Sensor (Paper Folding Unit-H1) |
| | | | Detection description | The receiving-light intensity failed to be within the threshold although the emitting-light intensity is adjusted to be within the threshold when adjusting the Sensor. |
| | | | Remedy | 1. Connector of the Slowing Timing Sensor (S30) is disconnected.<br>2. Slowing Timing Sensor (S30) is faulty. |
| E562 | -8002 | -05 | Title | Error in Disengagement Timing Sensor (Paper Folding Unit-H1) |
| | | | Detection description | The receiving-light intensity failed to be within the threshold although the emitting-light intensity is adjusted to be within the threshold when adjusting the Sensor. |
| | | | Remedy | 1. Connector of the Disengagement Timing Sensor (S31) is disconnected.<br>2. Disengagement Timing Sensor (S31) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E562 | -8003 | -05 | Title | Error in Folding Position Accuracy Sensor (Paper Folding Unit-H1) |
| | | | Detection description | The receiving-light intensity failed to be within the threshold although the emitting-light intensity is adjusted to be within the threshold when adjusting the Sensor. |
| | | | Remedy | 1. Connector of the Folding Position Accuracy Sensor (S32) is disconnected.<br>2. Folding Position Accuracy Sensor (S32) is faulty. |
| E562 | -8004 | -05 | Title | Error in the Upper Stopper HP Sensor (Paper Folding Unit-H1) |
| | | | Detection description | The receiving-light intensity failed to be within the threshold although the emitting-light intensity is adjusted to be within the threshold when adjusting the Sensor. |
| | | | Remedy | 1. Connector of the Upper Stopper HP Sensor (S23) is disconnected.<br>2. Upper Stopper HP Sensor (S23) is faulty. |
| E566 | -8001 | -05 | Title | Error in side registration detection |
| | | | Detection description | Side registration detection unit HP sensor does not come ON within 5 sec after the side registration detection unit shift motor starts operation. |
| | | | Remedy | 1. Connector check of side registration detection unit shift motor and side registration detection unit HP sensor<br>2. Replacement of side registration detection unit shift motor and side registration detection unit HP sensor<br>3. Replacement of finisher controller PCB |
| E566 | -8002 | -05 | Title | Error in side registration detection |
| | | | Detection description | Side registration detection unit HP sensor does not go OFF within 5 sec after the side registration detection unit shift motor starts operation. |
| | | | Remedy | 1. Connector check of side registration detection unit shift motor and side registration detection unit HP sensor<br>2. Replacement of side registration detection unit shift motor and side registration detection unit HP sensor<br>3. Replacement of finisher controller PCB |
| E567 | -8001 | -05 | Title | Error in shift roller operation |
| | | | Detection description | Shift roller unit HP sensor does not come ON within 5 sec after the side registration shift motor starts operation. |
| | | | Remedy | 1. Connector check of side registration shift motor and shift roller unit HP sensor<br>2. Replacement of side registration shift motor and shift roller unit HP sensor<br>3. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E567 | -8002 | -05 | Title | Error in shift roller operation |
| | | | Detection description | Shift roller unit HP sensor does not go OFF within 5 sec after the side registration shift motor starts operation. |
| | | | Remedy | 1. Connector check of side registration shift motor and shift roller unit HP sensor<br>2. Replacement of side registration shift motor and shift roller unit HP sensor<br>3. Replacement of finisher controller PCB |
| E568 | -8001 | -05 | Title | a. Error in feed roller disengage operation (Finisher-Q1)<br>b. Error in the Feed Roller Disengage/Buffer Flapper Motor (Finisher-N1) |
| | | | Detection description | a. Feed roller HP sensor does not come ON within 5 sec after the feed roller disengage motor starts operation.<br>b. The disengage roller does not come off the Feed Roller Separation HP Sensor when the Feed Roller Disengage/ Buffer Flapper Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of feed roller disengage motor and feed roller HP sensor<br>a-2. Replacement of feed roller disengage motor and feed roller HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Feed Roller Separation HP Sensor (S111) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are disconnected.<br>b-2. The wiring of the Feed Roller Separation HP Sensor (S111) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are faulty.<br>b-3. The Feed Roller Separation HP Sensor (S111) is faulty.<br>b-4. The Feed Roller Disengage/Buffer Flapper Motor (M119) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E568 | -8002 | -05 | Title | a. Error in feed roller disengage operation (Finisher-Q1)<br>b. Error in the Feed Roller Disengage/Buffer Flapper Motor (Finisher-N1) |
| | | | Detection description | a. Feed roller HP sensor does not go OFF within 5 sec after the feed roller disengage motor starts operation.<br>b. The Feed Roller Separation HP Sensor does not detect the disengage roller when the Feed Roller Disengage/Buffer Flapper Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of feed roller disengage motor and feed roller HP sensor<br>a-2. Replacement of feed roller disengage motor and feed roller HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Feed Roller Separation HP Sensor (S111) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are disconnected.<br>b-2. The wiring of the Feed Roller Separation HP Sensor (S111) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are faulty.<br>b-3. The Feed Roller Separation HP Sensor (S111) is faulty.<br>b-4. The Feed Roller Disengage/Buffer Flapper Motor (M119) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E568 | -8003 | -05 | Title | Error in the Feed Roller Disengage/Buffer Flapper Motor (Finisher-N1) |
| | | | Detection description | The buffer flapper does not come off the Buffer Flapper HP Sensor when the Feed Roller Disengage/Buffer Flapper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Buffer Flapper HP Sensor (S142) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are disconnected.<br>2. The wiring of the Buffer Flapper HP Sensor (S142) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are faulty.<br>3. The Buffer Flapper HP Sensor (S142) is faulty.<br>4. The Feed Roller Disengage/Buffer Flapper Motor (M119) is faulty.<br>5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E568 | -8004 | -05 | Title | Error in the Feed Roller Disengage/Buffer Flapper Motor (Finisher-N1) |
| | | | Detection description | The Buffer Flapper HP Sensor does not detect the buffer flapper when the Feed Roller Disengage/Buffer Flapper Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Buffer Flapper HP Sensor (S142) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are disconnected.<br>2. The wiring of the Buffer Flapper HP Sensor (S142) or the Feed Roller Disengage/Buffer Flapper Motor (M119) are faulty.<br>3. The Buffer Flapper HP Sensor (S142) is faulty.<br>4. The Feed Roller Disengage/Buffer Flapper Motor (M119) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E569 | -8001 | -05 | Title | Upper Stopper Motor of Paper Folding Unit failed to go through HP (Paper Folding Unit-H1) |
| | | | Detection description | The Upper Stopper HP Sensor failed to be OFF despite the drive of specified pulse in the case that the Upper Stopper Motor started to be driven while the Upper Stopper HP Sensor was ON. |
| | | | Remedy | 1. Connector of the Upper Stopper Motor (M8) is disconnected.<br>2. Upper Stopper Motor (M8) is faulty.<br>3. Connector of the Upper Stopper HP Sensor (S23) is disconnected.<br>4. Upper Stopper HP Sensor (S23) is faulty. |
| E569 | -8002 | -05 | Title | Upper Stopper Motor of Paper Folding Unit failed to return to HP (Paper Folding Unit-H1) |
| | | | Detection description | The Upper Stopper HP Sensor failed to be ON despite the drive of specified pulse in the case that the Upper Stopper Motor started to be driven while the Upper Stopper HP Sensor was OFF. |
| | | | Remedy | 1. Connector of the Upper Stopper Motor (M8) is disconnected.<br>2. Upper Stopper Motor (M8) is faulty.<br>3. Connector of the Upper Stopper HP Sensor (S23) is disconnected.<br>4. Upper Stopper HP Sensor (S23) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E569 | -8003 | -05 | Title | Upper Stopper Motor of Paper Folding Unit failed to go through HP (Paper Folding Unit-H1) |
| | | | Detection description | The Upper Stopper HP Sensor failed to be OFF despite the drive of specified pulse in the case that the Upper Stopper Motor started to be driven while the Upper Stopper HP Sensor was ON. |
| | | | Remedy | 1. Connector of the Upper Stopper Motor (M8) is disconnected.<br>2. Upper Stopper Motor (M8) is faulty.<br>3. Connector of the Upper Stopper HP Sensor (S23) is disconnected.<br>4. Upper Stopper HP Sensor (S23) is faulty. |
| E569 | -8004 | -05 | Title | Upper Stopper Motor of Paper Folding Unit failed to return to HP (Paper Folding Unit-H1) |
| | | | Detection description | The Upper Stopper HP Sensor failed to be ON despite the drive of specified pulse in the case that the Upper Stopper Motor started to be driven while the Upper Stopper HP Sensor was OFF. |
| | | | Remedy | 1. Connector of the Upper Stopper Motor (M8) is disconnected.<br>2. Upper Stopper Motor (M8) is faulty.<br>3. Connector of the Upper Stopper HP Sensor (S23) is disconnected.<br>4. Upper Stopper HP Sensor (S23) is faulty. |
| E56A | -8001 | -05 | Title | C-fold Stopper Motor of Paper Folding Unit failed to go through HP (Paper Folding Unit-H1) |
| | | | Detection description | The C-fold Stopper Motor HP Sensor failed to be OFF despite the drive of specified pulse in the case that the C-fold Stopper Motor started to be driven while the C-fold Stopper Motor HP Sensor was ON. |
| | | | Remedy | 1. Connector of the C-fold Stopper Motor (M9) is disconnected.<br>2. C-fold Stopper Motor (M9) is faulty.<br>3. Connector of the C-fold Stopper HP Sensor (S24) is disconnected.<br>4. C-fold Stopper HP Sensor (S24) is faulty. |
| E56A | -8002 | -05 | Title | C-fold Stopper Motor of Paper Folding Unit failed to return to HP (Paper Folding Unit-H1) |
| | | | Detection description | The C-fold Stopper Motor HP Sensor failed to be ON despite the drive of specified pulse in the case that the C-fold Stopper Motor started to be driven while the C-fold Stopper Motor HP Sensor was OFF. |
| | | | Remedy | 1. Connector of the C-fold Stopper Motor (M9) is disconnected.<br>2. C-fold Stopper Motor (M9) is faulty.<br>3. Connector of the C-fold Stopper HP Sensor (S24) is disconnected.<br>4. C-fold Stopper HP Sensor (S24) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E56B | -8001 | -05 | Title | Folding Tray Motor of Paper Folding Unit failed to go through HP (Paper Folding Unit-H1) |
| | | | Detection description | The Folding Tray HP Sensor failed to be OFF despite the drive of specified pulse in the case that the Folding Tray Motor started to be driven while the Folding Tray HP Sensor was ON. |
| | | | Remedy | 1. Connector of the Folding Tray Motor (M7) is disconnected.<br>2. Folding Tray Motor (M7) is faulty.<br>3. Connector of the Folding Tray HP Sensor (S28) is disconnected.<br>4. Folding Tray HP Sensor (S28) is faulty. |
| E56B | -8002 | -05 | Title | Folding Tray Motor of Paper Folding Unit failed to return to HP (Paper Folding Unit-H1) |
| | | | Detection description | The Folding Tray HP Sensor failed to be ON despite the drive of specified pulse in the case that the Folding Tray Motor started to be driven while the Folding Tray HP Sensor was OFF. |
| | | | Remedy | 1. Connector of the Folding Tray Motor (M7) is disconnected.<br>2. Folding Tray Motor (M7) is faulty.<br>3. Connector of the Folding Tray HP Sensor (S28) is disconnected.<br>4. Folding Tray HP Sensor (S28) is faulty. |
| E56D | -8001 | -05 | Title | Error in the Stacking Tray Paper Retainer Motor (Finisher-N1) |
| | | | Detection description | The stacking tray paper retainer does not come off the Stacking Tray Paper Retainer HP Sensor when the Stacking Tray Paper Retainer Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Stacking Tray Paper Retainer HP Sensor (S114) or the Stacking Tray Paper Retainer Motor (M114) are disconnected.<br>2. The wiring of the Stacking Tray Paper Retainer HP Sensor (S114) or the Stacking Tray Paper Retainer Motor (M114) are faulty.<br>3. The Stacking Tray Paper Retainer HP Sensor (S114) is faulty.<br>4. The Stacking Tray Paper Retainer Motor (M114) is faulty.<br>5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E56D | -8002 | -05 | Title | Error in the Stacking Tray Paper Retainer Motor (Finisher-N1) |
| | | | Detection description | The Stacking Tray Paper Retainer HP Sensor does not detect the stacking tray paper retainer when the Stacking Tray Paper Retainer Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Stacking Tray Paper Retainer HP Sensor (S114) or the Stacking Tray Paper Retainer Motor (M114) are disconnected.<br>2. The wiring of the Stacking Tray Paper Retainer HP Sensor (S114) or the Stacking Tray Paper Retainer Motor (M114) are faulty.<br>3. The Stacking Tray Paper Retainer HP Sensor (S114) is faulty.<br>4. The Stacking Tray Paper Retainer Motor (M114) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E56E | -8001 | -05 | Title | Lead-edge Retaining Guide Motor of Paper Folding Unit failed to go through HP (Paper Folding Unit-H1) |
| | | | Detection description | The Lead-edge Retaining Guide HP Sensor failed to be OFF despite the drive of specified pulse in the case that the Lead-edge Retaining Guide Motor started to be driven while the Lead-edge Retaining Guide HP Sensor was ON. |
| | | | Remedy | 1. Connector of the Lead-edge Retaining Guide Motor (M10) is disconnected.<br>2. Lead-edge Retaining Guide Motor (M10) is faulty.<br>3. Connector of the Lead-edge Retaining Guide HP Sensor (S25) is disconnected.<br>4. Lead-edge Retaining Guide HP Sensor (S25) is faulty. |
| E56E | -8002 | -05 | Title | Lead-edge Retaining Guide Motor of Paper Folding Unit failed to return to HP (Paper Folding Unit-H1) |
| | | | Detection description | The Lead-edge Retaining Guide HP Sensor failed to be ON despite the drive of specified pulse in the case that the Lead-edge Retaining Guide Motor started to be driven while the Lead-edge Retaining Guide HP Sensor was OFF. |
| | | | Remedy | 1. Connector of the Lead-edge Retaining Guide Motor (M10) is disconnected.<br>2. Lead-edge Retaining Guide Motor (M10) is faulty.<br>3. Connector of the Lead-edge Retaining Guide HP Sensor (S25) is disconnected.<br>4. Lead-edge Retaining Guide HP Sensor (S25) is faulty. |
| E56F | -8001 | -05 | Title | Error in inlet roller disengage operation |
| | | | Detection description | Inlet roller HP sensor does not come ON within 5 sec after the inlet roller disengage motor starts operation. |
| | | | Remedy | 1. Connector check of inlet roller disengage motor and inlet roller HP sensor<br>2. Replacement of inlet roller disengage motor and inlet roller HP sensor<br>3. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E56F | -8002 | -05 | Title | Error in inlet roller disengage operation |
| | | | Detection description | Inlet roller HP sensor does not go OFF within 5 sec after the inlet roller disengage motor starts operation. |
| | | | Remedy | 1. Connector check of inlet roller disengage motor and inlet roller HP sensor<br>2. Replacement of inlet roller disengage motor and inlet roller HP sensor<br>3. Replacement of finisher controller PCB |
| E577 | -8001 | -05 | Title | Error in paddle rotation/up&down operation |
| | | | Detection description | Paddle rotation HP sensor does not come ON within 5 sec after the paddle rotation motor starts operation. |
| | | | Remedy | 1. Replacement of paddle rotation motor and paddle rotation HP sensor<br>2. Replacement of finisher controller PCB |
| E577 | -8002 | -05 | Title | Error in paddle rotation/up&down operation |
| | | | Detection description | Paddle rotation HP sensor does not go OFF within 5 sec after the paddle rotation motor starts operation. |
| | | | Remedy | 1. Replacement of paddle rotation motor and paddle rotation HP sensor<br>2. Replacement of finisher controller PCB |
| E577 | -8003 | -05 | Title | Error in paddle rotation/up&down operation |
| | | | Detection description | Paddle up/down HP sensor does not come ON within 5 sec after the paddle up/down motor starts operation. |
| | | | Remedy | 1. Connector check of paddle up/down motor and paddle up/down HP sensor<br>2. Replacement of paddle up/down motor and paddle up/down HP sensor<br>3. Replacement of finisher controller PCB |
| E577 | -8004 | -05 | Title | Error in paddle rotation/up&down operation |
| | | | Detection description | Paddle up/down HP sensor does not go OFF within 5 sec after the paddle up/down motor starts operation. |
| | | | Remedy | 1. Connector check of paddle up/down motor and paddle up/down HP sensor<br>2. Replacement of paddle up/down motor and paddle up/down HP sensor<br>3. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E578 | -8001 | -05 | Title | a. Error in feed belt operation (Finisher-Q1)<br>b. Error in the Paper Return Guide Motor (Finisher-N1) |
| | | | Detection description | a. Feed belt HP sensor does not come ON within 5 sec after the feed belt shift motor starts operation.<br>b. The paper return guide does not come off the Paper Return Guide HP Sensor when the Paper Return Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of feed belt shift motor and feed belt HP sensor<br>a-2. Replacement of feed belt shift motor and feed belt HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Return Guide HP Sensor (S112) or the Paper Return Guide Motor (M112) are disconnected.<br>b-2. The wiring of the Paper Return Guide HP Sensor (S112) or the Paper Return Guide Motor (M112) are faulty.<br>b-3. The Paper Return Guide HP Sensor (S112) is faulty.<br>b-4. The Paper Return Guide Motor (M112) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E578 | -8002 | -05 | Title | a. Error in feed belt operation (Finisher-Q1)<br>b. Error in the Paper Return Guide Motor (Finisher-N1) |
| | | | Detection description | a. Feed belt HP sensor does not go OFF within 5 sec after the feed belt shift motor starts operation.<br>b. The Paper Return Guide HP Sensor does not detect the paper return guide when the Paper Return Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of feed belt shift motor and feed belt HP sensor<br>a-2. Replacement of feed belt shift motor and feed belt HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Return Guide HP Sensor (S112) or the Paper Return Guide Motor (M112) are disconnected.<br>b-2. The wiring of the Paper Return Guide HP Sensor (S112) or the Paper Return Guide Motor (M112) are faulty.<br>b-3. The Paper Return Guide HP Sensor (S112) is faulty.<br>b-4. The Paper Return Guide Motor (M112) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E57A | -8001 | -05 | Title | Error in process stopper operation |
| | | | Detection description | Process tray HP sensor does not come ON within 5 sec after the process stopper shift motor starts operation. |
| | | | Remedy | 1. Connector check of process stopper shift motor and process tray HP sensor<br>2. Replacement of process stopper shift motor and process tray HP sensor<br>3. Replacement of finisher controller PCB |
| E57A | -8002 | -05 | Title | Error in process stopper operation |
| | | | Detection description | Process tray HP sensor does not go OFF within 5 sec after the process stopper shift motor starts operation. |
| | | | Remedy | 1. Connector check of process stopper shift motor and process tray HP sensor<br>2. Replacement of process stopper shift motor and process tray HP sensor<br>3. Replacement of finisher controller PCB |
| E57A | -8003 | -05 | Title | Error in process stopper operation |
| | | | Detection description | When the process stopper starts operation, the stapler interferes and operation cannot proceed. |
| | | | Remedy | 1. Connector check of process stopper shift motor<br>2. Replacement of process stopper shift motor<br>3. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E57B | -8001 | -05 | Title | a. Error in paper rear edge drop operation (Finisher-Q1)<br>b. Error in the Paper Trailing Edge Pushing Guide Motor (Finisher-N1) |
| | | | Detection description | a. Paper rear edge drop guide HP sensor does not come ON within 5 sec after the paper rear edge drop motor starts operation.<br>b. The paper trailing edge pushing guide does not come off the Paper Trailing Edge Pushing Guide HP Sensor when the Paper Trailing Edge Pushing Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of paper rear edge drop motor and paper rear edge drop guide HP sensor<br>a-2. Replacement of paper rear edge drop motor and paper rear edge drop guide HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Trailing Edge Pushing Guide HP Sensor (S113) or the Paper Trailing Edge Pushing Guide Motor (M113) are disconnected.<br>b-2. The wiring of the Paper Trailing Edge Pushing Guide HP Sensor (S113) or the Paper Trailing Edge Pushing Guide Motor (M113) are faulty.<br>b-3. The Paper Trailing Edge Pushing Guide HP Sensor (S113) is faulty.<br>b-4. The Paper Trailing Edge Pushing Guide Motor (M113) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E57B | -8002 | -05 | Title | a. Error in paper rear edge drop operation (Finisher-Q1)<br>b. Error in the Paper Trailing Edge Pushing Guide Motor (Finisher-N1) |
| | | | Detection description | a. Paper rear edge drop guide HP sensor does not go off within 5 sec after the paper rear edge drop motor starts operation.<br>b. The Paper Trailing Edge Pushing Guide HP Sensor does not detect the paper trailing edge pushing guide when the Paper Trailing Edge Pushing Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of paper rear edge drop motor and paper rear edge drop guide HP sensor<br>a-2. Replacement of paper rear edge drop motor and paper rear edge drop guide HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Trailing Edge Pushing Guide HP Sensor (S113) or the Paper Trailing Edge Pushing Guide Motor (M113) are disconnected.<br>b-2. The wiring of the Paper Trailing Edge Pushing Guide HP Sensor (S113) or the Paper Trailing Edge Pushing Guide Motor (M113) are faulty.<br>b-3. The Paper Trailing Edge Pushing Guide HP Sensor (S113) is faulty.<br>b-4. The Paper Trailing Edge Pushing Guide Motor (M113) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E57C | -8001 | -05 | Title | a. Error in upper guide operation (Finisher-Q1)<br>b. Error in the Processing Tray Paper Retainer Motor (Finisher-N1) |
| | | | Detection description | a. Upper guide HP sensor does not come ON within 5 sec after the upper guide motor starts operation.<br>b. The paper retainer does not come off the Paper Retainer HP Sensor when the Processing Tray Paper Retainer Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of upper guide motor and upper guide HP sensor<br>a-2. Replacement of upper guide motor and upper guide HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Retainer HP Sensor (S135) or the Processing Tray Paper Retainer Motor (M118) are disconnected.<br>b-2. The wiring of the Paper Retainer HP Sensor (S135) or the Processing Tray Paper Retainer Motor (M118) are faulty.<br>b-3. The Paper Retainer HP Sensor (S135) is faulty.<br>b-4. The Processing Tray Paper Retainer Motor (M118) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E57C | -8002 | -05 | Title | a. Error in upper guide operation (Finisher-Q1)<br>b. Error in the Processing Tray Paper Retainer Motor (Finisher-N1) |
| | | | Detection description | a. Upper guide HP sensor does not go OFF within 5 sec after the upper guide motor starts operation.<br>b. The Paper Retainer HP Sensor does not detect the paper retainer when the Processing Tray Paper Retainer Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of upper guide motor and upper guide HP sensor<br>a-2. Replacement of upper guide motor and upper guide HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Paper Retainer HP Sensor (S135) or the Processing Tray Paper Retainer Motor (M118) are disconnected.<br>b-2. The wiring of the Paper Retainer HP Sensor (S135) or the Processing Tray Paper Retainer Motor (M118) are faulty.<br>b-3. The Paper Retainer HP Sensor (S135) is faulty.<br>b-4. The Processing Tray Paper Retainer Motor (M118) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E583 | -8001 | -05 | Title | a. Error in stack delivery auxiliary tray operation (Finisher-Q1)<br>b. Error in the Tray Auxiliary Guide Motor (Finisher-N1) |
| | | | Detection description | a. Stack delivery auxiliary tray HP sensor does not come ON within 5 sec after the stack delivery auxiliary tray motor starts operation.<br>b. The tray auxiliary guide does not come off the Tray Auxiliary Guide Front/Rear HP Sensors when the Tray Auxiliary Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of stack delivery auxiliary tray motor and stack delivery auxiliary tray HP sensor<br>a-2. Replacement of stack delivery auxiliary tray motor and stack delivery auxiliary tray HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Tray Auxiliary Guide Front HP Sensor (S137) or the Tray Auxiliary Guide Rear HP Sensor (S136) are disconnected.<br>b-2. The connector of the Tray Auxiliary Guide Motor (M120) is disconnected.<br>b-3. The wiring of the Tray Auxiliary Guide Front HP Sensor (S137) or the Tray Auxiliary Guide Rear HP Sensor (S136) are faulty.<br>b-4. The wiring of the Tray Auxiliary Guide Motor (M120) is faulty.<br>b-5. The Tray Auxiliary Guide Front HP Sensor (S137) is faulty.<br>b-6. The Tray Auxiliary Guide Rear HP Sensor (S136) is faulty.<br>b-7. The Tray Auxiliary Guide Motor (M120) is faulty.<br>b-8. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E583 | -8002 | -05 | Title | a. Error in stack delivery auxiliary tray operation (Finisher-Q1)<br>b. Error in the Tray Auxiliary Guide Motor (Finisher-N1) |
| | | | Detection description | a. Stack delivery auxiliary tray HP sensor does not go OFF within 5 sec after the stack delivery auxiliary tray motor starts operation.<br>b. The Tray Auxiliary Guide Front/Rear HP Sensors does nor detect the tray auxiliary guide when the Tray Auxiliary Guide Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of stack delivery auxiliary tray motor and stack delivery auxiliary tray HP sensor<br>a-2. Replacement of stack delivery auxiliary tray motor and stack delivery auxiliary tray HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Tray Auxiliary Guide Front HP Sensor (S137) or the Tray Auxiliary Guide Rear HP Sensor (S136) are disconnected.<br>b-2. The connector of the Tray Auxiliary Guide Motor (M120) is disconnected.<br>b-3. The wiring of the Tray Auxiliary Guide Front HP Sensor (S137) or the Tray Auxiliary Guide Rear HP Sensor (S136) are faulty.<br>b-4. The wiring of the Tray Auxiliary Guide Motor (M120) is faulty.<br>b-5. The Tray Auxiliary Guide Front HP Sensor (S137) is faulty.<br>b-6. The Tray Auxiliary Guide Rear HP Sensor (S136) is faulty.<br>b-7. The Tray Auxiliary Guide Motor (M120) is faulty.<br>b-8. The Finisher Controller PCB is faulty. |
| E584 | -0002 | -05 | Title | Error in the Stack Delivery Lower/Shutter Motor (Finisher-N1) |
| | | | Detection description | The Shutter HP Sensor does not detect the shutter when the Stack Delivery Lower/Shutter Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Shutter HP Sensor (S106) or the Stack Delivery Lower/Shutter Motor (M122) are disconnected.<br>2. The wiring of the Shutter HP Sensor (S106) or the Stack Delivery Lower/Shutter Motor (M122) are faulty.<br>3. The Shutter HP Sensor (S106) is faulty.<br>4. The Stack Delivery Lower/Shutter Motor (M122) is faulty.<br>5. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E584 | -8001 | -05 | Title | a. Error in shutter (Finisher-Q1)<br>b. Error in the Stack Delivery Lower/Shutter Motor (Finisher-N1) |
| | | | Detection description | a. Shutter HP sensor does not come ON within 5 sec after the paddle rotation motor starts operation.<br>b. The shutter does not come off the Shutter HP Sensor when the Stack Delivery Lower/Shutter Motor has been driven for 3 seconds. |
| | | | Remedy | a-1. Connector check of paddle rotation motor and shutter HP sensor<br>a-2. Replacement of paddle rotation motor and shutter HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. The connector of the Shutter HP Sensor (S106) or the Stack Delivery Lower/Shutter Motor (M122) are disconnected.<br>b-2. The wiring of the Shutter HP Sensor (S106) or the Stack Delivery Lower/Shutter Motor (M122) are faulty.<br>b-3. The Shutter HP Sensor (S106) is faulty.<br>b-4. The Stack Delivery Lower/Shutter Motor (M122) is faulty.<br>b-5. The Finisher Controller PCB is faulty. |
| E584 | -8002 | -05 | Title | a. Error in shutter (Finisher-Q1)<br>b. Error in the stack delivery lower/shutter motor (Finisher-N1) |
| | | | Detection description | a. Shutter HP sensor does not go OFF within 5 sec after the paddle rotation motor starts operation.<br>b. The shutter HP sensor does not detect the shutter. |
| | | | Remedy | a-1. Connector check of paddle rotation motor and shutter HP sensor<br>a-2. Replacement of paddle rotation motor and shutter HP sensor<br>a-3. Replacement of finisher controller PCB<br>b-1. Connector of the shutter HP sensor (S106) is disconnected.<br>b-2. The shutter HP sensor (S106) is faulty.<br>b-3. The stack delivery lower/shutter motor (M122) is faulty.<br>b-4. The finisher controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E584 | -8003 | -05 | Title | Error in the Stack Delivery Lower/Shutter Motor (Finisher-N1) |
| | | | Detection description | The shutter does not come off the Shutter Close Detection Sensor when the Stack Delivery Lower/Shutter Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Shutter Close Detection Sensor (S148) or the Stack Delivery Lower/Shutter Motor (M122) are disconnected.<br>2. The wiring of the Shutter Close Detection Sensor (S148) or the Stack Delivery Lower/Shutter Motor (M122) are faulty.<br>3. The Shutter Close Detection Sensor (S148) is faulty.<br>4. The Stack Delivery Lower/Shutter Motor (M122) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E584 | -8004 | -05 | Title | Error in the Stack Delivery Lower/Shutter Motor (Finisher-N1) |
| | | | Detection description | The Shutter Close Detection Sensor does not detect the shutter when the Stack Delivery Lower/Shutter Motor has been driven for 3 seconds. |
| | | | Remedy | 1. The connector of the Shutter Close Detection Sensor (S148) or the Stack Delivery Lower/Shutter Motor (M122) are disconnected.<br>2. The wiring of the Shutter Close Detection Sensor (S148) or the Stack Delivery Lower/Shutter Motor (M122) are faulty.<br>3. The Shutter Close Detection Sensor (S148) is faulty.<br>4. The Stack Delivery Lower/Shutter Motor (M122) is faulty.<br>5. The Finisher Controller PCB is faulty. |
| E590 | -8000 | -05 | Title | Error in punch operation |
| | | | Detection description | Clock error of punch motor is detected. |
| | | | Remedy | 1. Check of punch motor<br>2. Check of punch motor FG sensor (SR38)<br>3. Replacement of punch unit<br>4. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E590 | -8001 | -05 | Title | a. Error in punch operation (Finisher-Q1)<br>b. Error in the Punch Motor (Finisher-N1) |
| | | | Detection description | a. If the punch motor HP sensor (PS36) cannot be detected within 200 msec after the punch motor starts driving.<br>b. During initialization, the Punch HP Sensor does not detect the Puncher when the Punch Motor has been driven for 500 msec. after the Puncher has come off the Punch HP Sensor. After initialization, the Punch Motor does not return to home position. |
| | | | Remedy | a-1. Check of punch motor<br>a-2. Check of punch motor FG sensor (SR38)<br>a-3. Replacement of punch unit<br>a-4. Replacement of finisher controller PCB<br>b-1. The connector of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are disconnected.<br>b-2. The connector of the Punch Motor (M102) is disconnected.<br>b-3. The wiring of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are faulty.<br>b-4. The wiring of the Punch Motor (M102) is faulty.<br>b-5. The Punch HP Sensor (S104) is faulty.<br>b-6. The Punch Motor Clock Sensor (S105) is faulty.<br>b-7. The Punch Motor (M102) is faulty.<br>b-8. The Puncher Driver PCB (PCB1) is faulty.<br>b-9. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E590 | -8002 | -05 | Title | a. Error in punch operation (Finisher-Q1)<br>b. Error in the Punch Motor (Finisher-N1) |
| | | | Detection description | a. If the punch motor HP sensor (PS36) is still detected after 200 msec from the start of punch motor driving.<br>b. The Puncher does not come off the Punch HP Sensor when the Punch Motor has been driven for 200 msec.<br>The Puncher does not come off the Punch HP Sensor during initialization. |
| | | | Remedy | a-1. Check of punch motor<br>a-2. Check of punch motor FG sensor (SR38)<br>a-3. Replacement of punch unit<br>a-4. Replacement of finisher controller PCB<br>b-1. The connector of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are disconnected.<br>b-2. The connector of the Punch Motor (M102) is disconnected.<br>b-3. The wiring of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are faulty.<br>b-4. The wiring of the Punch Motor (M102) is faulty.<br>b-5. The Punch HP Sensor (S104) is faulty.<br>b-6. The Punch Motor Clock Sensor (S105) is faulty.<br>b-7. The Punch Motor (M102) is faulty.<br>b-8. The Puncher Driver PCB (PCB1) is faulty.<br>b-9. The Finisher Controller PCB is faulty. |
| E590 | -8003 | -05 | Title | Punch Motor clock error (Finisher-N1) |
| | | | Detection description | The drive pulse of the Punch Motor does not reach 100 pulses when the Punch Motor has been driven for 100 msec. after the Puncher has come off the Punch HP Sensor. |
| | | | Remedy | 1. The connector of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are disconnected.<br>2. The connector of the Punch Motor (M102) is disconnected.<br>3. The wiring of the Punch HP Sensor (S104) or the Punch Motor Clock Sensor (S105) are faulty.<br>4. The wiring of the Punch Motor (M102) is faulty.<br>5. The Punch HP Sensor (S104) is faulty.<br>6. The Punch Motor Clock Sensor (S105) is faulty.<br>7. The Punch Motor (M102) is faulty.<br>8. The Puncher Driver PCB (PCB1) is faulty.<br>9. The Finisher Controller PCB is faulty. |
| E590 | -8004 | -05 | Title | Error in punch operation |
| | | | Detection description | If the punch motor HP sensor (PS36) cannot be detected at the operation switch of 2/hole/3-hole, 2-hole/4-hole (France). |
| | | | Remedy | 1. Check of punch motor<br>2. Check of punch motor FG sensor (SR38)<br>3. Replacement of punch unit<br>4. Replacement of finisher controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E593 | -8001 | -05 | Title | Error in the Punch Slide Motor (Finisher-N1) |
| | | | Detection description | The punch unit does not come off the Horizontal Registration HP Sensor when the Punch Slide Motor has been driven for 680 msec. |
| | | | Remedy | 1. The connector of the Horizontal Registration HP Sensor (S101) or the Punch Slide Motor (M101) are disconnected.<br>2. The wiring of the Horizontal Registration HP Sensor (S101) or the Punch Slide Motor (M101) are faulty.<br>3. The Horizontal Registration HP Sensor (S101) is faulty.<br>4. The Punch Slide Motor (M101) is faulty.<br>5. The Puncher Driver PCB (PCB1) is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E593 | -8002 | -05 | Title | Error in the Punch Slide Motor (Finisher-N1) |
| | | | Detection description | The Horizontal Registration HP Sensor does not detect the punch unit when the Punch Slide Motor has been driven for 3.3 seconds. |
| | | | Remedy | 1. The connector of the Horizontal Registration HP Sensor (S101) or the Punch Slide Motor (M101) are disconnected.<br>2. The wiring of the Horizontal Registration HP Sensor (S101) or the Punch Slide Motor (M101) are faulty.<br>3. The Horizontal Registration HP Sensor (S101) is faulty.<br>4. The Punch Slide Motor (M101) is faulty.<br>5. The Puncher Driver PCB (PCB1) is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5A3 | -0001 | -05 | Title | Error in the Registration Motor (Finisher-N1) |
| | | | Detection description | The Registration HP Sensor does not turn ON when the Registration Motor has been driven for 2.933 seconds. |
| | | | Remedy | 1. The connector of the Registration HP Sensor (S105) or the Registration Motor (M102) are disconnected.<br>2. The wiring of the Registration HP Sensor (S105) or the Registration Motor (M102) are faulty.<br>3. The Registration HP Sensor (S105) is faulty.<br>4. The Registration Motor (M102) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5A3 | -0002 | -05 | Title | Error in the Registration Motor (Finisher-N1) |
| | | | Detection description | The Registration HP Sensor does not turn OFF when the Registration Motor has been driven for 670 msec. |
| | | | Remedy | 1. The connector of the Registration HP Sensor (S105) or the Registration Motor (M102) are disconnected.<br>2. The wiring of the Registration HP Sensor (S105) or the Registration Motor (M102) are faulty.<br>3. The Registration HP Sensor (S105) is faulty.<br>4. The Registration Motor (M102) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5A4 | -8001 | -05 | Title | Error in the Press Motor (Finisher-N1) |
| | | | Detection description | The Press Motor HP Sensor does not turn ON when the Press Motor has been driven for 926 msec. |
| | | | Remedy | 1. The connector of the Press Motor HP Sensor (S106) or the Press Motor (M105) are disconnected.<br>2. The wiring of the Press Motor HP Sensor (S106) or the Press Motor (M105) are faulty.<br>3. The Press Motor HP Sensor (S106) is faulty.<br>4. The Press Motor (M105) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5A4 | -8002 | -05 | Title | Error in the Press Motor (Finisher-N1) |
| | | | Detection description | The Press Motor HP Sensor does not turn OFF when the Press Motor has been driven for 601 msec. |
| | | | Remedy | 1. The connector of the Press Motor HP Sensor (S106) or the Press Motor (M105) are disconnected.<br>2. The wiring of the Press Motor HP Sensor (S106) or the Press Motor (M105) are faulty.<br>3. The Press Motor HP Sensor (S106) is faulty.<br>4. The Press Motor (M105) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5A7 | -8011 | -05 | Title | The feeding claw operating motor (M02) of the booklet trimmer has not been arrived at home position. |
| | | | Detection description | The feeding claw home position sensor (PI04) failed to be ON |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |
| E5A7 | -8012 | -05 | Title | The feeding claw operating motor (M02) of the booklet trimmer is remained at home position. |
| | | | Detection description | The feeding claw home position sensor (PI04) failed to be OFF |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |
| E5A7 | -8021 | -05 | Title | The head-and-tail guide motor (M03) of the booklet trimmer has not been arrived at home position |
| | | | Detection description | The head-and-tail guide home position sensor (PI03) failed to be ON |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5A7 | -8022 | -05 | Title | The head-and-tail guide motor (M03) of the booklet trimmer is remained at home position |
| | | | Detection description | The head-and-tail guide home position sensor (PI03) failed to be OFF |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |
| E5A7 | -8025 | -05 | Title | EEPROM error with the booklet trimmer |
| | | | Detection description | There is a failure with the numerical value for home position that has been saved |
| | | | Remedy | Replacement of trimmer controller PCB |
| E5A7 | -8033 | -05 | Title | The driver with the trimming area feed motor (M04) of the booklet trimmer is faulty |
| | | | Detection description | There was a failure in the trimming area feed motor driver PCB (A04) |
| | | | Remedy | 1. Connector check<br>2. Replacement of motor<br>3. Replacement of driver PCB |
| E5A7 | -8043 | -05 | Title | The driver with the trimming motor (M05) of the booklet trimmer is faulty |
| | | | Detection description | There was a failure in the trimming motor driver PCB (A05) |
| | | | Remedy | - |
| E5A7 | -8044 | -05 | Title | The upper limit is failed to be detected with the upper blade of the booklet trimmer |
| | | | Detection description | The upper blade upper limit sensor (PI06) failed to be ON although the upper blade has moved for a certain distance |
| | | | Remedy | - |
| E5A7 | -8051 | -05 | Title | The stopper shift motor (M06) of the booklet trimmer has not been arrived at home position |
| | | | Detection description | The stopper home position sensor (PI05) failed to be ON |
| | | | Remedy | - |
| E5A7 | -8052 | -05 | Title | The stopper shift motor (M06) of the booklet trimmer is remained at home position |
| | | | Detection description | The stopper home position sensor (PI05) failed to be OFF |
| | | | Remedy | |
| E5A7 | -8055 | -05 | Title | Home position data of trimming stopper positioning motor is incorrect |
| | | | Detection description | - |
| | | | Remedy | 1. Home position adjustment<br>2. Replace the trimmer controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5A7 | -8061 | -05 | Title | The conveyer retaining roller shift motor (M08) of the booklet trimmer has not been arrived at home position |
| | | | Detection description | The retaining roller home position sensor (PI14) failed to be ON |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |
| E5A7 | -8062 | -05 | Title | The conveyer retaining roller shift motor (M08) of the booklet trimmer is remained at home position |
| | | | Detection description | The retaining roller home position sensor (PI14) failed to be OFF |
| | | | Remedy | 1. Connector check<br>2. Replacement of sensor<br>3. Replacement of motor |
| E5A7 | -8065 | -05 | Title | Home position data of conveyer delivery roller motor is incorrect. |
| | | | Detection description | - |
| | | | Remedy | 1. Home position adjustment<br>2. Replace the trimmer controller PCB |
| E5A7 | -8073 | -05 | Title | The driver with the main feed motor (M10) of the booklet trimmer is faulty |
| | | | Detection description | There was a failure in the main feed motor driver PCB (A10) |
| | | | Remedy | 1. Connector check<br>2. Replacement of motor<br>3. Replacement of driver PCB |
| E5AA | -8001 | -05 | Title | Error in the Cutter Motor (Finisher-N1) |
| | | | Detection description | The home position of the trimming blade is not detected when the Cutter Motor has been driven for 5 seconds. |
| | | | Remedy | 1. The connector of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are disconnected.<br>2. The wiring of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are faulty.<br>3. The Cutter Motor Clock Sensor (S108) is faulty.<br>4. The Cutter Motor (M106) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5AA | -8002 | -05 | Title | Error in the Cutter Motor (Finisher-N1) |
| | | | Detection description | The Cutter Motor Clock Sensor does not come off the home position of the trimming blade when the Cutter Motor has been driven for 500 msec. |
| | | | Remedy | 1. The connector of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are disconnected.<br>2. The wiring of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are faulty.<br>3. The Cutter Motor Clock Sensor (S108) is faulty.<br>4. The Cutter Motor (M106) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5AA | -8003 | -05 | Title | Cutter Motor clock error (Finisher-N1) |
| | | | Detection description | The Cutter Motor Clock Sensor does not detect the Motor clock when the Cutter Motor has been driven for 625 msec. |
| | | | Remedy | 1. The connector of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are disconnected.<br>2. The wiring of the Cutter Motor Clock Sensor (S108) or the Cutter Motor (M106) are faulty.<br>3. The Cutter Motor Clock Sensor (S108) is faulty.<br>4. The Cutter Motor (M106) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5AE | -8000 | -05 | Title | Trimmer stationary paper error |
| | | | Detection description | The Inlet Sensor detects the stationary paper after performing the paper delivery operation. |
| | | | Remedy | 1. The paper has jammed in the Trimmer.<br>2. The connector of the Inlet Sensor (S101) is disconnected.<br>3. The wire of the Inlet Sensor (S101) is faulty.<br>4. The Inlet Sensor (S101) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5BA | -8001 | -05 | Title | Error in the Front Estrangement Motor (Finisher-N1) |
| | | | Detection description | The Front Estrangement Motor HP Sensor does not turn ON when the Front Estrangement Motor has been driven for 191msec. |
| | | | Remedy | 1. The connector of the Front Estrangement Motor HP Sensor (S102) or the Front Estrangement Motor (M103) are disconnected.<br>2. The wiring of the Front Estrangement Motor HP Sensor (S102) or the Front Estrangement Motor (M103) are faulty.<br>3. The Front Estrangement Motor HP Sensor (S102) is faulty.<br>4. The Front Estrangement Motor (M103) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5BA | -8002 | -05 | Title | Error in the Front Estrangement Motor (Finisher-N1) |
| | | | Detection description | The Front Estrangement Motor HP Sensor does not turn OFF when the Front Estrangement Motor has been driven for 724 msec. after the Front Estrangement Motor HP Sensor has turned ON. |
| | | | Remedy | 1. The connector of the Front Estrangement Motor HP Sensor (S102) or the Front Estrangement Motor (M103) are disconnected.<br>2. The wiring of the Front Estrangement Motor HP Sensor (S102) or the Front Estrangement Motor (M103) are faulty.<br>3. The Front Estrangement Motor HP Sensor (S102) is faulty.<br>4. The Front Estrangement Motor (M103) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5BA | -8011 | -05 | Title | Error in the Rear Estrangement Motor (Finisher-N1) |
| | | | Detection description | The Rear Estrangement Motor HP Sensor does not turn ON when the Rear Estrangement Motor has been driven for 180 msec. |
| | | | Remedy | 1. The connector of the Rear Estrangement Motor HP Sensor (S104) or the Rear Estrangement Motor (M104) are disconnected.<br>2. The wiring of the Rear Estrangement Motor HP Sensor (S104) or the Rear Estrangement Motor (M104) are faulty.<br>3. The Rear Estrangement Motor HP Sensor (S104) is faulty.<br>4. The Rear Estrangement Motor (M104) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5BA | -8012 | -05 | Title | Error in the Rear Estrangement Motor (Finisher-N1) |
| | | | Detection description | The Rear Estrangement Motor HP Sensor does not turn OFF when the Rear Estrangement Motor has been driven for 537 msec. |
| | | | Remedy | 1. The connector of the Rear Estrangement Motor HP Sensor (S104) or the Rear Estrangement Motor (M104) are disconnected.<br>2. The wiring of the Rear Estrangement Motor HP Sensor (S104) or the Rear Estrangement Motor (M104) are faulty.<br>3. The Rear Estrangement Motor HP Sensor (S104) is faulty.<br>4. The Rear Estrangement Motor (M104) is faulty.<br>5. The Trimmer Controller PCB (PCB1) is faulty. |
| E5BB | -8001 | -05 | Title | Error in the Waste Paper Full Sensor (Finisher-N1) |
| | | | Detection description | The A/D input value does not enter into the D/A output upper limit of the Waste Paper Full Sensor. |
| | | | Remedy | 1. The connector of the Waste Paper Full Sensor (emitting/receiving) (S011) is disconnected.<br>2. The wire of the Waste Paper Full Sensor (emitting/receiving) (S011) is faulty.<br>3. The Waste Paper Full Sensor (emitting/receiving) (S011) is faulty.<br>4. The Trimmer Controller PCB (PCB1) is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5BB | -8002 | -05 | Title | Error in the Waste Paper Full Sensor (Finisher-N1) |
| | | | Detection description | The A/D input value does not enter into the D/A output lower limit of the Waste Paper Full Sensor. |
| | | | Remedy | 1. The connector of the Waste Paper Full Sensor (emitting/receiving) (S011) is disconnected.<br>2. The wire of the Waste Paper Full Sensor (emitting/receiving) (S011) is faulty.<br>3. The Waste Paper Full Sensor (emitting/receiving) (S011) is faulty.<br>4. The Trimmer Controller PCB (PCB1) is faulty. |
| E5F0 | -8001 | -05 | Title | Error in the Saddle Lead Edge Stopper Motor (Finisher-N1) |
| | | | Detection description | The Saddle Lead Edge Stopper HP Sensor does not detect the Saddle lead edge stopper when the Saddle lead edge stopper has been moved for 182 mm by Saddle Lead Edge Stopper Motor. |
| | | | Remedy | 1. The connector of the Saddle Lead Edge Stopper HP Sensor (S205) or the Saddle Lead Edge Stopper Motor (M203) are disconnected.<br>2. The wiring of the Saddle Lead Edge Stopper HP Sensor (S205) or the Saddle Lead Edge Stopper Motor (M203) are faulty.<br>3. The Saddle Lead Edge Stopper HP Sensor (S205) is faulty.<br>4. The Saddle Lead Edge Stopper Motor (M203) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F0 | -8002 | -05 | Title | Error in the Saddle Lead Edge Stopper Motor (Finisher-N1) |
| | | | Detection description | The Saddle lead edge stopper does not come off the Saddle Lead Edge Stopper HP Sensor when the Saddle Lead Edge Stopper Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Lead Edge Stopper HP Sensor (S205) or the Saddle Lead Edge Stopper Motor (M203) are disconnected.<br>2. The wiring of the Saddle Lead Edge Stopper HP Sensor (S205) or the Saddle Lead Edge Stopper Motor (M203) are faulty.<br>3. The Saddle Lead Edge Stopper HP Sensor (S205) is faulty.<br>4. The Saddle Lead Edge Stopper Motor (M203) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F1 | -8000 | -05 | Title | Error in saddle folding |
| | | | Detection description | Saddle fold/feed motor rotation sensor does not come ON for 1 sec after the saddle fold/feed motor starts operation. |
| | | | Remedy | 1. Connector check of saddle fold/feed motor and saddle fold/feed motor rotation sensor<br>2. Replacement of saddle fold/feed motor and saddle fold/feed motor rotation sensor<br>3. Replacement of saddle controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F1 | -8001 | -05 | Title | Saddle folder/feeder clock error (Finisher-N1) |
| | | | Detection description | The drive speed of the Saddle Folder/Feeder Motor is less than 5 mm/sec. |
| | | | Remedy | 1. The connector of the Saddle Folder/Feeder Motor Sensor (S214) or the Saddle Folder/Feeder Motor (M206) are disconnected.<br>2. The wiring of the Saddle Folder/Feeder Motor Sensor (S214) or the Saddle Folder/Feeder Motor (M206) are faulty.<br>3. The Saddle Folder/Feeder Motor Sensor (S214) is faulty.<br>4. The Saddle Folder/Feeder Motor (M206) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F1 | -8002 | -05 | Title | Error in the Saddle Folder/Feeder Motor (Finisher-N1) |
| | | | Detection description | The Saddle Folder HP Sensor does not detect the home position of the paper fold roller during initialization. |
| | | | Remedy | 1. The connector of the Saddle Folder HP Sensor (S229) or the Saddle Folder/Feeder Motor (M206) are disconnected.<br>2. The wiring of the Saddle Folder HP Sensor (S229) or the Saddle Folder/Feeder Motor (M206) are faulty.<br>3. The Saddle Folder HP Sensor (S229) is faulty.<br>4. The Saddle Folder/Feeder Motor (M206) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F2 | -8001 | -05 | Title | Error in the Saddle Roller Guide Motor (Finisher-N1) |
| | | | Detection description | The Saddle Roller Guide HP Sensor does not detect the Saddle roller guide when the saddle roller guide has been moved for 20 mm by Saddle Roller Guide Motor. |
| | | | Remedy | 1. The connector of the Saddle Roller Guide HP Sensor (S207) or the Saddle Roller Guide Motor (M204) are disconnected.<br>2. The wiring of the Saddle Roller Guide HP Sensor (S207) or the Saddle Roller Guide Motor (M204) are faulty.<br>3. The Saddle Roller Guide HP Sensor (S207) is faulty.<br>4. The Saddle Roller Guide Motor (M204) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F2 | -8002 | -05 | Title | Error in the Saddle Roller Guide Motor (Finisher-N1) |
| | | | Detection description | The saddle roller guide does not come off the Saddle Roller Guide HP Sensor when the Saddle Roller Guide Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Roller Guide HP Sensor (S207) or the Saddle Roller Guide Motor (M204) are disconnected.<br>2. The wiring of the Saddle Roller Guide HP Sensor (S207) or the Saddle Roller Guide Motor (M204) are faulty.<br>3. The Saddle Roller Guide HP Sensor (S207) is faulty.<br>4. The Saddle Roller Guide Motor (M204) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F3 | -8001 | -05 | Title | Error in the Saddle Alignment Guide Motor (Finisher-N1) |
| | | | Detection description | The Saddle Alignment Plate HP Sensor does not detect the saddle alignment guide when the saddle alignment guide has been moved for 177 mm by Saddle Alignment Guide Motor. |
| | | | Remedy | 1. The connector of the Saddle Alignment Plate HP Sensor (S206) or the Saddle Alignment Guide Motor (M202) are disconnected.<br>2. The wiring of the Saddle Alignment Plate HP Sensor (S206) or the Saddle Alignment Guide Motor (M202) are faulty.<br>3. The Saddle Alignment Plate HP Sensor (S206) is faulty.<br>4. The Saddle Alignment Guide Motor (M202) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F3 | -8002 | -05 | Title | Error in the Saddle Alignment Guide Motor (Finisher-N1) |
| | | | Detection description | The saddle alignment guide does not come off the Saddle Alignment Plate HP Sensor when the Saddle Alignment Guide Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Alignment Plate HP Sensor (S206) or the Saddle Alignment Guide Motor (M202) are disconnected.<br>2. The wiring of the Saddle Alignment Plate HP Sensor (S206) or the Saddle Alignment Guide Motor (M202) are faulty.<br>3. The Saddle Alignment Plate HP Sensor (S206) is faulty.<br>4. The Saddle Alignment Guide Motor (M202) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F4 | -8001 | -05 | Title | a. Error in saddle staple<br>b. Error in the Saddle Stitcher Motor (Finisher-N1) |
| | | | Detection description | a. Home position cannot be detected within 500 msec after the saddle unit starts operation.<br>b. The Saddle Stitcher HP Sensor does not detect the saddle stitcher unit when the Saddle Stitcher Motor has been driven for 480 msec. |
| | | | Remedy | a-1. Connector check of staple unit<br>a-2. Replacement of staple unit<br>a-3. Replacement of saddle controller PCB<br>b-1. The connector of the Saddle Stitcher HP Sensor (S223) or the Saddle Stitcher Motor (M209) are disconnected.<br>b-2. The wiring of the Saddle Stitcher HP Sensor (S223) or the Saddle Stitcher Motor (M209) are faulty.<br>b-3. The Saddle Stitcher HP Sensor (S223) is faulty.<br>b-4. The Saddle Stitcher Motor (M209) is faulty.<br>b-5. The Saddle Stitcher Controller PCB is faulty.<br>b-6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F4 | -8002 | -05 | Title | a. Error in saddle staple<br>b. Error in the Saddle Stitcher Motor (Finisher-N1) |
| | | | Detection description | a. Home position is still detected after 500 msec from the start of saddle unit operation.<br>b. The Saddle Stitcher unit does not come off the Saddle Stitcher HP Sensor when the Saddle Stitcher Motor has been driven for 480msec. |
| | | | Remedy | a-1. Connector check of staple unit<br>a-2. Replacement of staple unit<br>a-3. Replacement of saddle controller PCB<br>b-1. The connector of the Saddle Stitcher HP Sensor (S223) or the Saddle Stitcher Motor (M209) are disconnected.<br>b-2. The wiring of the Saddle Stitcher HP Sensor (S223) or the Saddle Stitcher Motor (M209) are faulty.<br>b-3. The Saddle Stitcher HP Sensor (S223) is faulty.<br>b-4. The Saddle Stitcher Motor (M209) is faulty.<br>b-5. The Saddle Stitcher Controller PCB is faulty.<br>b-6. The Finisher Controller PCB is faulty. |
| E5F5 | -8001 | -05 | Title | Error in the Saddle Trailing Edge Retainer Motor (Finisher-N1) |
| | | | Detection description | The Saddle Trailing Edge Retainer Move HP Sensor does not detect the saddle trailing edge retainer when the saddle trailing edge retainer has been moved for 96 mm by Saddle Trailing Edge Retainer Motor. |
| | | | Remedy | 1. The connector of the Saddle Trailing Edge Retainer Move HP Sensor (S219) or the Saddle Trailing Edge Retainer Motor (M210) are disconnected.<br>2. The wiring of the Saddle Trailing Edge Retainer Move HP Sensor (S219) or the Saddle Trailing Edge Retainer Motor (M210) are faulty.<br>3. The Saddle Trailing Edge Retainer Move HP Sensor (S219) is faulty.<br>4. The Saddle Trailing Edge Retainer Motor (M210) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F5 | -8002 | -05 | Title | Error in the Saddle Trailing Edge Retainer Motor (Finisher-N1) |
| | | | Detection description | The Saddle trailing edge retainer does not come off the Saddle Trailing Edge Retainer Move HP Sensor when the Saddle Trailing Edge Retainer Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Trailing Edge Retainer Move HP Sensor (S219) or the Saddle Trailing Edge Retainer Motor (M210) are disconnected.<br>2. The wiring of the Saddle Trailing Edge Retainer Move HP Sensor (S219) or the Saddle Trailing Edge Retainer Motor (M210) are faulty.<br>3. The Saddle Trailing Edge Retainer Move HP Sensor (S219) is faulty.<br>4. The Saddle Trailing Edge Retainer Motor (M210) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F6 | -8001 | -05 | Title | Error in the Saddle Paper Push-on Plate Motor (Finisher-N1) |
| | | | Detection description | The Saddle Paper Push-on Plate HP Sensor does not detect the saddle paper push-on plate when the Saddle Paper Push-on Plate Motor has been driven for 500 msec. |
| | | | Remedy | 1. The connector of the Saddle Paper Push-on Plate HP Sensor (S218) or the Saddle Paper Push-on Plate Motor (M205) are disconnected.<br>2. The wiring of the Saddle Paper Push-on Plate HP Sensor (S218) or the Saddle Paper Push-on Plate Motor (M205) are faulty.<br>3. The Saddle Paper Push-on Plate HP Sensor (S218) is faulty.<br>4. The Saddle Paper Push-on Plate Motor (M205) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F6 | -8002 | -05 | Title | Error in the Saddle Paper Push-on Plate Motor (Finisher-N1) |
| | | | Detection description | The saddle paper push-on plate does not come off the Saddle Paper Push-on Plate HP Sensor when the Saddle Paper Push-on Plate Motor has been driven for 150 msec. |
| | | | Remedy | 1. The connector of the Saddle Paper Push-on Plate HP Sensor (S218) or the Saddle Paper Push-on Plate Motor (M205) are disconnected.<br>2. The wiring of the Saddle Paper Push-on Plate HP Sensor (S218) or the Saddle Paper Push-on Plate Motor (M205) are faulty.<br>3. The Saddle Paper Push-on Plate HP Sensor (S218) is faulty.<br>4. The Saddle Paper Push-on Plate Motor (M205) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F6 | -8003 | -05 | Title | Saddle Paper Push-on Plate Motor clock error (Finisher-N1) |
| | | | Detection description | The drive speed of the Saddle Paper Push-on Plate Motor is less than 6 clocks. |
| | | | Remedy | 1. The connector of the Saddle Paper Push-on Plate Motor Sensor (S213) or the Saddle Paper Push-on Plate Motor (M205) are disconnected.<br>2. The wiring of the Saddle Paper Push-on Plate Motor Sensor (S213) or the Saddle Paper Push-on Plate Motor (M205) are faulty.<br>3. The Saddle Paper Push-on Plate Motor Sensor (S213) is faulty.<br>4. The Saddle Paper Push-on Plate Motor (M205) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F7 | -8001 | -05 | Title | Error in the Saddle Trailing Edge Retainer Motor (Finisher-N1) |
| | | | Detection description | The Saddle Trailing Edge Retainer HP Sensor does not detect the Saddle trailing edge retainer when the Saddle Trailing Edge Retainer Motor has been driven for 80 pulses. |
| | | | Remedy | 1. The connector of the Saddle Trailing Edge Retainer HP Sensor (S221) or the Saddle Trailing Edge Retainer Motor (M210) are disconnected.<br>2. The wiring of the Saddle Trailing Edge Retainer HP Sensor (S221) or the Saddle Trailing Edge Retainer Motor (M210) are faulty.<br>3. The Saddle Trailing Edge Retainer HP Sensor (S221) is faulty.<br>4. The Saddle Trailing Edge Retainer Motor (M210) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F7 | -8002 | -05 | Title | Error in the Saddle Trailing Edge Retainer Motor (Finisher-N1) |
| | | | Detection description | The saddle trailing edge retainer does not come off the Saddle Trailing Edge Retainer HP Sensor when the Saddle Trailing Edge Retainer Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Trailing Edge Retainer HP Sensor (S221) or the Saddle Trailing Edge Retainer Motor (M210) are disconnected.<br>2. The wiring of the Saddle Trailing Edge Retainer HP Sensor (S221) or the Saddle Trailing Edge Retainer Motor (M210) are faulty.<br>3. The Saddle Trailing Edge Retainer HP Sensor (S221) is faulty.<br>4. The Saddle Trailing Edge Retainer Motor (M210) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F8 | -8001 | -05 | Title | Error in the Saddle Tapping Motor (Finisher-N1) |
| | | | Detection description | The Saddle Paper Tapping HP Sensor does not detect the Saddle tapping plate when the Saddle Tapping Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Paper Tapping HP Sensor (S215) or the Saddle Tapping Motor (M213) are disconnected.<br>2. The wiring of the Saddle Paper Tapping HP Sensor (S215) or the Saddle Tapping Motor (M213) are faulty.<br>3. The Saddle Paper Tapping HP Sensor (S215) is faulty.<br>4. The Saddle Tapping Motor (M213) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F8 | -8002 | -05 | Title | Error in the Saddle Tapping Motor (Finisher-N1) |
| | | | Detection description | The saddle tapping plate does not come off the Saddle Paper Tapping HP Sensor when the Saddle Tapping Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Paper Tapping HP Sensor (S215) or the Saddle Tapping Motor (M213) are disconnected.<br>2. The wiring of the Saddle Paper Tapping HP Sensor (S215) or the Saddle Tapping Motor (M213) are faulty.<br>3. The Saddle Paper Tapping HP Sensor (S215) is faulty.<br>4. The Saddle Tapping Motor (M213) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5F9 | -8001 | -05 | Title | Error in the Saddle Lead-in Roller Disengage Motor (Finisher-N1) |
| | | | Detection description | The Saddle Lead-in Roller HP Sensor does not detect the Saddle lead-in roller when the Saddle Lead-in Roller Disengage Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Lead-in Roller HP Sensor (S222) or the Saddle Lead-in Roller Disengage Motor (M214) are disconnected.<br>2. The wiring of the Saddle Lead-in Roller HP Sensor (S222) or the Saddle Lead-in Roller Disengage Motor (M214) are faulty.<br>3. The Saddle Lead-in Roller HP Sensor (S222) is faulty.<br>4. The Saddle Lead-in Roller Disengage Motor (M214) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5F9 | -8002 | -05 | Title | Error in the Saddle Lead-in Roller Disengage Motor (Finisher-N1) |
| | | | Detection description | The saddle lead-in roller does not come off the Saddle Lead-in Roller HP Sensor when the Saddle Lead-in Roller Disengage Motor has been driven for 50 pulses. |
| | | | Remedy | 1. The connector of the Saddle Lead-in Roller HP Sensor (S222) or the Saddle Lead-in Roller Disengage Motor (M214) are disconnected.<br>2. The wiring of the Saddle Lead-in Roller HP Sensor (S222) or the Saddle Lead-in Roller Disengage Motor (M214) are faulty.<br>3. The Saddle Lead-in Roller HP Sensor (S222) is faulty.<br>4. The Saddle Lead-in Roller Disengage Motor (M214) is faulty.<br>5. The Saddle Stitcher Controller PCB is faulty.<br>6. The Finisher Controller PCB is faulty. |
| E5FA | -8000 | -05 | Title | Error in saddle press |
| | | | Detection description | Saddle press position sensor does not come ON within 200 msec after the saddle press motor starts operation. |
| | | | Remedy | 1. Replacement of saddle press motor and saddle press position sensor<br>2. Replacement of saddle controller PCB |
| E5FA | -8001 | -05 | Title | Error in saddle press |
| | | | Detection description | Saddle press HP sensor does not come ON within 1 sec after the saddle press motor starts operation. |
| | | | Remedy | 1. Replacement of saddle press motor and saddle press HP sensor<br>2. Replacement of saddle controller PCB |
| E5FA | -8002 | -05 | Title | Error in saddle press |
| | | | Detection description | Saddle press HP sensor does not go OFF within 1 sec after the saddle press motor starts operation. |
| | | | Remedy | 1. Replacement of saddle press motor and saddle press HP sensor<br>2. Replacement of saddle controller PCB |
| E5FB | -8001 | -05 | Title | Error in saddle disengage operation |
| | | | Detection description | Saddle lead-in roller HP sensor does not come ON within 5 sec after the saddle lead-in roller disengage motor starts operation. |
| | | | Remedy | 1. Check of saddle lead-in roller disengage motor and saddle lead-in roller HP sensor<br>2. Replacement of saddle lead-in roller disengage motor and saddle lead-in roller HP sensor<br>3. Replacement of saddle controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5FB | -8002 | -05 | Title | Error in saddle disengage operation |
| | | | Detection description | Saddle lead-in roller HP sensor does not go OFF within 5 sec after the saddle lead-in roller disengage motor starts operation. |
| | | | Remedy | 1. Check of saddle lead-in roller disengage motor and saddle lead-in roller HP sensor<br>2. Replacement of saddle lead-in roller disengage motor and saddle lead-in roller HP sensor<br>3. Replacement of saddle controller PCB |
| E5FC | -8001 | -05 | Title | Error in saddle knocking motor |
| | | | Detection description | Saddle paper knocking HP sensor does not come ON within 5 sec after the saddle knocking motor starts operation. |
| | | | Remedy | 1. Check of saddle knocking motor and saddle paper knocking HP sensor<br>2. Replacement of saddle knocking motor and saddle paper knocking HP sensor<br>3. Replacement of saddle controller PCB |
| E5FC | -8002 | -05 | Title | Error in saddle knocking motor |
| | | | Detection description | Saddle paper knocking HP sensor does not come OFF within 5 sec after the saddle knocking motor starts operation. |
| | | | Remedy | 1. Check of saddle knocking motor and saddle paper knocking HP sensor<br>2. Replacement of saddle knocking motor and saddle paper knocking HP sensor<br>3. Replacement of saddle controller PCB |
| E5FD | -8001 | -05 | Title | Error in saddle trailing edge holding shift motor |
| | | | Detection description | Saddle trailing edge holding shift HP sensor does not come ON within 5 sec after the saddle training edge holding shift motor starts operation. |
| | | | Remedy | 1. Check of saddle trailing edge holding shift motor and saddle trailing edge holding shift HP sensor<br>2. Replacement of saddle trailing edge holding shift motor and saddle trailing edge holding shift HP sensor<br>3. Replacement of saddle controller PCB |
| E5FD | -8002 | -05 | Title | Error in saddle trailing edge holding shift motor |
| | | | Detection description | Saddle trailing edge holding shift HP sensor does not come OFF within 5 sec after the saddle training edge holding shift motor starts operation. |
| | | | Remedy | 1. Check of saddle trailing edge holding shift motor and saddle trailing edge holding shift HP sensor<br>2. Replacement of saddle trailing edge holding shift motor and saddle trailing edge holding shift HP sensor<br>3. Replacement of saddle controller PCB |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E5FE | -8001 | -05 | Title | Error in saddle trailing edge holding motor |
| | | | Detection description | Saddle trailing edge retainer HP sensor does not come ON within 5 sec after the saddle training edge holding motor starts operation. |
| | | | Remedy | 1. Check of saddle trailing edge holding motor and saddle trailing edge retainer HP sensor<br>2. Replacement of saddle trailing edge holding motor and saddle trailing edge retainer HP sensor<br>3. Replacement of saddle controller PCB |
| E5FE | -8002 | -05 | Title | Error in saddle trailing edge holding motor |
| | | | Detection description | Saddle trailing edge retainer HP sensor does not come OFF within 5 sec after the saddle training edge holding motor starts operation. |
| | | | Remedy | 1. Check of saddle trailing edge holding motor and saddle trailing edge retainer HP sensor<br>2. Replacement of saddle trailing edge holding motor and saddle trailing edge retainer HP sensor<br>3. Replacement of saddle controller PCB |

T-7-9

## E602

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0001 | -00 | Title | Error in HDD |
| | | | Detection description | HDD failed to be recognized. Startup partition (BOOTDEV) failed to be found at startup. |
| | | | Remedy | 1. Turn OFF the main switch and check connection of HDD cable, and then turn ON the main switch.<br>2. If the Encryption Board has been installed, there may be an Encryption Board failure. In this case, disconnect the signal cable connecting to the Encryption Board and directly connect to the HDD. (It cannot be connected from the back side. Open the Main Controller Cover, and connect by going over the Main Controller PCB 1.) After connecting, power on by the safe mode. If the machine starts normally, replace the Encryption Board as the Encryption Board had failed.<br>3. Be sure that HDD spins stably (no problem in drive sound) and 5V/12V power is supplied when the main power is turned ON. (If the drive sound is abnormal, replace the HDD.)<br>4. Replace the HDD and reinstall the system. (In the case of using a USB memory device, insert a USB memory device where the system software has been registered to the slot of the host machine, and then execute main menu [3]: Upgrade (Overwrite all).)<br>5. Replace the Main Controller PCB 1. |
| E602 | 0002 | -00 | Title | Error in HDD |
| | | | Detection description | There is no system for the main CPU |
| | | | Remedy | 1. Start in Safe Mode, then perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Switch. (Prepare the USB memory which system software was registered. Insert the USB memory to the equipment. Execute [3]: Upgrade (Overwrite All) in the main menu.)<br>2. If the above measures do not solve the problem, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0003 | -00 | Title | Error in HDD |
| | | | Detection description | WriteAbort was detected with BootDevice |
| | | | Remedy | 1. Execute detection and recovery of WriteAbortSector<br><In the case of display of B/W E-code><br>1-1. Perform the following steps because Service Mode is not available.<br>1-2. Turn OFF the power. Then, while pressing 1+9 keys, turn ON the power. WriteAbortSector recovery routine is automatically started which makes the screen black.<br>1-3. After a while, progress is displayed because the process takes time (40 to 50 min.). The process is complete when the screen turns white.<br><In the case of official display of wrench-mark><br>1-1. Set as follows: CHK-TYPE=0; and execute HD-CHECK (40 to 50 min.), and then turn OFF and then ON the main switch.<br>2. If the above measures do not solve the problem, start up in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the main switch.<br>3. If no improvement is found despite the above measures, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0006 | -00 | Title | Error in HDD |
| | | | Detection description | There is no system for the sub CPU |
| | | | Remedy | Reinstall the system software. For details, see “Chapter 6: Upgrading”.<br>For your reference, the method using USB memory is described below.<br>1. Prepare the USB memory which system software was registered.<br>2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode. (When it is not operated normally, start the safe mode.)<br>3. Insert the USB memory to the equipment.<br>4. Execute [3]: Upgrade (Overwrite All) in the main menu. (Be sure to download SYSTEM, LANGUAGE and RUI.)<br>5. System software is downloaded and the machine restarts automatically. At this time, if the machine restarts with the safe mode, E753 might occurs. Check the log. In case of the system software of the options which are not connected, turn OFF and then ON the power supply to restore. (For details, see the description for E753.)<br><br>If the measures above do not solve the problem, replace the HDD and download the system software with the foregoing method. |
| E602 | 0007 | -00 | Title | Error in HDD |
| | | | Detection description | There is no ICCProfile |
| | | | Remedy | 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.<br>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |
| E602 | 0009 | -00 | Title | Error in HDD |
| | | | Detection description | There is no Font file in /BOOTDEV/BOOT |
| | | | Remedy | 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.<br>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0010 | -00 | | Error in HDD |
| | | | | There is no Chinese, Korean, and Taiwan font files |
| | | | | 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.<br>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |
| E602 | 0011 | -00 | | Error in HDD |
| | | | | There is no Chinese, Korean, and Taiwan font files |
| | | | | 1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch.<br>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |
| E602 | 0012 | -00 | Title | Error in HDD |
| | | | Detection description | There is no file in which the Web browser refers to |
| | | | Remedy | 1. Start up in Safe Mode and reinstall the Web browser using SST, and then turn OFF and then ON the main power switch.<br>2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0101 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of image data (Inbox, etc.) (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0111 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of image data (Inbox, etc.) (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0201 | -00 | Title | Error in HDD |
| | | | Detection description | Error in management data area of image (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0211 | -00 | Title | Error in HDD |
| | | | Detection description | Error in management data area of image (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0301 | -00 | Title | Error in HDD |
| | | | Detection description | Storage area of image data (temporary data) (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0311 | -00 | Title | Error in HDD |
| | | | Detection description | Storage area of image data (temporary data) (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0401 | -00 | Title | Error in HDD |
| | | | Detection description | Error in thumbnail area (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0411 | -00 | Title | Error in HDD |
| | | | Detection description | Error in thumbnail area (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0501 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of universal data (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0511 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of universal data (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0601 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of universal data (temporary data) (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0611 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of universal data (temporary data) (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0701 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of fax (temporary data) (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0711 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of fax (temporary data) (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0801 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of PSS (temporary data) (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0811 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of PSS (temporary data) (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0901 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of PDL-related file (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 0911 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of PDL-related file (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |
| E602 | 1001 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of firmware (BOOTDEV) (at startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Format the BOOTDEV using SST or USB, and download the firmware.<br>2. Replace the HDD. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1011 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of firmware (BOOTDEV) (after startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Format the BOOTDEV using SST or USB, and download the firmware.<br>2. Replace the HDD. |
| E602 | 1101 | -00 | Title | Error in HDD |
| | | | Detection description | Error in MEAP area (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1111 | -00 | Title | Error in HDD |
| | | | Detection description | Error in MEAP area (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1201 | -00 | Title | Error in HDD |
| | | | Detection description | Error in Send area (at startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Format the all using SST or USB, and download the firmware.<br>4. Replace the HDD. |
| E602 | 1211 | -00 | Title | Error in HDD |
| | | | Detection description | Error in Send area (after startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Format the all using SST or USB, and download the firmware.<br>4. Replace the HDD. |
| E602 | 1301 | -00 | Title | Error in HDD |
| | | | Detection description | Error in MEAP area (at startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Format the all using SST or USB, and download the firmware.<br>4. Replace the HDD. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1311 | -00 | Title | Error in HDD |
| | | | Detection description | Error in MEAP area (after startup) |
| | | | Remedy | If the problem is not solved by turning OFF and then ON the power,<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Format the all using SST or USB, and download the firmware.<br>4. Replace the HDD. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1401 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of system log (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1411 | -00 | Title | Error in HDD |
| | | | Detection description | Error in storage area of system log (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1501 | -00 | Title | Error in HDD |
| | | | Detection description | Error in Advanced Box area (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1511 | -00 | Title | Error in HDD |
| | | | Detection description | Error in Advanced Box area (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1601 | -00 | Title | Error in HDD |
| | | | Detection description | Error in CDS area (at startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 1611 | -00 | Title | Error in HDD |
| | | | Detection description | Error in CDS area (after startup) |
| | | | Remedy | When the problem is not solved by turning OFF and then ON the power, ask the followings to user.<br>A. Preferring to give priority on recovery time although data is deleted<br>B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.)<br><br>Case A<br>1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition)<br>2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD.<br><br>Case B<br>1. Try to recover the corresponding file/partition.<br>-> Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power.<br>2. Back up necessary data.<br>3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data.<br>4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL)<br>5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware.<br>6. Replace the HDD.<br>Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | 2000 | -00 | Title | Error in HDD Encryption Board |
| | | | Detection description | Authentication error between the host machine and the Encryption Board. |
| | | | Remedy | 1. After checking connection of the Encryption Board, disconnect and connect the connector and, turn OFF and then ON the power.<br>2. Execute the key clear procedure.<br><br>* Key clear: system recovery procedure<br>1. Execute the key clear procedure with SST.<br>--> As a result, the disk becomes unformatted disk. Thus, it is necessary to execute step 2.<br>--> E602-0001 will be indicated if activating the machine with the unformatted disk.<br>2. Execute HDD format and system reinstallation with SST. |
| E602 | 4000 | -00 | Title | Error in HDD |
| | | | Detection description | Unable to mount the Linux system. |
| | | | Remedy | 1. Check the cable and the power connector.<br>2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch.<br>3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |
| E602 | 4001 | -00 | Title | Error in HDD |
| | | | Detection description | No Linux system start script. |
| | | | Remedy | 1. Check the cable and the power connector.<br>2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch.<br>3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system. |
| E602 | FF01 | -00 | Title | Error in HDD |
| | | | Detection description | HDD error (unidentified) (at startup) |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Disconnect and then connect the HDD connector.<br>3. Format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E602 | FF11 | -00 | Title | Error in HDD |
| | | | Detection description | HDD error (unidentified) (after startup) |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Disconnect and then connect the HDD connector.<br>3. Format the HDD using SST or USB, and download the firmware.<br>4. Replace the HDD. |

T-7-10

## E604 to E677

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E604 | -1024 | -00 | Title | Insufficient memory |
| | | | Detection description | Insufficient memory (require 1024 MB). |
| | | | Remedy | DDR2-SDRAM |
| E609 | -0008 | -00 | Title | Hard disk error |
| | | | Detection description | Temperature of the HDD does not rise to the specified temperature within the specified period of time at the time of startup. |
| | | | Remedy | HDD. |
| E609 | -0009 | -00 | Title | Hard disk error |
| | | | Detection description | At the time of recovery from sleep, it does not reach to the specified temperature. |
| | | | Remedy | HDD. |
| E610 | -0001 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | The Encryption Board does not exist. |
| | | | Remedy | Check the hardware configuration. |
| E610 | -0002 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Not meeting the memory configuration to execute encryption operation. |
| | | | Remedy | Check the hardware configuration. |
| E610 | -0101 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Failed to initialize the memory of key storage area. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0102 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Failed to initialize the encryption processing part. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0201 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Error in the encryption processing part. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0202 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Error in the encryption processing part. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0301 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Failed to create the encryption key. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0302 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Failure of the encryption key is detected. |
| | | | Remedy | Turn OFF and then ON the power.<br>Due to this error, HDD content is initialized. |
| E610 | -0303 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Failure of the encryption key is detected. |
| | | | Remedy | Turn OFF and then ON the power.<br>Due to this error, HDD content is initialized. |
| E610 | -0401 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Error is detected during encryption. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0402 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Error is detected during decryption. |
| | | | Remedy | Turn OFF and then ON the power. |
| E610 | -0501 | -00 | Title | Failure of the HDD encryption key (hardware configuration error/initialization error/encryption key error/encryption processing error) |
| | | | Detection description | Error in document management information on /FSTDEV. |
| | | | Remedy | Turn OFF and then ON the power. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E611 | -0000 | -00 | Title | Rebooting due to SRAM corruption when executing a transmission job that secures disconnection of the power |
| | | | Detection description | In the case that reboot is repeated at recovery from power down because SRAM information is corrupted and the job information saved on SRAM cannot be read, the phenomenon that the communication is repeated occurs. |
| | | | Remedy | Clear SRAM to erase the job that secures disconnection of the power. |
| E674 | -0001 | -00 | Title | FAX error |
| | | | Detection description | Communication error with the FAX PCB. |
| | | | Remedy | Check the cable connection, replace the FAX PCB, replace the Main Controller PCB. |
| E674 | -0002 | -00 | Title | FAX error |
| | | | Detection description | Communication error with the FAX PCB. |
| | | | Remedy | Check the cable connection, replace the FAX PCB, replace the Main Controller PCB. |
| E674 | -0004 | -00 | Title | FAX error |
| | | | Detection description | Error in access of the modem IC. |
| | | | Remedy | Check the cable connection, replace the FAX PCB, replace the Main Controller PCB. |
| E674 | -0008 | -00 | Title | FAX error |
| | | | Detection description | Error in access of the port IC. |
| | | | Remedy | Check the cable connection, replace the FAX PCB, replace the Main Controller PCB. |
| E674 | -000C | -00 | Title | FAX error |
| | | | Detection description | Error in access of the modem IC/port IC. |
| | | | Remedy | Check the cable connection, replace the FAX PCB, replace the Main Controller PCB. |
| E674 | -0010 | -00 | Title | FAX error |
| | | | Detection description | FAX error. |
| | | | Remedy | Replace the Main Controller PCB. |
| E674 | -0011 | -00 | Title | FAX error |
| | | | Detection description | FAX error. |
| | | | Remedy | Replace the Main Controller PCB. |
| E674 | -0030 | -00 | Title | FAX error |
| | | | Detection description | Checksum error. |
| | | | Remedy | Download the system software for 2-line FAX. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E674 | -0100 | -00 | Title | FAX error |
| | | | Detection description | Logging is failed after completion of FAX communication, and unable to read. |
| | | | Remedy | Turn OFF and then ON the power. |
| E674 | -0200 | -00 | Title | HDD access error |
| | | | Detection description | An error occurred when accessing the HDD. |
| | | | Remedy | 1. Turn OFF/ON the main power switch.<br>2. Reinstall all the formats and the system.<br>3. Replace the HDD.<br>4. Replace the Main Controller PCB 1. |
| E677 | -0001 | -00 | Title | Print server error |
| | | | Detection description | Exhaust Fan operation error on the print server is detected. |
| | | | Remedy | 1. Check power supply to the Exhaust Fan.<br>2. Replace the Exhaust Fan. |
| E677 | -0003 | -00 | Title | Print server error |
| | | | Detection description | Error is detected at the configuration check performed at startup. |
| | | | Remedy | Check the cable connection, reinstallation. |
| E677 | -0004 | -00 | Title | Print server error |
| | | | Detection description | CPU Fan operation error on the print server is detected. |
| | | | Remedy | 1. Check power supply to the CPU Fan.<br>2. Replace the CPU Fan. |
| E677 | -0010 | -00 | Title | Print server error |
| | | | Detection description | Not proper print server is connected. |
| | | | Remedy | Replace the print server with the proper one. |
| E677 | -0080 | -00 | Title | Print server error |
| | | | Detection description | Communication error at startup. |
| | | | Remedy | Check the cable connection, reinstallation. |

T-7-11

## E710 to E760

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E710 | -0001 | -00 | Title | Printer IPC error |
| | | | Detection description | Error is detected by IPC communication IC of the printer engine at power ON. |
| | | | Remedy | Disconnection of cable. |
| E711 | -0001 | -00 | Title | IPC communication error |
| | | | Detection description | Occurrence of error was set for 4 times or more for 1.5 seconds to the error register of the IPC Chip. |
| | | | Remedy | Check the Cable. |
| E711 | -0001 | -05 | Title | IPC communication error (retransmission request reception error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection.<br>Check the connection between DCON side (J462) and Finisher Lattice side (J9043)<br>Finisher Cable<br>2. Replace the DC Controller PCB. |
| E711 | -0002 | -05 | Title | IPC communication error (reception timeout) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection.<br>Check the connection between DCON side (J462) and Finisher Lattice side (J9043)<br>Finisher Cable<br>2. Replace the DC Controller PCB. |
| E711 | -0004 | -05 | Title | IPC communication error (checksum error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection.<br>Check the connection between DCON side (J462) and Finisher Lattice side (J9043)<br>Finisher Cable<br>2. Replace the DC Controller PCB. |
| E711 | -0020 | -05 | Title | IPC communication error (recovery error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection.<br>Check the connection between DCON side (J462) and Finisher Lattice side (J9043)<br>Finisher Cable<br>2. Replace the DC Controller PCB. |
| E711 | -0040 | -05 | Title | IPC communication error (serial error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection.<br>Check the connection between DCON side (J462) and Finisher Lattice side (J9043)<br>Finisher Cable<br>2. Replace the DC Controller PCB. |
| E713 | -0001 | -05 | Title | Finisher IPC communication error (retransmission request reception error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection of the Finisher.<br>DC Controller side: J462, Finisher Lattice side: J9043<br>2. Replace the Finisher Controller PCB. |
| E713 | -0002 | -05 | Title | Finisher IPC communication error (reception timeout) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection of the Finisher.<br>DC Controller side: J462, Finisher Lattice side: J9043<br>2. Replace the Finisher Controller PCB. |
| E713 | -0004 | -05 | Title | Finisher IPC communication error (checksum error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection of the Finisher.<br>DC Controller side: J462, Finisher Lattice side: J9043<br>2. Replace the Finisher Controller PCB. |
| E713 | -0020 | -05 | Title | Finisher IPC communication error (recovery error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection of the Finisher.<br>DC Controller side: J462, Finisher Lattice side: J9043<br>2. Replace the Finisher Controller PCB. |
| E713 | -0040 | -05 | Title | Finisher IPC communication error (serial error) |
| | | | Detection description | Communication between the host machine and the Finisher was lost. |
| | | | Remedy | 1. Check the cable connection of the Finisher.<br>DC Controller side: J462, Finisher Lattice side: J9043<br>2. Replace the Finisher Controller PCB. |
| E717 | -0001 | -00 | Title | Communication error with the NE Controller |
| | | | Detection description | Error when the NE Controller is started.<br>The NE Controller which was connected before turning OFF the power is not connected at power-on. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E717 | -0002 | -00 | Title | Communication error with the NE Controller |
| | | | Detection description | IPC error at NE Controller operation.<br>Open circuit of IPC, unable to recover the IPC communication. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0001 | -00 | Title | Error in coin manager |
| | | | Detection description | Error when the coin manager is started.<br>The coin manager which was connected before turning OFF the power is not connected at power-on. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0002 | -00 | Title | Error in coin manager |
| | | | Detection description | IPC error at coin manager operation.<br>Open circuit of IPC, unable to recover the IPC communication.<br>When open circuit of the pickup/delivery signal cable is detected.<br>Invalid connection is detected. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0003 | -00 | Title | Error in coin manager |
| | | | Detection description | Communication error with the coin manager occurs during unit price acquisition at startup. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0011 | -00 | Title | Error when the Card Reader is started |
| | | | Detection description | The Card Reader which was connected before turning OFF the power is not connected at power-on. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0012 | -00 | Title | IPC error at Card Reader operation |
| | | | Detection description | Open circuit of IPC, unable to recover the IPC communication. |
| | | | Remedy | Check the cable, and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E719 | -0031 | -00 | Title | Communication error when the Card Reader (serial) is started |
| | | | Detection description | Unable to start communication with the Card Reader at startup. |
| | | | Remedy | 1. Check the cable connection of the Card Reader (connector connection error, open circuit), and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR.<br>2. After removing the Card Reader, execute the following service mode, and then reinstall the Card Reader.<br>• COPIER> FUNCTION> CLEAR> CARD<br>• COPIER> FUNCTION> CLEAR> ERR |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E719 | -0032 | -00 | Title | Communication error after the Card Reader (serial) is started |
| | | | Detection description | Although communication with the Card Reader was possible at startup, it became unavailable in the middle of it. |
| | | | Remedy | Check the cable connection of the Card Reader (connector connection error, open circuit), and then go through the following to clear the error: Service Mode> COPIER> FUNCTION> CLEAR> ERR. |
| E720 | -0001 | -05 | Title | Different model error |
| | | | Detection description | Not proper Finisher is connected. |
| | | | Remedy | Check the configuration of options. |
| E720 | -0002 | -05 | Title | Different model error |
| | | | Detection description | Not proper Option Deck is connected. |
| | | | Remedy | Check the configuration of options. |
| E720 | -0100 | -05 | Title | Different model error |
| | | | Detection description | Finisher-N1 is connected to iR-ADV 8205 PRO/8295 PRO for Japan. |
| | | | Remedy | Check the configuration of options. |
| E720 | -02xx | -05 | Title | Different model error |
| | | | Detection description | Option that is not supported is connected.<br>xx= 02: Finisher, 11 to 13: POD Deck, 21: Multi Inserter, 31: GBC Puncher, 51 to 52: Stacker, 61: Perfect Binder, 71: Inserter |
| | | | Remedy | Check the configuration of options. |
| E720 | -0300 | -05 | Title | Different model error |
| | | | Detection description | Service mode (COPIER> OPTION> ACCPST-D) is set when Finisher-N1 is connected. |
| | | | Remedy | Check the configuration of options. |
| E730 | -1001 | -00 | Title | PDL software error |
| | | | Detection description | Initialization error. |
| | | | Remedy | 1. PDL reset processing.<br>2. Turn OFF and then ON the power. |
| E730 | -100A | -00 | Title | PDL software error |
| | | | Detection description | Systematic fatal error, such as initialization failure, occurs. |
| | | | Remedy | 1. PDL reset processing.<br>2. Turn OFF and then ON the power. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E730 | -9004 | -00 | Title | Third party PDL communication error |
| | | | Detection description | Communication error with the print server. |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Check the cable connection.<br>3. Replace the Open I/F PCB, F Link PCB (Main/Sub).<br>4. Replace the Main Controller PCB. |
| E730 | -9005 | -00 | Title | Third party PDL communication error |
| | | | Detection description | Error in video cable connection with the print server. |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Check the cable connection.<br>3. Replace the Open I/F PCB, F Link PCB (Main/Sub).<br>4. Replace the Main Controller PCB. |
| E730 | -A006 | -00 | Title | PDL communication error |
| | | | Detection description | No reply from PDL. Due to failure of Subbootable, or no existence, there is no reply from PDL. |
| | | | Remedy | 1. PDL reset processing.<br>2. Turn OFF and then ON the power.<br>3. Check the connection of the Main Controller PCB.<br>4. Reinstall the firmware.<br>5. Replace the Main Controller PCB. |
| E730 | -A007 | -00 | Title | Mismatched PDL version |
| | | | Detection description | Version of the host machine control software and version of PDL control software are different. |
| | | | Remedy | 1. PDL reset processing.<br>2. Turn OFF and then ON the power.<br>3. System All Format and installation. |
| E730 | -B013 | -00 | Title | PDL embedded font error |
| | | | Detection description | Font data is corrupted. |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Reinstall the system.<br>3. System All Format and installation. |
| E732 | -0000 | -00 | Title | Reader communication error |
| | | | Detection description | Negotiation failure. |
| | | | Remedy | 1. Check the connection of the Connector with the Reader.<br>2. Check the power of the Reader (check if the initialization operation is executed at startup).<br>3. Replace the Reader Controller PCB and the Main Controller PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E732 | -0001 | -00 | Title | Reader communication error |
| | | | Detection description | Communication error. |
| | | | Remedy | 1. Check the connection of the Connector with the Reader.<br>2. Check the power of the Reader (check if the initialization operation is executed at startup).<br>3. Replace the Reader Controller PCB and the Main Controller PCB. |
| E732 | -0010 | -00 | Title | Reader communication error |
| | | | Detection description | Unable to detect Vsync from the Reader Controller although 2 minutes have passed after the completion of register setting of the Main Controller. |
| | | | Remedy | 1. Check the connection of the Connector with the Reader.<br>2. Check the power of the Reader (check if the initialization operation is executed at startup).<br>3. Replace the Reader Controller PCB and the Main Controller PCB. |
| E732 | -0023 | -00 | Title | Scanner communication error |
| | | | Detection description | SPRDY-S signal cannot be detected (Hardware failure of DDI-S) |
| | | | Remedy | 1. Check of connector of scanner connection<br>2. Check of scanner power (check whether initialization operation is executed or not at start-up)<br>3. Replacement of RCON, scanner board or main controller PCB |
| E732 | -8888 | -00 | Title | Error in the reader type |
| | | | Detection description | When a scanner for the different model is detected during the communication with the reader. |
| | | | Remedy | Replace to the proper reader. |
| E732 | -9999 | -00 | Title | Detection of Reader |
| | | | Detection description | The Reader is detected for the first time with the printer model. (On the user screen, only the message “Turn OFF and then ON the power again”, instead of an error code, is displayed. It is recorded as an error log in Service Mode> COPIER> DISPLAY> ERR.) |
| | | | Remedy | --- |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E733 | -0000 | -00 | Title | Communication error between the Main Controller PCB 1 and the DC Controller PCB |
| | | | Detection description | Unable to make communication between the Main Controller PCB 1 and the DC Controller PCB. (Communication error was detected at startup.) |
| | | | Remedy | 1. Check the cable connection (connector connection error/ open circuit).<br>• DC Controller PCB: J441, J442, Main Controller PCB 2: J21, J22<br>• Main Controller PCB 2: J2, Main Controller PCB 1: J1019<br>2. Replace the DC Controller PCB/Main Controller PCB 2/Main Controller PCB1. |
| E733 | -0001 | -00 | Title | Communication error between the Main Controller PCB 1 and the DC Controller PCB |
| | | | Detection description | Unable to make communication between the Main Controller PCB 1 and the DC Controller PCB. (Communication error was detected during power distribution (while the power is ON).) |
| | | | Remedy | 1. Turn OFF and then ON the power.<br>2. Check the cable connection (connector connection error/ open circuit).<br>• DC Controller PCB: J441, J442, Main Controller PCB 2: J21, J22<br>• Main Controller PCB 2: J2, Main Controller PCB 1: J1019<br>3. Replace the DC Controller PCB/Main Controller PCB 2/Main Controller PCB1. |
| E733 | -0002 | -00 | Title | Communication error between the Main Controller PCB 1 and the DC Controller PCB |
| | | | Detection description | Error was detected in the signal from the DC Controller PCB to the Main Controller PCB 1. (Communication between the DC Controller PCB and the Main Controller PCB 1 is normal.) |
| | | | Remedy | 1. Check the cable connection (connector connection error/ open circuit).<br>• DC Controller PCB: J441, J442, Main Controller PCB 2: J21, J22<br>• Main Controller PCB 2: J2, Main Controller PCB 1: J1019<br>2. Replace the DC Controller PCB/Main Controller PCB 2/Main Controller PCB1. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E733 | -0010 | -00 | Title | Communication error between the Main Controller PCB 2 and the DC Controller PCB |
| | | | Detection description | An image request signal is not sent from the Main Controller PCB 2 to the DC Controller PCB. Or, a vertical synchronization signal (a signal to synchronize the write start timing in horizontal scanning direction at the time of laser exposure) is not sent from the DC Controller PCB to the Main Controller PCB 2.<br>Since the Main Controller PCB 1 monitors whether the foregoing communication is made normally, this error may occur when communication between the Main Controller PCB 2 and the Main Controller PCB 1 is not available. |
| | | | Remedy | 1. Check the cable connection (connector connection error/ open circuit).<br>• DC Controller PCB: J441, J442, Main Controller PCB 2: J21, J22<br>• Main Controller PCB 2: J2, Main Controller PCB 1: J1019<br>2. Replace the DC Controller PCB/Main Controller PCB 2/Main Controller PCB1. |
| E740 | -0002 | -00 | Title | Network Controller error |
| | | | Detection description | Invalid MAC address. |
| | | | Remedy | 1. Check the connection of the LAN Connector.<br>2. Check the connection of the Main Controller PCB 1.<br>3. Replacement of the Main Controller PCB 1. |
| E743 | -0000 | -04 | Title | DDI communication error |
| | | | Detection description | The Reader Controller PCB detected the communication error between the Main Controller PCB and the Reader Controller PCB. |
| | | | Remedy | 1. Connection error between the Main Controller PCB and the Reader Controller PCB.<br>2. Failure of the Reader Controller PCB (PCB1).<br>3. Failure of the Main Controller PCB. |
| E743 | -0003 | -04 | Title | DDI communication error |
| | | | Detection description | The Reader Controller PCB detected the communication error between the Main Controller PCB and the Reader Controller PCB. |
| | | | Remedy | 1. Connection error between the Main Controller PCB and the Reader Controller PCB.<br>2. Failure of the Reader Controller PCB (PCB1).<br>3. Failure of the Main Controller PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E743 | -0004 | -04 | Title | DDI communication error |
| | | | Detection description | The Reader Controller PCB detected the communication error between the Main Controller PCB and the Reader Controller PCB. |
| | | | Remedy | 1. Connection error between the Main Controller PCB and the Reader Controller PCB.<br>2. Failure of the Reader Controller PCB (PCB1).<br>3. Failure of the Main Controller PCB. |
| E744 | -0001 | -00 | Title | Error in language file/BootROM |
| | | | Detection description | Version of language in HDD and version of Bootable are different. |
| | | | Remedy | Download the correct version of the language file. |
| E744 | -0002 | -00 | Title | Error in language file/BootROM |
| | | | Detection description | Size of the language in HDD is too big. |
| | | | Remedy | Download the correct version of the language file. |
| E744 | -0003 | -00 | Title | Error in language file/BootROM |
| | | | Detection description | Unable to find the language to be switched to that is described in the Config.txt in HDD. |
| | | | Remedy | Download the correct version of the language file. |
| E744 | -0004 | -00 | Title | Error in language file/BootROM |
| | | | Detection description | Unable to switch to the language in HDD. |
| | | | Remedy | Download the correct version of the language file. |
| E744 | -1000 | -00 | Title | Error in language file/BootROM |
| | | | Detection description | The Boot ROM for the different model is installed. |
| | | | Remedy | Replace the Boot ROM with the one for the correct model. |
| E744 | -2000 | -00 | Title | Controller firmware mismatch |
| | | | Detection description | Invalid controller firmware was detected. |
| | | | Remedy | This error normally does not occur. This error occurs when using the HDD which was used with another model.<br>Replace the HDD with the one which was originally installed or a new one for the model. |
| E744 | -4000 | -05 | Title | Engine ID error |
| | | | Detection description | The Main Controller PCB model and the DC Controller PCB (PCB1) model are not matched. |
| | | | Remedy | Replace the DC Controller PCB (PCB1) or redownload. |
| E746 | -0003 | -00 | Title | Different Image Analysis PCB model |
| | | | Detection description | Different Image Analysis PCB model. |
| | | | Remedy | 1. Check the connection of the Image Analysis PCB.<br>2. Replace the Image Analysis PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E746 | -0021 | -00 | Title | Image Analysis PCB self-check error detection |
| | | | Detection description | Image Analysis PCB self-check error detection. |
| | | | Remedy | 1. Check the connection of the Image Analysis PCB.<br>2. Replace the Image Analysis PCB. |
| E746 | -0022 | -00 | Title | Invalid Image Analysis PCB version |
| | | | Detection description | Invalid Image Analysis PCB version. |
| | | | Remedy | 1. Upgrade the Image Analysis PCB software.<br>2. Replace the Image Analysis PCB. |
| E746 | -0023 | -00 | Title | No reply from Image Analysis PCB |
| | | | Detection description | No reply from Image Analysis PCB. |
| | | | Remedy | 1. Check the connection of the Image Analysis PCB.<br>2. Replace the Image Analysis PCB. |
| E746 | -0024 | -00 | Title | Image Analysis PCB operation error |
| | | | Detection description | Image Analysis PCB operation error. |
| | | | Remedy | 1. Check the connection of the Image Analysis PCB.<br>2. Replace the Image Analysis PCB. |
| E746 | -0031 | -00 | Title | Hardware error (TPM) |
| | | | Detection description | Hardware error (TPM). |
| | | | Remedy | The TPM PCB is not installed, the TPM PCB for other model is installed, or failure of TPM Chip. |
| E746 | -0032 | -00 | Title | Error in engine ID of SoftID |
| | | | Detection description | Mismatched data in TPM |
| | | | Remedy | Format the system.<br>Format the HDD using SST or USB memory, and download the system software. For details, see “Chapter 6: Upgrading”. For your reference, the method using USB memory is described below.<br>1. Prepare the USB memory which system software was registered.<br>2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode.<br>3. Insert the USB memory to the equipment.<br>4. Execute [4]: Format HDD in the main menu.<br>5. After formatting is completed, the machine reboots automatically and starts with the download mode.<br>6. Execute [1]: Upgrade (Auto) in the main menu.<br>7. System software is downloaded and the machine restarts automatically. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E746 | -0033 | -00 | Title | Error in engine ID of SoftID |
| | | | Detection description | Error that can be recovered |
| | | | Remedy | When the TPM key was backed up, it can be restored.<br>1. Connect the USB memory which stores the TPM key.<br>2. Go to Management Settings > Data Management > TPM Settings, and then click “Restore TPM Key”.<br>3. Enter the password set at backup operation.<br>4. When the restoration completion screen is displayed, click “OK”. Remove the USB memory, and turn OFF and then ON the main power.<br><br>When the TPM key was not backed up, formatting the system is required.<br>1. Prepare the USB memory which system software was registered.<br>2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode.<br>3. Insert the USB memory to the equipment.<br>4. Execute [4]: Format HDD in the main menu.<br>5. After formatting is completed, the machine reboots automatically and starts with the download mode.<br>6. Execute [1]: Upgrade (Auto) in the main menu.<br>7. System software is downloaded and the machine restarts automatically. |
| E746 | -0034 | -00 | Title | Error occurs, but auto recovery of system is possible (TPM) |
| | | | Detection description | Error occurs, but auto recovery of system is possible (TPM). |
| | | | Remedy | Mismatch of key occurs. However, recovery by restart is possible.<br>Turn OFF and then ON the power. |
| E746 | -0035 | -00 | Title | TPM version error |
| | | | Detection description | TPM which cannot be used in this machine was installed. |
| | | | Remedy | Install the supported TPM. |
| E748 | -2000 | -00 | Title | Main Controller PCB access error |
| | | | Detection description | Main Controller PCB Chip access error. |
| | | | Remedy | Replace the Main Controller PCB 1/2. |
| E748 | -2001 | -00 | Title | Main Controller PCB access error |
| | | | Detection description | Main Controller PCB memory access error. |
| | | | Remedy | 1. Remove and then reinstall the DDR2-SDRAM(M0/M1/P).<br>2. Replace the Main Controller PCB 1/2. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E748 | -2010 | -00 | Title | Flash PCB error / HDD error |
| | | | Detection description | Flash PCB error has occurred, or the HDD cannot be recognized. |
| | | | Remedy | 1. After turning OFF the main power, disconnect the HDD interface connector (J12) of the Main Controller PCB 2 and turn ON the main power.<br>2. If the error code E748-2010 remains unchanged, it means a Flash PCB error, so replace the Flash PCB, and install the system using SST or USB.<br>3. When it changed to another error code(For example E602), refer to the remedy of the applicable code. |
| E748 | -2011 | -00 | Title | Flash PCB error |
| | | | Detection description | Flash PCB error |
| | | | Remedy | Replace the Flash PCB, and install the system using SST or USB. |
| E748 | -2012 | -00 | Title | Flash PCB error |
| | | | Detection description | Flash PCB error |
| | | | Remedy | Replace the Flash PCB, and install the system using SST or USB. |
| E748 | -2021 | -00 | Title | Main controller board 2 access errors |
| | | | Detection description | Main controller board 2 access errors |
| | | | Remedy | Main controller board 1/2 removing and inserting, replacement |
| E748 | -2023 | -00 | Title | Main controller board 2 access errors |
| | | | Detection description | Main controller board 2 access errors |
| | | | Remedy | DDR2-SDRAM (M0/M1/P) removing and inserting, replacement |
| E748 | -2024 | -00 | Title | Main controller board 2 access errors |
| | | | Detection description | Main controller board 2 access errors |
| | | | Remedy | Main controller board 1/2 removing and inserting, replacement |
| E748 | -4910 | -00 | Title | Main Controller PCB 2 error |
| | | | Detection description | Main Controller PCB 2 error. |
| | | | Remedy | Replace the Main Controller PCB 2. |
| E748 | -9000 | -00 | Title | System error |
| | | | Detection description | --- |
| | | | Remedy | Contact to the sales companies |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E749 | | | Title | Restart direction due to configuration change. |
| | | | Detection description | The option such as the Finisher and Paper Deck was installed or removed when all of following conditions were met and the machine configuration is changed when the main power switch is turned ON.<br>Settings/Registration > Preferences > Timer/Energy Settings > Quick Startup at Power-on > ON<br><br>• The Main Power Switch is turned OFF<br>• The power plug of the machine is connected to the output.<br>• The breaker is ON |
| | | | Remedy | It is recovered by turning OFF and then ON the main power.<br><br>CAUTION<br>This machine provides power to some PCBs even when in the main power OFF status.<br>The power supply is not completely OFF by just turning OFF the main power switch and therefore, the machine is unable to detect a configuration change.<br>When disconnecting and then connecting a connector, always disconnect the power plug or turn the breaker OFF.<br>Refer to the Service Manual > Chapter 2 > External and Controls > Quick Startup for details. |
| E753 | -0001 | -00 | Title | Download error |
| | | | Detection description | Firmware update error. |
| | | | Remedy | Turn OFF and then ON the power. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E753 | -0001 | -05 | Title | Download Error |
| | | | Detection description | System Software Update Error<br>Error occurs when updating system software of uninstalled options |
| | | | Remedy | Check the log to find where the download error has been occurred.<br><FIN_N1> Staple Finisher-N1/Booklet Finisher-N1/Paper Folding Unit-H1/Document Insertion Unit-K1/Inner Booklet Trimmer-A1<br><PIU_B1> Professional Puncher Integration Unit-B1<br><G3CCB> Super G3 FAX Board-AL1/Super G3 2nd Line Fax Board-AL1/Super G3 3rd/4th Line Fax Board-AL1<br><G3CCM> Super G3 FAX Board-AL1/Super G3 2nd Line Fax Board-AL1/Super G3 3rd/4th Line Fax Board-AL1<br>When any of the above system software is displayed, check if the target option has been installed.<br>When the target option has not been installed:<br>Turn OFF and then ON the main power supply to restore (since there is no system software to be updated.).<br>When the target option has been installed:<br>Check if the accessory is correctly installed and if the target system software to be downloaded is for the installed option.<br>Then download the appropriate system software again. |
| E760 | -0001 | -00 | Title | Main Controller PCB 2 internal error |
| | | | Detection description | Error was detected in the Image Processing Chip on the Main Controller PCB 2. |
| | | | Remedy | 1. Turn OFF and then ON the main power.<br>2. Remove and then install the DDR2-SDRAM (J11 and J13) on the Main Controller PCB 2.<br>3. Replace the DDR2-SDRAM on the Main Controller PCB 2.<br>4. Replace the Main Controller PCB 2.<br>NOTE:<br>If the error occurs periodically or it occurs with specific jobs although it can be solved by turning OFF and then ON the power, upgrade the system software to the latest version. |

T-7-12

## E804 to E996

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E804 | -0000 | -05 | Title | Power Supply Cooling Fan 1/2 error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Power Supply Cooling Fan 1 (FM14)/Power Supply Cooling Fan 2 (FM15) is turned ON.<br>The error detection signal cable is shared with the Fans, and it is not detected with which Fan the error occurs. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Power Supply Cooling Fan 1 (FM14)/Power Supply Cooling Fan 2 (FM15). |
| E804 | -0001 | -05 | Title | Fixing Power Supply Cooling Fan error |
| | | | Detection description | The Fan stop signal is detected for 1.5 seconds or longer and retry is failed 4 times in a row although the Fixing Power Supply Cooling Fan (FM7) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Fixing Power Supply Cooling Fan (FM7). |
| E806 | -0000 | -05 | Title | Making Image Exhaust Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Making Image Exhaust Fan (FM3) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Making Image Exhaust Fan (FM3). |
| E808 | -0001 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Detected 290 V or higher inlet voltage at power-on. |
| | | | Remedy | 1. Check the outlet voltage. -> Connect to the correct outlet.<br>2. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10).<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2). |
| E808 | -0002 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Detected 50 V or lower inlet voltage at power-on. |
| | | | Remedy | 1. Check the outlet voltage. -> Connect to the correct outlet.<br>2. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10).<br>3. Replace the Fixing Power Supply PCB (PCB10).<br>4. Replace the Main Driver PCB (PCB2). |
| E808 | -0003 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Inlet current is 1 A or lower for 1 second or longer although the maximum voltage is output. |
| | | | Remedy | 1. Check the clogging of the Fixing Power Supply Cooling Fan (FM7).<br>2. Check the clogging of the Louver on right side of the host machine (Multi-purpose Tray side).<br>3. Check the connection of the Fixing Power Supply PCB (PCB10) Output Connector.<br>4. Replace the Fixing Power Supply PCB (PCB10). |
| E808 | -0004 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Detected OFF with 12 V of the Main Driver PCB (PCB2) output. |
| | | | Remedy | Replace the Main Driver PCB (PCB2). |
| E808 | -0005 | -05 | Title | 12 V OFF detection when relay is turned ON |
| | | | Detection description | Detected OFF with 12 V of the Fixing Power Supply output after IH relay is turned ON. |
| | | | Remedy | 1. Check the conduction of the Fixing Thermal Switch 1/2 (TP1/2).<br>2. Check the drawer between the Fixing Assembly and the host machine.<br>3. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10).<br>4. Replace the Fixing Power Supply Unit.<br>5. Replace the Main Driver PCB (PCB2). |
| E808 | -0006 | -05 | Title | ASIC error |
| | | | Detection description | ASIC error. |
| | | | Remedy | Replace the DC Controller PCB (PCB1). |
| E808 | -0007 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | The detected power voltage differs from the voltage of the port in the IH Power Supply. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10).<br>2. Replace the Fixing Power Supply PCB with the one for the correct location (voltage).<br>3. Replace the DC Controller PCB (PCB1). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E808 | -0008 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Current fluctuation error. |
| | | | Remedy | 1. Check the connection between the Main Driver PCB (PCB2) and the Fixing Power Supply PCB (PCB10).<br>2. Check the connection between the Fixing Power Supply PCB (PCB10) and the Heater Unit.<br>3. Replace the Fixing Roller and Heater Unit.<br>4. Replace the Fixing Power Supply PCB (PCB10).<br>5. Replace the Main Driver PCB (PCB2). |
| E808 | -0009 | -05 | Title | Fixing Power Supply error |
| | | | Detection description | Unable to clear the error flag at power-on. |
| | | | Remedy | Replace the DC Controller PCB (PCB1). |
| E820 | -0000 | -05 | Title | Developer Lower Cooling Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Developer Lower Cooling Fan (FM30) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Developer Lower Cooling Fan (FM30). |
| E820 | -0001 | -05 | Title | Developer Upper Cooling Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Developer Upper Cooling Fan (FM31) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Developer Upper Cooling Fan (FM31). |
| E820 | -0002 | -05 | Title | Duplex Driver Cooling Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Duplex Driver Cooling Fan (FM41) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Duplex Driver Cooling Fan (FM41). |
| E824 | -0000 | -05 | Title | Primary Charging Air Supply Fan error |
| | | | Detection description | The Fan stop signal is detected for 5 seconds or longer and retry is failed 4 times in a row although the Primary Charging Air Supply Fan (FM2) is turned ON. |
| | | | Remedy | 1. Check the connection of the Connector.<br>2. Replace the Primary Charging Air Supply Fan (FM2). |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E840 | -0001 | -05 | Title | Fixing Shutter Motor error |
| | | | Detection description | The Fixing Shutter HP Sensor (PS53) failed the detection at the Fixing Shutter operation. |
| | | | Remedy | 1. Check the operation of the Fixing Shutter Gear (overload, etc.).<br>2. Check the operation of the Fixing Shutter Motor (M15) at the initialization operation of the Fixing Shutter.<br>3. Check the detection of the Fixing Shutter HP Sensor (PS53) (if the Sensor operates normally).<br>4. Check the drawer of the Fixing Assembly and the host machine.<br>5. Replace the Fixing Upper Unit and the Fixing Drawer Harness Unit.<br>6. Replace the Main Driver PCB (PCB2) (check the fuse (FU11)). |
| E880 | -0001 | 00 | Title | Controller Fan error |
| | | | Detection description | Error in the Main Controller Cooling Fan (FM4) is detected. |
| | | | Remedy | Connector disconnection, failure of Fan. |
| E880 | -0005 | 00 | Title | Controller Fan error |
| | | | Detection description | Error in the HDD Cooling Fan (FM) is detected. |
| | | | Remedy | Connector disconnection, failure of Fan. |
| E905 | -0001 | -05 | Title | POD Deck Air Assist Fan error |
| | | | Detection description | [POD Deck Lite] When the Air Assist Swing Motor fails to return to the HP although a specified period of time has passed |
| | | | Remedy | 1. Check connector disconnection/improper connection. => Disconnect and then connect the connector.<br>Target connector: Deck Lite Controller J04, J05<br>BoxDriver J51, J52, J57<br>2. Replace the Swing Motor (M3) and the Air Assist Fan (FM1, FM2, FM3).<br>3. Replace the Deck Lite Controller PCB.<br>4. Replace the BoxDriver PCB. |
| E905 | -0002 | -05 | Title | POD Deck Air Assist Fan error |
| | | | Detection description | [POD Deck Lite] When the Pickup Motor Cooling Fan is not locked |
| | | | Remedy | 1. Check connector disconnection/improper connection. => Disconnect and then connect the connector.<br>Target connector: Deck Lite Controller J30<br>2. Replace the Motor Cooling Fan (FM4).<br>3. Replace the Deck Lite Controller PCB. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E905 | -0003 | -05 | Title | POD Deck Air Assist Fan error |
| | | | Detection description | [POD Deck Lite] When the Pickup Motor Cooling Fan is not unlocked |
| | | | Remedy | 1. Check connector disconnection/improper connection. => Disconnect and then connect the connector. Target connector: Deck Lite Controller J30<br>2. Replace the Motor Cooling Fan (FM4).<br>3. Replace the Deck Lite Controller PCB. |
| E906 | -0001 | -05 | Title | POD Deck Air Heater error |
| | | | Detection description | [POD Deck Lite] Air Heater high temperature error<br>When 120 deg C or higher temperature is detected for 1 second consecutively |
| | | | Remedy | 1. Check connector disconnection/improper connection. => Disconnect and then connect the connector. Target connector: Deck Lite Controller J03, J05 BoxDriver J52, J54, J58, J59<br>2. Replace the Air Heater.<br>3. Replace the Deck Lite Controller PCB. |
| E906 | -0002 | -05 | Title | POD Deck Air Heater error |
| | | | Detection description | [POD Deck Lite] Air Heater low temperature error<br>When the heater does not become Ready although a specified period of time has passed |
| | | | Remedy | 1. Check connector disconnection/improper connection. => Disconnect and then connect the connector. Target connector: Deck Lite Controller J03, J05 BoxDriver J52, J54, J58, J59<br>2. Replace the Air Heater.<br>3. Replace the Deck Lite Controller PCB. |
| E996 | -xxxx | -05 | Title | Timeout error |
| | | | Detection description | The DC Controller is not stopped.<br>The Detailed Code varies according to the state transition of the software. |
| | | | Remedy | Turn OFF and then ON the main power. |
| E996 | -0071 | -04 | Title | Frequent error avoidance jam (ADF) |
| | | | Detection description | Frequent error avoidance jam (ADF) |
| | | | Remedy | Depending on the setting of JM-ERR-R in service mode, “010071” jam is displayed as an error.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-R, and set JM-ERR-R to 0. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E996 | -0CA1 | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CA1” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |
| E996 | -0CA2 | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CA2” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |
| E996 | -0CA3 | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CA3” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |
| E996 | -0CA4 | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CA4” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |
| E996 | -0CA4 | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CA4” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |

| E Code | Detail Code | Location | Item | Description |
|---|---|---|---|---|
| E996 | -0CAF | -05 | Title | Frequent error avoidance jam (PRINTER) |
| | | | Detection description | Error avoidance jam (PRINTER) |
| | | | Remedy | Make “000CAF” jam to be displayed as an error by setting JM-ERR-D in service mode.<br>Collect log and contact to the sales companies.<br>To cancel the setting, select COPIER> OPTION> FNC-SW> JM-ERR-D, and set JM-ERR-D to 0. |

T-7-13

# Jam Code

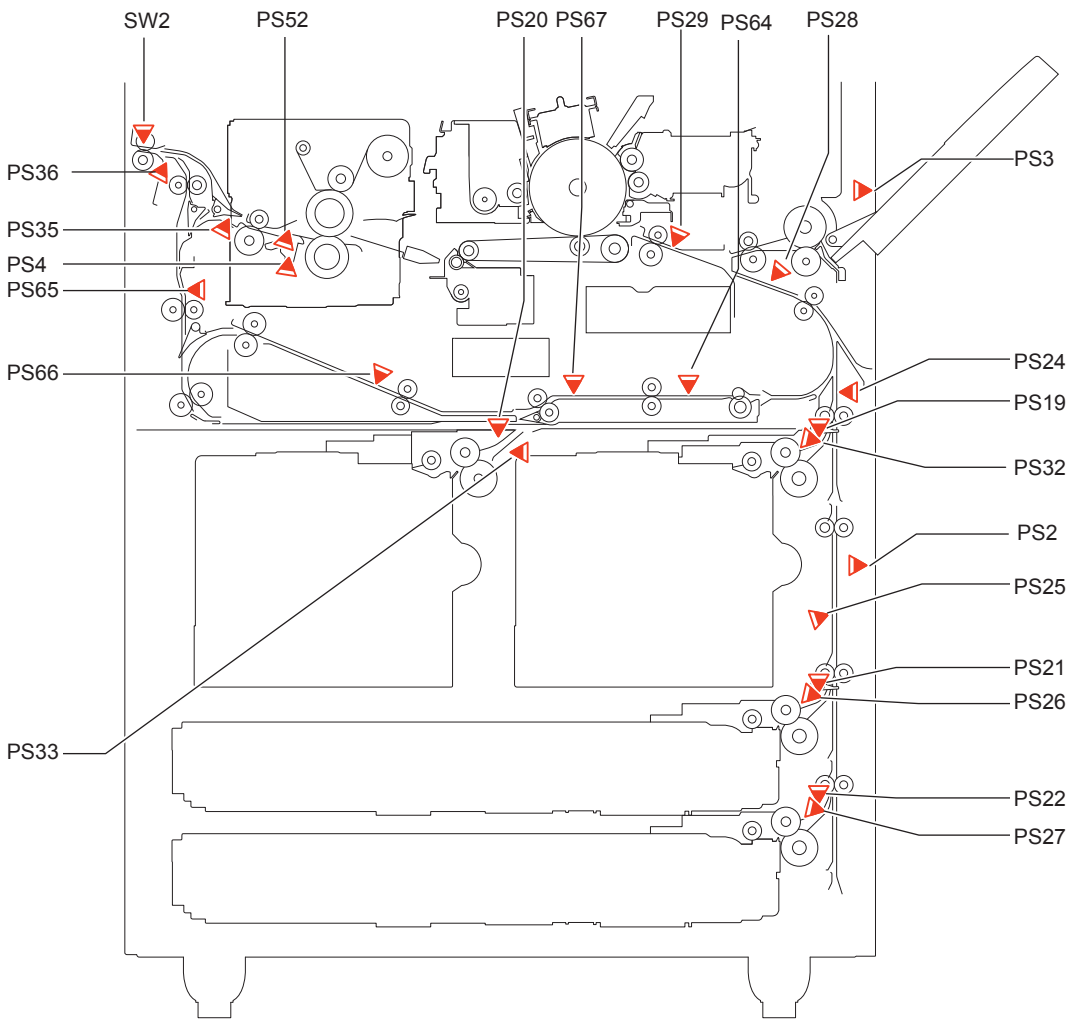
## Jam Type

Jam types are shown below.

| Type | Meaning |
|---|---|
| DELAY | Delay jam |
| STNRY | Stationary jam |
| OVERLAP | Double feed detection |
| TIMING NG | Timing error |
| OHP NG | Incorrect paper |
| ADF OP | ADF open |
| COVER OP | Cover open |
| RESIDUAL | Residual jam |
| PICKUP NG | Pickup error |
| POWER ON | Power ON |
| DOOR OP | Door open |
| SEQ NG | Sequence jam |
| DELAY ESC | Delay jam while ejecting to the escape delivery tray |
| OTH JAM | Other jams |
| STNRY ESC | Stationary jam while ejecting to the escape delivery tray |
| STP | Staple |
| SDL STP | Saddle stitch staple |
| INIT ROT | Residual (at initial rotation) |
| UP DEVICE | Upper stream device jam |
| OTHER | Others |
| ERROR | Error |
| RETRY ERR | Retry error |
| STOP | Press Stop key |
| ROT | Keeps rotating |
| PROGRAM | Program |
| TIME OUT | Time-out |
| PUNCH | Punch |
| MEDIA NG | Misprint |

T-7-14

## Main Unit



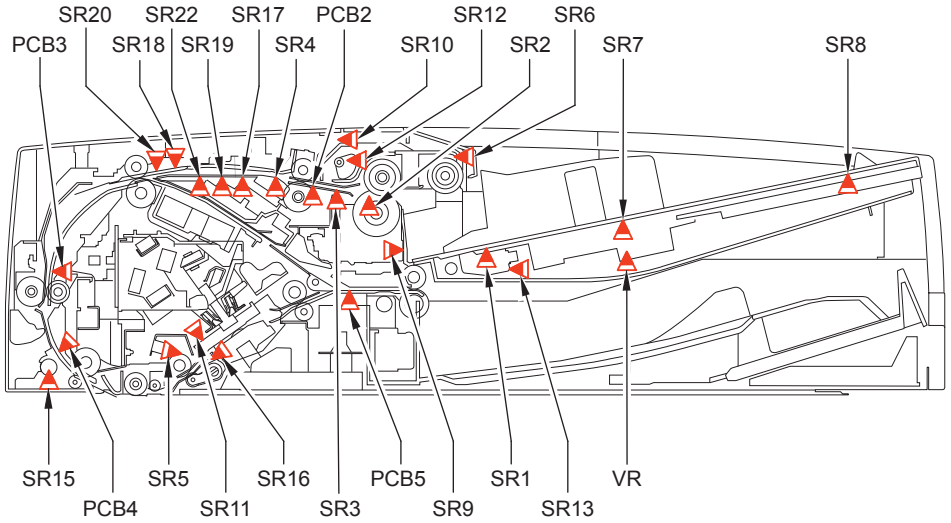

F-7-1

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 00 | 0101 | DELAY | Right Deck Pickup Sensor 1 | PS19 |
| 00 | 0102 | DELAY | Right Deck Pull Out Sensor | PS32 |
| 00 | 0103 | DELAY | Vertical Path Sensor 1 | PS24 |
| 00 | 0104 | DELAY | Writing Judging Sensor | PS28 |
| 00 | 0105 | DELAY | Registration Sensor | PS29 |
| 00 | 0106 | DELAY | Left Deck Pickup Sensor 1 | PS20 |
| 00 | 0107 | DELAY | Left Deck Pull Out Sensor | PS33 |
| 00 | 0108 | DELAY | Duplex Merging Sensor | PS67 |
| 00 | 0109 | DELAY | Duplex Outlet Sensor | PS64 |
| 00 | 010A | DELAY | Cassette 3 Pickup Sensor 1 | PS21 |
| 00 | 010B | DELAY | Vertical Path Sensor 3 | PS26 |
| 00 | 010C | DELAY | Vertical Path Sensor 2 | PS25 |
| 00 | 010D | DELAY | Cassette 4 Pickup Sensor 1 | PS22 |
| 00 | 010E | DELAY | Vertical Path Sensor 4 | PS27 |
| 00 | 0111 | DELAY | Fixing Outlet Sensor | PS52 |
| 00 | 0112 | DELAY | Inner Delivery Sensor | PS35 |
| 00 | 0113 | DELAY | Outer Delivery Sensor | PS36 |
| 00 | 0114 | DELAY | Reverse Vertical Path Sensor | PS65 |
| 00 | 0115 | DELAY | Duplex Left Sensor | PS66 |
| 00 | 0202 | STNRY | Right Deck Pull Out Sensor | PS32 |
| 00 | 0203 | STNRY | Vertical Path Sensor 1 | PS24 |
| 00 | 0204 | STNRY | Writing Judging Sensor | PS28 |
| 00 | 0205 | STNRY | Registration Sensor | PS29 |
| 00 | 0207 | STNRY | Left Deck Pull Out Sensor | PS33 |
| 00 | 0208 | STNRY | Duplex Merging Sensor | PS67 |
| 00 | 0209 | STNRY | Duplex Outlet Sensor | PS64 |
| 00 | 020B | STNRY | Vertical Path Sensor 3 | PS26 |
| 00 | 020C | STNRY | Vertical Path Sensor 2 | PS25 |
| 00 | 020E | STNRY | Vertical Path Sensor 4 | PS27 |
| 00 | 0212 | STNRY | Inner Delivery Sensor | PS35 |
| 00 | 0213 | STNRY | Outer Delivery Sensor | PS36 |
| 00 | 0214 | STNRY | Reverse Vertical Path Sensor | PS65 |
| 00 | 0215 | STNRY | Duplex Left Sensor | PS66 |
| 00 | 0305 | TIMING NG | Registration Sensor | PS29 |
| 00 | 0A02 | POWER ON | Right Deck Pull Out Sensor | PS32 |
| 00 | 0A03 | POWER ON | Vertical Path Sensor 1 | PS24 |
| 00 | 0A04 | POWER ON | Writing Judging Sensor | PS28 |
| 00 | 0A05 | POWER ON | Registration Sensor | PS29 |
| 00 | 0A07 | POWER ON | Left Deck Pull Out Sensor | PS33 |
| 00 | 0A08 | POWER ON | Duplex Merging Sensor | PS67 |
| 00 | 0A09 | POWER ON | Duplex Outlet Sensor | PS64 |
| 00 | 0A0B | POWER ON | Vertical Path Sensor 3 | PS26 |
| 00 | 0A0C | POWER ON | Vertical Path Sensor 2 | PS25 |
| 00 | 0A0E | POWER ON | Vertical Path Sensor 4 | PS27 |

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 00 | 0A0F | POWER ON | Fixing Entrance Sensor | PS51 |
| 00 | 0A10 | POWER ON | Fixing Toenail Jam Sensor | PS4 |
| 00 | 0A11 | POWER ON | Fixing Outlet Sensor | PS52 |
| 00 | 0A12 | POWER ON | Inner Delivery Sensor | PS35 |
| 00 | 0A13 | POWER ON | Outer Delivery Sensor | PS36 |
| 00 | 0A14 | POWER ON | Reverse Vertical Path Sensor | PS65 |
| 00 | 0A15 | POWER ON | Duplex Left Sensor | PS66 |
| 00 | 0B01 | DOOR OP | Front Door Open Detection Switch | DOOR OP |
| 00 | 0B02 | DOOR OP | Multi-purpose Tray Cover Sensor | DOOR OP |
| 00 | 0B03 | DOOR OP | Vertical Path Cover Open/Close Sensor | DOOR OP |
| 00 | 0CA1 | OTHER | FeedSts time out jam | OTHER |
| 00 | 0CA2 | OTHER | RefeedStart time out jam | OTHER |
| 00 | 0CA3 | OTHER | ImageSet time out jam | OTHER |
| 00 | 0CA4 | OTHER | PageComplete time out jam | OTHER |
| 00 | 0CA5 | OTHER | Fixing temperature control time out jam | OTHER |
| 00 | 0C10 | OTHER | Fixing Toenail jam | PS4 |
| 00 | 0CF1 | OTHER | Retry jam | OTHER |
| 00 | 0D91 | OTHER | Different Size jam(short paper length) | OTHER |
| 02 | 1E00 | OTHER | Finisher Sequence Error jam | OTHER |

T-7-15

## Duplex Color Image Reader-G1




F-7-2

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 01 | 0001 | DELAY | Post-separation sensor 1/2/3 | SR2,SR3,PCB2 |
| 01 | 0002 | STNRY | Post-separation sensor 1/2/3 | SR2,SR3,PCB2 |
| 01 | 0003 | DELAY | Delay detection sensor | SR4 |
| 01 | 0004 | STNRY | Delay detection sensor | SR4 |
| 01 | 0005 | DELAY | Registration sensor | PCB3 |
| 01 | 0006 | STNRY | Registration sensor | PCB3 |
| 01 | 0007 | DELAY | Lead sensor 1 | PCB4 |
| 01 | 0008 | STNRY | Lead sensor 1 | PCB4 |
| 01 | 0009 | DELAY | Lead sensor 2 | SR5 |
| 01 | 0010 | STNRY | Lead sensor 2 | SR5 |
| 01 | 0011 | DELAY | Delivery sensor | PCB5 |
| 01 | 0012 | STNRY | Delivery sensor | PCB5 |
| 01 | 0042 | STNRY | Post-separation sensor 3 | SR2,SR3,PCB2 |
| 01 | 0043 | DELAY | Delay detection sensor | SR4 |
| 01 | 0044 | STNRY | Delay detection sensor | SR4 |
| 01 | 0045 | DELAY | Registration sensor | PCB3 |
| 01 | 0046 | STNRY | Registration sensor | PCB3 |
| 01 | 0047 | DELAY | Lead sensor 1 | PCB4 |
| 01 | 0048 | STNRY | Lead sensor 1 | PCB4 |
| 01 | 0049 | DELAY | Lead sensor 2 | SR5 |
| 01 | 0050 | STNRY | Lead sensor 2 | SR5 |
| 01 | 0051 | DELAY | Delivery sensor | PCB5 |
| 01 | 0052 | STNRY | Delivery sensor | PCB5 |
| 01 | 0071 | TIMING NG | | TIMING NG |
| 01 | 0073 | HP NG | Disengaging HP sensor 1 | SR15 |
| 01 | 0074 | HP NG | Disengaging HP sensor 2 | SR16 |
| 01 | 0075 | HP NG | Pickup roller unit lifter HP sensor | SR12 |
| 01 | 0090 | ADF OP | DADF open/closed sensor 1/2 | ADF OP |
| 01 | 0091 | ADF OP | DADF open/closed sensor 1/2 | ADF OP |
| 01 | 0092 | COVER OP | Cover open/closed sensor | SR10 |
| 01 | 0093 | COVER OP | Cover open/closed sensor | SR10 |
| 01 | 0094 | POWER ON | All feed sensor *3 | POWER ON |
| 01 | 0095 | PICKUP NG | Post-separation sensor 1/2/3 | SR2,SR3,PCB2 |

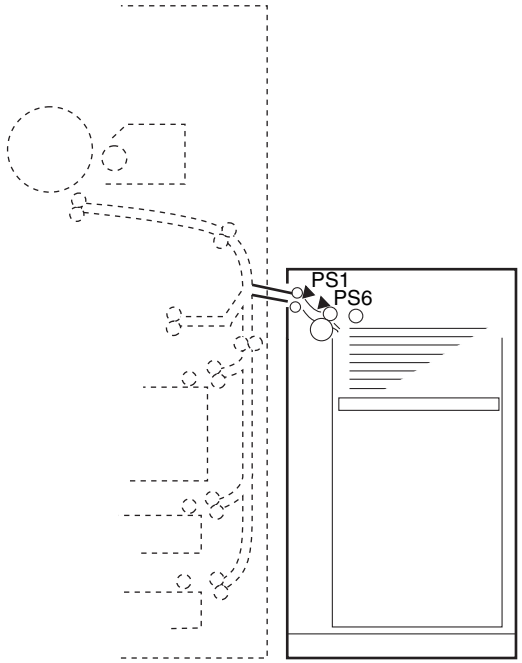
T-7-16

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

*2 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If it is not recovered by the above operation, it is considered an error near the target sensor. Disconnect and then connect the connectors around the target sensor, check if the cable is open circuit, and replace the sensor.

*3 Please confirm the following sensors from service mode.
Delivery Sensor (PCB5): COPIER> IO> FEEDER> P006> 3 (0: Paper presence)
Read Sensor 2 (SR5): COPIER> IO> FEEDER> P006> 2 (0: Paper presence)
Read Sensor 1 (PCB4): COPIER> IO> FEEDER> P006> 1 (0: Paper presence)
Registration Sensor (PCB3): COPIER> IO> FEEDER> P006> 0 (0: Paper presence)
Delay sensor (SR4): COPIER> IO> FEEDER> P006> 5 (0: Paper presence)
Post-separation Sensor 3 (PCB2): COPIER> IO> FEEDER> P006> 4 (0: Paper presence)

## Paper Deck Unit-C1

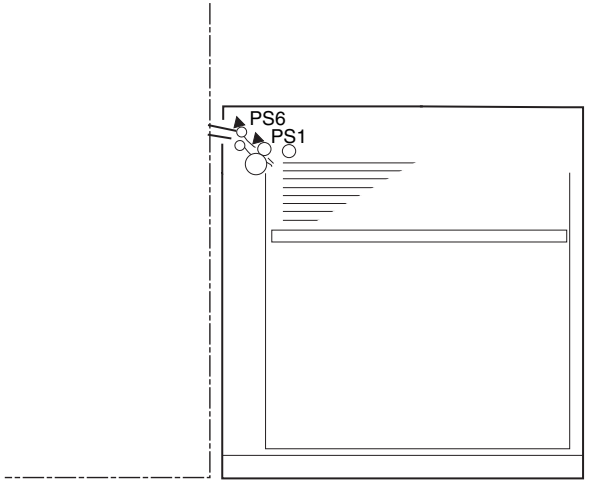



F-7-3

| ACC ID | Jam Code | Type | Sensor Name / Description | Sensor ID |
|---|---|---|---|---|
| 00 | 0117 | DELAY | Deck feed sensor | PS1 |
| 00 | 0118 | DELAY | Deck pickup sensor | PS6 |
| 00 | 0218 | STNRY | Deck pickup sensor | PS6 |
| 00 | 0A18 | POWER ON | Deck pickup sensor | PS6 |

T-7-17

## POD Deck Light-A1

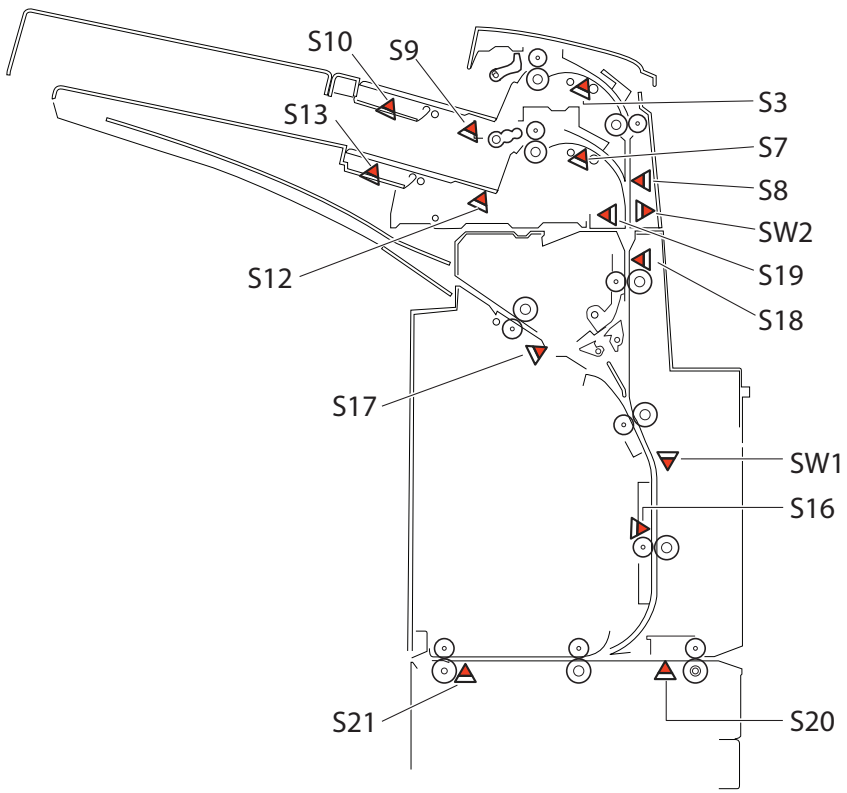



F-7-4

| ACC ID | Jam Code | Type | Sensor Name / Description | Sensor ID |
|---|---|---|---|---|
| 00 | 0117 | DELAY | Deck feed sensor | PS1 |
| 00 | 0118 | DELAY | Deck pickup sensor | PS6 |
| 00 | 0218 | STNRY | Deck pickup sensor | PS6 |
| 00 | 0A18 | POWER ON | Deck pickup sensor | PS6 |

T-7-18

# Inserter-K1




F-7-5

## ARCNET Connection

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 71 | 20E0 | DELAY | Inlet Sensor Delay jam1 | S20 |
| 71 | 20E2 | DELAY | Outlet Sensor Delay jam1 | S21 |
| 71 | 20E4 | DELAY | Registration Sensor Delay jam | S3, S7 |
| 71 | 20E5 | DELAY | Middle Feed Sensor Delay jam | S8 |
| 71 | 20E6 | DELAY | Reverse Inlet Sensor Delay jam | S18 |
| 71 | 20E7 | DELAY | Reverse Sensor Delay jam | S17 |
| 71 | 20E8 | DELAY | Reverse Timing Sensor Delay jam | S16 |
| 71 | 21F0 | STNRY | Inlet Sensor Stationary jam | S20 |
| 71 | 21F2 | STNRY | Outlet Sensor Stationary jam | S21 |
| 71 | 21F4 | STNRY | Registration Sensor Stationary jam | S3, S7 |
| 71 | 21F5 | STNRY | Middle Feed Sensor Stationary jam | S8 |
| 71 | 21F6 | STNRY | Reverse Entrance Sensor Stationary jam | S18 |
| 71 | 21F7 | STNRY | Reverse Sensor Stationary jam | S17 |
| 71 | 21F8 | STNRY | Reverse Timing Sensor Stationary jam | S16 |
| 71 | 2200 | OTHER | Early Timing jam | TIMING NG |
| 71 | 2300 | POWER ON | Power ON jam | POWER ON |
| 71 | 2400 | DOOR OP | Cover Open jam | DOOR OP |
| 71 | 2C00 | OTHER | Sequence error jam | SEQ NG |
| 71 | 2C01 | ERROR | Error Avoidance jam | ERROR |
| 71 | 2FC0 | TIME OUT | EntryStart Time Out jam | TIME OUT |
| 71 | 2FC1 | TIME OUT | EjectStartAck Time Out jam | TIME OUT |
| 71 | 2FC2 | DOOR OP | Upper Tray Paper Absent jam | S9 |
| 71 | 2FC3 | DOOR OP | Lower Tray Paper Absent jam | S12 |
| 71 | 2FC4 | OTHER | Different Inserter Width jam | S10 |
| 71 | 2FCF | STOP | Emergency Stop jam | STOP |

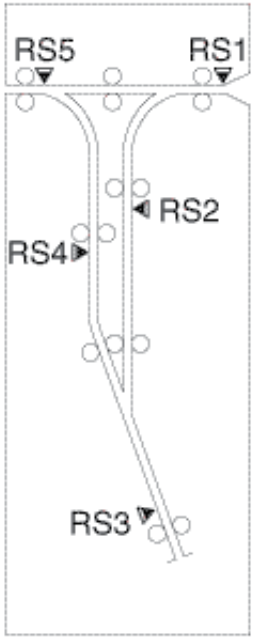
T-7-19

## IPC Connection

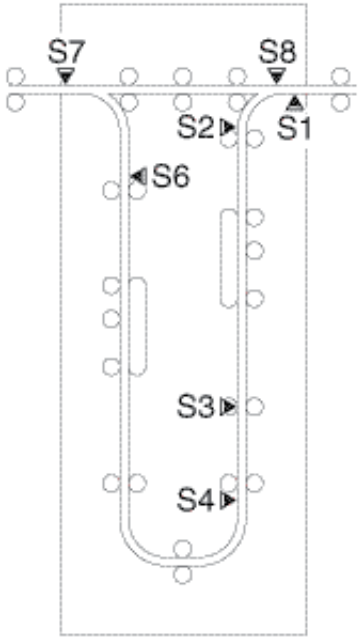
| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 10E0 | DELAY | Inlet Sensor Delay jam1 | S20 |
| 02 | 10E2 | DELAY | Outlet2 Sensor Delay jam1 | S21 |
| 02 | 10E4 | DELAY | Registration Sensor Delay jam | S3, S7 |
| 02 | 10E5 | DELAY | Middle Feed Sensor Delay jam | S8 |
| 02 | 10E6 | DELAY | Reverse Entrance Sensor Delay jam | S18 |
| 02 | 10E7 | DELAY | Reverse Sensor Delay jam | S17 |
| 02 | 10E8 | DELAY | Reverse Timing Sensor Delay jam | S16 |
| 02 | 11F0 | STNRY | Inlet Sensor Stationary jam | S20 |
| 02 | 11F2 | STNRY | Outlet2 Sensor Stationary jam | S21 |
| 02 | 11F4 | STNRY | Registration Sensor Stationary jam | S3, S7 |
| 02 | 11F5 | STNRY | Middle Feed Sensor Stationary jam | S8 |
| 02 | 11F6 | STNRY | Reverse Entrance Sensor Stationary jam | S18 |
| 02 | 11F7 | STNRY | Reverse Sensor Stationary jam | S17 |
| 02 | 11F8 | STNRY | Reverse Timing Sensor Stationary jam | S16 |
| 02 | 13CD | POWER ON | Power ON jam | POWER ON |
| 02 | 14CC | COVER OP | Cover Open jam | SW1 |
| 02 | 1FC0 | TIME OUT | EntryStart Time Out jam | TIME OUT |
| 02 | 1FC1 | TIME OUT | EjectStartAck Time Out jam | TIME OUT |
| 02 | 1FC2 | OTHER | Upper Tray Paper Absent jam | S9 |
| 02 | 1FC3 | OTHER | Lower Tray Paper Absent jam | S12 |
| 02 | 1FC4 | OTH JAM | Different Inserter Width jam | OTH JAM |
| 02 | 1FCE | ERROR | Error Avoidance jam | ERROR |
| 02 | 1FCF | STOP | Emergency Stop jam | STOP |

T-7-20

## Professional Puncher-C1/Integration Unit-B1




F-7-6




F-7-7

## ARCNET Connection

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 31 | 1002 | DELAY | Inlet Sensor | RS1 |
| 31 | 1004 | DELAY | Pull in Sensor | RS2 |
| 31 | 1006 | DELAY | Reverse Sensor | RS3 |
| 31 | 1008 | DELAY | Reverse Delivery Sensor | RS4 |
| 31 | 100A | DELAY | Delivery Sensor | RS5 |
| 31 | 1103 | STNRY | Inlet Sensor | RS1 |
| 31 | 1105 | STNRY | Pull in Sensor | RS2 |
| 31 | 1107 | STNRY | Reverse Sensor | RS3 |
| 31 | 1109 | STNRY | Reverse Delivery Sensor | RS4 |
| 31 | 110B | STNRY | Delivery Sensor | RS5 |
| 31 | 11A3 | STNRY | Punch Sensor 1 | S1 |
| 31 | 11A5 | STNRY | Punch Sensor 8 | S8 |
| 31 | 11A7 | STNRY | Punch Sensor 7 | S7 |
| 31 | 11B3 | STNRY | Punch Sensor 2 | S2 |
| 31 | 11B5 | STNRY | Punch Sensor 3 | S3 |
| 31 | 11B7 | STNRY | Punch Sensor 4 | S4 |
| 31 | 11B9 | STNRY | Punch Sensor 6 | S6 |
| 31 | 1231 | OTHER | Early Timing jam | TIMING NG |
| 31 | 1320 | POWER ON | Power ON | POWER ON |
| 31 | 1422 | DOOR OP | Door Open jam | DOOR OP |
| 31 | 1721 | INIT ROT | Residual jam | RESIDUAL |
| 31 | 1C01 | OTHER | Time-out error | TIME OUT |
| 31 | 1F01 | ERROR | ERROR | SIGNAL |
| 31 | 1F30 | OTHER | Error in completion of paper feed from upper stream device | SEQ NG |
| 31 | 1F07 | TIMING NG | Reverse Sensor | RS3 |
| 31 | 1FA0 | OTHER | Timing error | TIMING NG |
| 31 | 1FC0 | OTHER | Other jams | TOOL OF |
| 31 | 1FC2 | OTHER | Timing error | TIMING NG |
| 31 | 1FD0 | ERROR | Error | MOTOR NG |
| 31 | 1FD1 | ERROR | Error | SIGNAL NG |
| 31 | 1FD2 | ERROR | Error | SIGNAL NG |
| 31 | FF01 | UP DEVICE | Error | UP DEVICE |

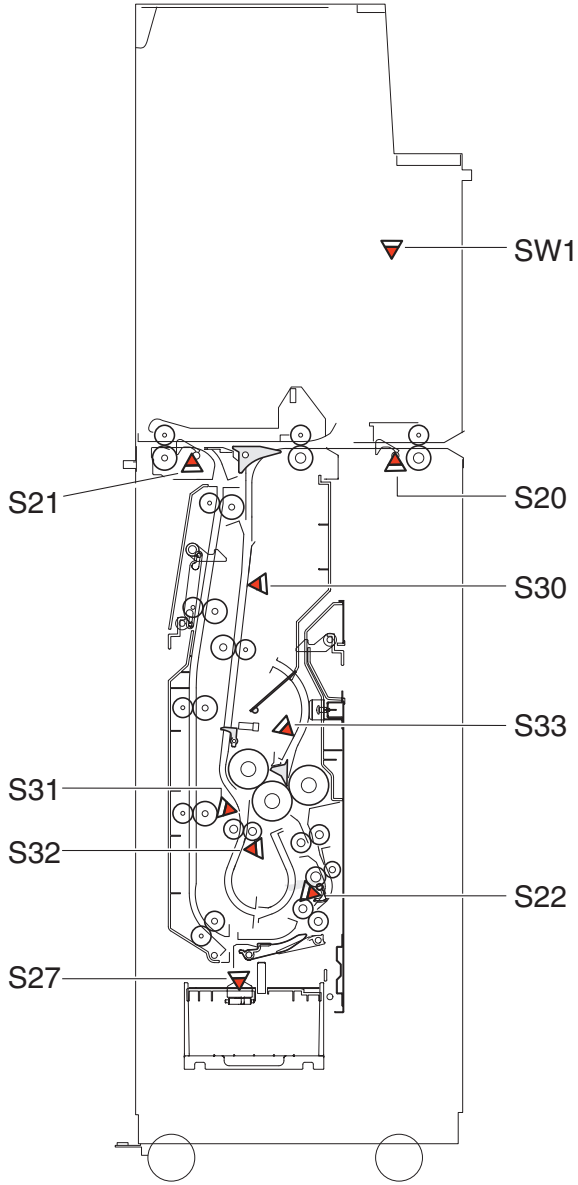
T-7-21

## IPC Connection

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 1051 | DELAY | Inlet Sensor | RS1 |
| 02 | 1053 | DELAY | Pull in Sensor | RS2 |
| 02 | 1055 | DELAY | Reverse Sensor | RS3 |
| 02 | 1057 | DELAY | Reverse Delivery Sensor | RS4 |
| 02 | 1059 | DELAY | Delivery Sensor | RS5 |
| 02 | 1152 | STNRY | Inlet Sensor | RS1 |
| 02 | 1154 | STNRY | Pull in Sensor | RS2 |
| 02 | 1156 | STNRY | Reverse Sensor | RS3 |
| 02 | 1158 | STNRY | Reverse Delivery Sensor | RS4 |
| 02 | 115A | STNRY | Delivery Sensor | RS5 |
| 02 | 1161 | STNRY | Punch Sensor 1 | S1 |
| 02 | 1162 | STNRY | Punch Sensor 8 | S8 |
| 02 | 1163 | STNRY | Punch Sensor 7 | S7 |
| 02 | 1164 | STNRY | Punch Sensor 2 | S2 |
| 02 | 1165 | STNRY | Punch Sensor 3 | S3 |
| 02 | 1166 | STNRY | Punch Sensor 4 | S4 |
| 02 | 1167 | STNRY | Punch Sensor 6 | S6 |
| 02 | 1370 | POWER ON | Power ON jam | POWER ON |
| 02 | 1472 | COVER OP | Door Open jam | COVER OP |
| 02 | 1F5E | TIMING NG | Reverse Sensor | RS3 |
| 02 | 1F5F | MOTOR NG | IFU Operation Error of Path Switching Motor | ERROR |
| 02 | 1F71 | OTH JAM | Idle rotation jam | OTH JAM |
| 02 | 1F73 | OTH JAM | Jam during Paper feed from Upper Stream Device | OTH JAM |
| 02 | 1F74 | TIME OUT | EntryStart Time Out jam | TIME OUT |
| 02 | 1F75 | TIME OUT | EjectStartAck Time Out jam | TIME OUT |
| 02 | 1F76 | OTH JAM | Punch Unit Error(Die comes off during operation) | OTH JAM |
| 02 | 1F77 | TIME OUT | Puncher IFU paper feed time out | TIME OUT |
| 02 | 1F78 | TIME OUT | Time Out jam(Error Avoidance) | TIME OUT |
| 02 | 1F79 | SIGNAL | Error in completion of paper feed from upper stream device | ERROR |
| 02 | 1F7A | SIGNAL | Error in start of paper feed from upper stream device | ERROR |
| 02 | 1F7B | UP DEVICE | Upper stream device jam | UP DEVICE |
| 02 | 1F7F | OTH JAM | Emergency Stop jam | OTH JAM |

T-7-22

# Paper Folding Unit-H1




F-7-8

## ARCNET Connection

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 1082 | DELAY | Entrance sensor | S20 |
| 02 | 1084 | DELAY | Delivery sensor 2 | S21 |
| 02 | 1086 | DELAY | Slowdown timing sensor | S30 |
| 02 | 1088 | DELAY | Release timing sensor | S31 |
| 02 | 108A | DELAY | Fold position sensor | S32 |
| 02 | 108C | DELAY | Upper stopper paper sensor | S33 |
| 02 | 108E | DELAY | Delivery sensor 1 | S22 |
| 02 | 1092 | DELAY | Fold tray paper sensor | S27 |
| 02 | 109E | STOP | Press Stop key | STOP |
| 02 | 1183 | STNRY | Entrance sensor | S20 |
| 02 | 1185 | STNRY | Delivery sensor 2 | S21 |
| 02 | 1187 | STNRY | Slowdown timing sensor | S30 |
| 02 | 1189 | STNRY | Release timing sensor | S31 |
| 02 | 118B | STNRY | Fold position sensor | S32 |
| 02 | 118D | STNRY | Upper stopper paper sensor | S33 |
| 02 | 118F | STNRY | Delivery sensor 1 | S22 |
| 02 | 1193 | STNRY | Fold tray paper sensor | S27 |
| 02 | 119F | OTHER | Other jams | OTHER |
| 02 | 139C | POWER ON | Power ON | POWER ON |
| 02 | 149B | COVER OP | Cover open | COVER OP |
| 02 | 179C | POWER ON | Power ON | POWER ON |
| 02 | 1C9D | ERROR | Error | ERROR |
| 02 | 1F9A | OTHER | Other jams | SIGNAL |

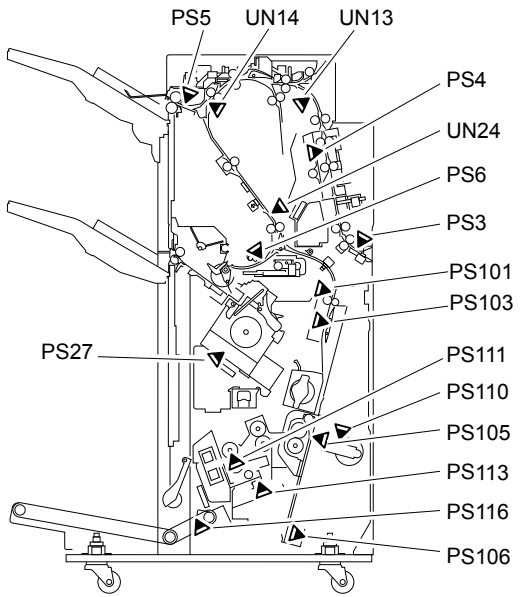
T-7-23

## IPC Connection

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 10E1 | DELAY | Inlet Sensor Delay jam | S20 |
| 02 | 10E3 | DELAY | Outlet2 Sensor Delay jam | S21 |
| 02 | 10E9 | DELAY | Slowdown Timing Sensor Delay jam | S30 |
| 02 | 10EA | DELAY | Release Timing Sensor Delay jam | S31 |
| 02 | 10EB | DELAY | Fold Position Adjustment Sensor Delay jam | S32 |
| 02 | 10EC | DELAY | Upper Stopper Paper Detection Sensor Delay jam | S33 |
| 02 | 10ED | DELAY | Outlet1 Sensor Delay jam | S22 |
| 02 | 10EE | DELAY | Fold Tray Empty Sensor Delay jam | S27 |
| 02 | 11F1 | STNRY | Inlet Sensor Stationary jam | S20 |
| 02 | 11F3 | STNRY | Outlet2 Sensor Stationary jam | S21 |
| 02 | 11F9 | STNRY | Slowdown Timing Sensor Stationary jam | S30 |
| 02 | 11FA | STNRY | Release Timing Sensor Stationary jam | S31 |
| 02 | 11FB | STNRY | Fold Position Adjustment Sensor Stationary jam | S32 |
| 02 | 11FC | STNRY | Upper Stopper Paper Detection Sensor Stationary jam | S33 |
| 02 | 11FD | STNRY | Outlet1 Sensor Stationary jam | S22 |
| 02 | 11FE | STNRY | Fold Tray Empty Sensor Stationary jam | S27 |
| 02 | 13DD | POWER ON | Power ON jam | POWER ON |
| 02 | 14DC | COVER OP | Cover Open jam | SW1 |
| 02 | 1FD0 | STOP | EntryStart Time Out jam | TIME OUT |
| 02 | 1FD1 | TIME OUT | EjectStart Time Out jam | TIME OUT |
| 02 | 1FDE | ERROR | Error Avoidance jam | ERROR |
| 02 | 1FDF | STOP | Emergency Stop jam | STOP |

T-7-24

## Staple Finisher-Q1/Booklet Finisher-Q1



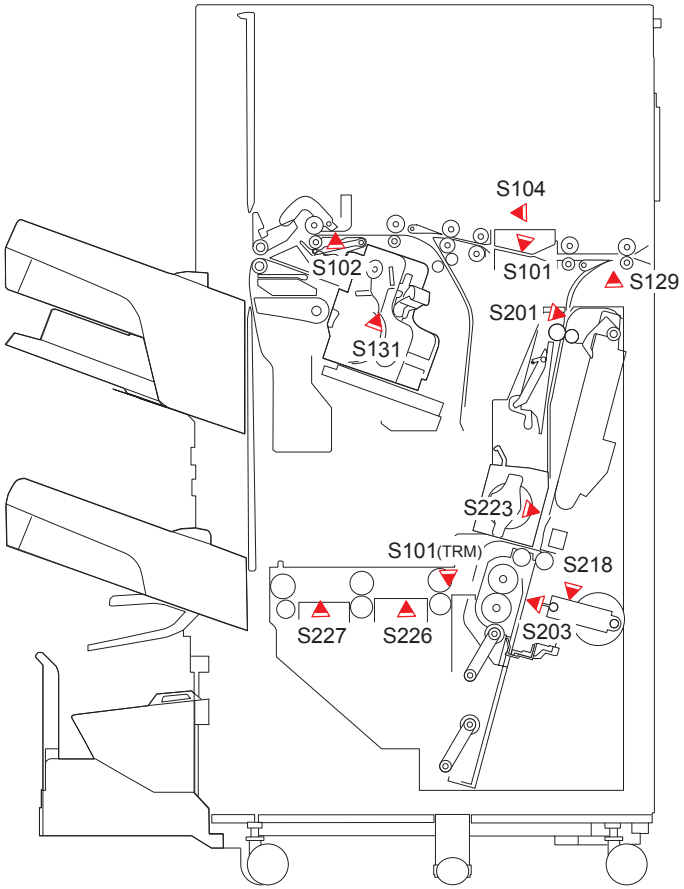

F-7-9

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 1002 | DELAY | Inlet sensor | PS3 |
| 02 | 1004 | DELAY | Shift unit trailing edge sensor | PS4 |
| 02 | 1006 | DELAY | Buffer path 1 sensor PCB | UN13 |
| 02 | 1008 | DELAY | Buffer path 2 sensor PCB | UN14 |
| 02 | 100A | DELAY | Upper delivery sensor | PS5 |
| 02 | 100C | DELAY | Lower sensor | UN24 |
| 02 | 100E | DELAY | Lower delivery sensor | PS6 |
| 02 | 1042 | DELAY | Saddle inlet sensor | PS101 |
| 02 | 1044 | DELAY | Saddle vertical path sensor | PS103 |
| 02 | 1046 | DELAY | Saddle lead edge stopper HP sensor | PS105 |
| 02 | 104A | DELAY | Saddle delivery tray paper sensor 2 | PS111 |
| 02 | 1054 | DELAY | Saddle paper push-on plate motor sensor | PS113 |
| 02 | 1103 | STNRY | Inlet sensor | PS3 |
| 02 | 1105 | STNRY | Shift unit trailing edge sensor | PS4 |
| 02 | 1107 | STNRY | Buffer path 1 sensor PCB | UN13 |
| 02 | 1109 | STNRY | Buffer path 2 sensor PCB | UN14 |
| 02 | 110B | STNRY | Upper delivery sensor | PS5 |
| 02 | 110D | STNRY | Lower sensor | UN24 |
| 02 | 110F | STNRY | Lower delivery sensor | PS6 |
| 02 | 1143 | STNRY | Saddle inlet sensor | PS101 |
| 02 | 1145 | STNRY | Saddle vertical path sensor | PS103 |
| 02 | 1147 | STNRY | Saddle lead edge stopper HP sensor | PS105 |
| 02 | 114B | STNRY | Saddle delivery tray paper sensor 2 | PS111 |
| 02 | 1155 | STNRY | Saddle paper push-on plate motor sensor | PS113 |
| 02 | 1231 | RESIDUAL | Residual jam | RESIDUAL |
| 02 | 1320 | POWER ON | Power ON | POWER ON |
| 02 | 1422 | DOOR OP | Door open | FRONT CVR |
| 02 | 1524 | STP | Staple HP sensor | PS27 |
| 02 | 1550 | SDL STP | Saddle staple HP sensor | SDL STP |
| 02 | 1721 | INIT ROT | Residual jam | RESIDUAL |
| 02 | 1C01 | RETRY ERR | Time Out jam | RETRY ERR |
| 02 | 1F03 | UP DEVICE | Upper stream device jam | UP DEVICE |
| 02 | 1F25 | OTHER | Stop due to jam accompanied with sequence error | SEQ NG |
| 02 | 1F30 | UP DEVICE | Upper stream device jam | UP DEVICE |
| 02 | 1F31 | UP DEVICE | Upper stream device jam | UP DEVICE |
| 02 | 1F4B | TIME OUT | Time Out jam | TIME OUT |
| 02 | 1F52 | OTHER | Saddle press HP sensor | PS110 |
| 02 | 1FFF | ERROR | Error | ERROR |
| 02 | 1CAF | TIMEOUT | TIMEOUT JAM | TIMEOUT |

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 1F01 | ERROR | - | ERROR |
| 02 | 1F48 | TIMEOUT | Trimmer Timeout JAM | TIMEOUT |
| 02 | 1F83 | OTHER | - | OTHER |
| 02 | 1FD0 | TIMEOUT | Trimmer Timeout JAM | TIMEOUT |

T-7-25

## Staple Finisher-N1/Booklet Finisher-N1

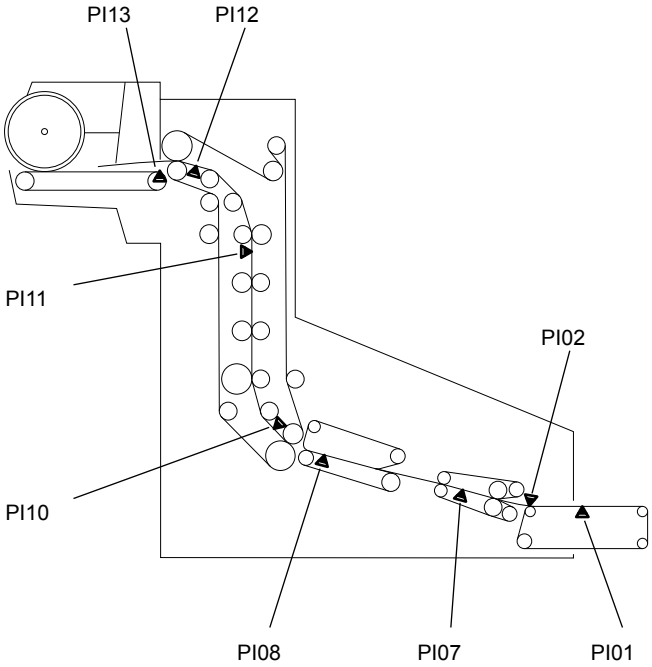



F-7-10

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 1011 | DELAY | Finisher Inlet Sensor Delay jam | S101 |
| 02 | 1012 | DELAY | Finisher Feed Sensor Delay jam | S102 |
| 02 | 1091 | DELAY | Saddle Feed Path Sensor 1 Delay jam | S226 |
| 02 | 1092 | DELAY | Saddle Delivery Path Sensor 2 Delay jam | S227 |
| 02 | 1093 | DELAY | Saddle Inlet Sensor Delay jam | S201 |
| 02 | 1094 | DELAY | Trimmer Inlet Sensor Delay jam | S201, S203<br>S226, S227 |
| 02 | 1121 | STNRY | Finisher Inlet Sensor Stationary jam | S101 |
| 02 | 1122 | STNRY | Finisher Feed Sensor Stationary jam | S102 |
| 02 | 112F | OTH JAM | Finisher Error Avoidance jam | OTH JAM |
| 02 | 11A1 | STNRY | Saddle Feed Path Sensor 1 Feed Stationary jam | S226 |
| 02 | 11A2 | STNRY | Saddle Delivery Path Sensor 2 Feed Stationary jam | S227 |
| 02 | 11A3 | STNRY | Saddle Inlet Sensor Feed Stationary jam | S201 |
| 02 | 11A4 | STNRY | Trimmer Inlet Sensor Stationary jam | S201, S203<br>S226, S227 |
| 02 | 11AF | OTH JAM | Trimmer Error Avoidance jam | OTH JAM |
| 02 | 1205 | OTH JAM | Early Timing jam | S101 |
| 02 | 1307 | POWER ON | Power ON jam | S101, S102 |
| 02 | 1387 | POWER ON | Saddle power ON jam | S201, S203<br>S226, S227 |
| 02 | 138A | POWER ON | Trimmer Power ON jam | POWER ON |
| 02 | 1408 | COVER OP | Door Open jam | S129 |
| 02 | 1488 | COVER OP | Saddle Door Open jam | S129 |
| 02 | 148B | COVER OP | Trimmer Door Open jam | S129 |
| 02 | 1506 | STP | Staples jam | S131 |
| 02 | 1586 | SDL STP | Saddle Staples jam | S223 |
| 02 | 1F45 | PUNCH | Punch jam | S104 |
| 02 | 1F4F | OTH JAM | Punch Error Avoidance jam | OTH JAM |
| 02 | 1F8F | OTH JAM | Saddle Error Avoidance jam | OTH JAM |

T-7-26

## Booklet Trimmer-D1




F-7-11

| ACC ID | Jam Code | Type | Sensor Name/Description | Sensor ID |
|---|---|---|---|---|
| 02 | 10C2 | DELAY | Infeed section entrance booklet sensor (Photoelectric) | PI01 |
| 02 | 10C4 | DELAY | Infeed section exit booklet sensor (Photoelectric) | PI02 |
| 02 | 10C6 | DELAY | Trim section entrance booklet sensor (Photoelectric) | PI07 |
| 02 | 10C8 | DELAY | Stopper booklet sensor (Photoelectric) | PI08 |
| 02 | 10CA | DELAY | Trim section exit booklet sensor (Photoelectric) | PI10 |
| 02 | 10CC | DELAY | Booklet lifter booklet sensor (Photoelectric) | PI11 |
| 02 | 10CE | DELAY | Delivery section booklet sensor (Photoelectric) | PI12 |
| 02 | 10D0 | DELAY | Conveyor section booklet sensor (Photoelectric) | PI13 |
| 02 | 11C3 | STNRY | Infeed section entrance booklet sensor (Photoelectric) | PI01 |
| 02 | 11C5 | STNRY | Infeed section exit booklet sensor (Photoelectric) | PI02 |
| 02 | 11C7 | STNRY | Trim section entrance booklet sensor (Photoelectric) | PI07 |
| 02 | 11C9 | STNRY | Stopper booklet sensor (Photoelectric) | PI08 |
| 02 | 11CB | STNRY | Trim section exit booklet sensor (Photoelectric) | PI10 |
| 02 | 11CD | STNRY | Booklet lifter booklet sensor (Photoelectric) | PI11 |
| 02 | 11CF | STNRY | Delivery section booklet sensor (Photoelectric) | PI12 |
| 02 | 13DC | POWER ON | Power ON | POWER ON |
| 02 | 14DB | COVER OP | Cover open | COVER OP |
| 02 | 17DD | INIT ROT | Residual jam | RESIDUAL |
| 02 | 17DE | ROT | Residual jam | RESIDUAL |
| 02 | 1FD6 | OTHER | Stop due to jam accompanied with sequence error | SEQ NG |
| 02 | 1FD7 | OTHER | Stop due to jam accompanied with sequence error | SEQ NG |
| 02 | 1FD8 | OTHER | Stop due to jam accompanied with sequence error | SEQ NG |
| 02 | 1FD9 | PROGRAM | Program error | PROGRAM |
| 02 | 1FDA | OTHER | Timing error | TIMING NG |
| 02 | 1FDF | OTHER | Other jams | SIZE NG |
| 02 | 1FFE | OTHER | Trimmer undefined jam | OTHER |

T-7-27

# Alarm Code

## List of Alarm Code

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 00-0246 | Error code display (4-digit) | Soft counter PCB cannot write normally |
| 00-0247 | Error code display (4-digit) | Soft counter PCB cannot restore data |
| 01-0001 | Fails to obtain counter information (RDS creates) | - |
| 01-0002 | No change in device status after specified period of time has passed (RDS server creates) | - |
| 01-0004 | IP address change notification (RDS server creates) | - |
| 02-0020 | Dust correction (paper front) occurrence | Movement: Execute correction process to the pixel where dust is detected (image on paper front)<br>Cause: Dust is detected on the Stream Read Glass (paper front).<br>Measures: Clean the Stream Read Glass (paper front), and check if the Platen Roller 1 is soiled. If necessary, clean it. |
| 02-0021 | Dust correction (paper back) occurrence | Movement: Execute correction process to the pixel where dust is detected (image on paper back with 1-Path DADF).<br>Cause: Dust is detected on the Scanner Glass (paper back).<br>Measures: Clean and check the Scanner Glass (paper back), and check if the Platen Roller 2 is soiled. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0001 | Right Deck Lifter error | Movement: The Right Deck Lifter Motor (M4) is stopped. Not using the Right Deck.<br>Cause: The Right Deck Lifter does not rise, failure of the Right Deck Paper Height Sensor (PS6).<br>Measures:<br>1. Turn OFF/ON the power.<br>When it is recovered, the measure is completed. If it is not recovered, execute the following measures.<br>2. Check if the Deck Lifter rises.<br>If not, execute the following measures. If an alarm occurs although it rises, execute step 5 and later steps.<br>3. Check the connection between the Right Deck Lifter Motor (M4) and the Feed Driver PCB (PCB3).<br>Motor side: J2069, PCB side: J225<br>4. Replace the Right Deck.<br>5. Check the connection between the Right Deck Paper Height Sensor (PS6) and the Feed Driver PCB (PCB3).<br>Sensor side: J2063, J3633 (relay), PCB side: J222<br>6. Check the operation of the Right Deck Paper Height Sensor (PS6), and replace it.<br>7. Replace the Feed Driver PCB (PCB3). |
| 04-0002 | Left Deck Lifter error | Movement: The Left Deck Lifter Motor (M5) is stopped. Not using the Left Deck.<br>Cause: The Left Deck Lifter does not rise, failure of the Left Deck Paper Height Sensor (PS10).<br>Measures:<br>1. Turn OFF and then ON the power.<br>When it is recovered, the measure is completed. If it is not recovered, execute the following measures.<br>2. Check if the Deck Lifter rises.<br>If not, execute the following measures. If an alarm occurs although it rises, execute step 5 and later steps.<br>3. Check the connection between the Left Deck Lifter Motor (M5) and the Feed Driver PCB (PCB3).<br>Motor side: J2051, PCB side: J225<br>4. Replace the Left Deck.<br>5. Check the connection between the Left Deck Paper Height Sensor (PS10) and the Feed Driver PCB (PCB3).<br>Sensor side: J2045, J3634 (relay), PCB side: J221<br>6. Check the operation of the Left Deck Paper Height Sensor (PS10), and replace it if necessary.<br>7. Replace the Feed Driver PCB (PCB3). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0003 | Cassette 3 Lifter error | Movement: The Cassette 3 Lifter Motor (M20) is stopped. Not using the Cassette 3.<br>Cause: The Cassette Lifter does not rise, failure of the Cassette 3 Paper Height Sensor (PS17).<br>Measures:<br>1. Turn OFF and then ON the power.<br>When it is recovered, the measure is completed. If it is not recovered, execute the following measures.<br>2. Check if the Deck Lifter rises.<br>If not, execute the following measures. If an alarm occurs although it rises, execute step 5 and later steps.<br>3. Check the connection between the Cassette 3 Lifter Motor (M20) and the Feed Driver PCB (PCB3).<br>Motor side: J2072, PCB side: J225<br>4. Replace the Cassette 3.<br>5. Check the connection between the Cassette 3 Paper Height Sensor (PS17) and the Feed Driver PCB (PCB3).<br>Sensor side: J2080, J3635 (relay), PCB side: J223<br>6. Check the operation of the Cassette 3 Paper Height Sensor (PS17), and replace it if necessary.<br>7. Replace the Feed Driver PCB (PCB3). |
| 04-0004 | Cassette 4 Lifter error | Movement: The Cassette 4 Lifter Motor (M21) is stopped. Not using the Cassette 4.<br>Cause: The Cassette 4 Lifter does not rise, failure of the Cassette 4 Paper Height Sensor (PS18).<br>Measures:<br>1. Turn OFF and then ON the power.<br>When it is recovered, the measure is completed. If it is not recovered, execute the following measures.<br>2. Check if the Deck Lifter rises.<br>If not, execute the following measures. If an alarm occurs although it rises, execute step 5 and later steps.<br>3. Check the connection between the Cassette 4 Lifter Motor (M21) and the Feed Driver PCB (PCB3).<br>Motor side: J2074, PCB side: J225<br>4. Replace the Cassette 4.<br>5. Check the connection between the Cassette 4 Paper Height Sensor (PS18) and the Feed Driver PCB (PCB3).<br>Sensor side: J2091, J3636 (relay), PCB side: J224<br>6. Check the operation of the Cassette 4 Paper Height Sensor (PS18), and replace it if necessary.<br>7. Replace the Feed Driver PCB (PCB3). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0008 | Option Deck Lifter error | Movement: The Option Deck Pickup Motor (M) is stopped. Not using the Left Deck.<br>Cause: The Option Deck does not rise, failure of the Option Deck Paper Height Sensor (PS).<br>Measures: Clear the error by turning OFF/ON the power. |
| 04-0010 | Jam left untouched (RDS creates) | - |
| 04-0031 | Right Deck Lifter Motor overcurrent alarm | Movement: The Right Deck Lifter Motor (M4) is stopped. Not using the Right Deck.<br>Cause: The Right Deck is above the upper limit or is stopped along the way.<br>Measures:<br>1. Check the connection between the Right Deck Lifter Motor (M4) and the Feed Driver PCB (PCB3).<br>Motor side: J2069, PCB side: J225<br>2. Replace the Right Deck Lifter Motor (M4).<br>3. Check the Right Deck Upper Limit Sensor (PS8).<br>4. Check the Right Deck Lifter Gear (damage, foreign matter, etc.).<br>5. Replace the Feed Driver PCB (PCB3). |
| 04-0032 | Left Deck Lifter Motor overcurrent alarm | Movement: The Left Deck Lifter Motor (M5) is stopped. Not using the Left Deck.<br>Cause: The Left Deck is above the upper limit or is stopped along the way.<br>Measures:<br>1. Check the connection between the Left Deck Lifter Motor (M5) and the Feed Driver PCB (PCB3).<br>Motor side: J2069, PCB side: J225<br>2. Replace the Left Deck Lifter Motor (M5).<br>3. Check the Left Deck Upper Limit Sensor (PS12).<br>4. Check the Left Deck Lifter Gear (damage, foreign matter, etc.).<br>5. Replace the Feed Driver PCB (PCB3). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0033 | Cassette 3 Lifter Motor overcurrent alarm | Movement: The Cassette 3 Lifter Motor (M20) is stopped. Not using the Cassette 3.<br>Cause: The Cassette 3 is above the upper limit or is stopped along the way.<br>Measures:<br>1. Check the connection between the Cassette 3 Lifter Motor (M20) and the Feed Driver PCB (PCB3).<br>Motor side: J2072, PCB side: J225<br>2. Replace the Cassette 3 Lifter Motor (M20).<br>3. Check the Cassette 3 Upper Limit Sensor (PS68).<br>4. Check the Cassette 3 Lifter Gear (damage, foreign matter, etc.).<br>5. Replace the Feed Driver PCB (PCB3). |
| 04-0034 | Cassette 4 Lifter Motor overcurrent alarm | Movement: The Cassette 4 Lifter Motor (M21) is stopped. Not using the Cassette 4.<br>Cause: The Cassette 4 is above the upper limit or is stopped along the way.<br>Measures:<br>1. Check the connection between the Cassette 4 Lifter Motor (M21) and the Feed Driver PCB (PCB3).<br>Motor side: J2072, PCB side: J225<br>2. Replace the Cassette 4 Lifter Motor (M21).<br>3. Check the Cassette 4 Upper Limit Sensor (PS71).<br>4. Check the Cassette 4 Lifter Gear (damage, foreign matter, etc.).<br>5. Replace the Feed Driver PCB (PCB3). |
| 04-0069 | Error in Right Deck Pickup Solenoid connection | Movement: Jam occurred when picking up from the Right Deck.<br>Cause: Connection of the Right Deck Pickup Solenoid (SL6) cannot be detected.<br>Measures:<br>1. Check the connection of the Right Deck Pickup Solenoid (SL6).<br>Solenoid side: J2070, Pickup Unit side: J3633, Feed Driver PCB side: J222<br>2. Replace the Right Deck Pickup Solenoid (SL6).<br>3. Replace the Feed Driver PCB (PCB3). |
| 04-0070 | Error in Left Deck Pickup Solenoid connection | Movement: Jam occurred when picking up from the Left Deck.<br>Cause: Connection of the Left Deck Pickup Solenoid (SL7) cannot be detected.<br>Measures:<br>1. Check the connection of the Left Deck Pickup Solenoid (SL7).<br>Solenoid side: J2052, Pickup Unit side: J3634, Feed Driver PCB side: J221<br>2. Replace the Left Deck Pickup Solenoid (SL7).<br>3. Replace the Feed Driver PCB (PCB3). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0071 | Error in Cassette 3 Pickup Solenoid connection | Movement: Jam occurred when picking up from the Cassette 3.<br>Cause: Connection of the Cassette 3 Pickup Solenoid (SL3) cannot be detected.<br>Measures:<br>1. Check the connection of the Cassette 3 Pickup Solenoid (SL3).<br>Solenoid side: J2073, Pickup Unit side: J3635, Feed Driver PCB side: J223<br>2. Replace the Cassette 3 Pickup Solenoid (SL3).<br>3. Replace the Feed Driver PCB (PCB3). |
| 04-0072 | Error in Cassette 4 Pickup Solenoid connection | Movement: Jam occurred when picking up from the Cassette 4.<br>Cause: Connection of the Cassette 4 Pickup Solenoid (SL4) cannot be detected.<br>Measures:<br>1. Check the connection of the Cassette 4 Pickup Solenoid (SL4).<br>Solenoid side: J2075, Pickup Unit side: J3636, Feed Driver PCB side: J224<br>2. Replace the Cassette 4 Pickup Solenoid (SL4).<br>3. Replace the Feed Driver PCB (PCB3). |
| 04-0073 | Error in Multi-purpose Pickup Solenoid connection | Movement: Jam occurred when picking up from the Multi-purpose Tray.<br>Cause: Connection of the Multi-purpose Pickup Solenoid (SL2) cannot be detected.<br>Measures:<br>1. Check the connection of the Multi-purpose Pickup Solenoid (SL2).<br>Solenoid side: J2001, Relay: J3060, J3121, J3235, Main Driver PCB side: J106<br>2. Replace the Multi-purpose Pickup Solenoid (SL2).<br>3. Replace the Main Driver PCB (PCB2). |
| 04-0074 | Error in Left Deck Merging Solenoid connection | Movement: Jam occurred when picking up from the Left Deck.<br>Cause: Connection of the Left Deck Merging Solenoid (SL11) cannot be detected.<br>Measures:<br>1. Check the connection of the Left Deck Merging Solenoid (SL11).<br>Solenoid side: J2106, Relay side: J3270, Duplex Driver PCB side: J343<br>2. Replace the Left Deck Merging Solenoid (SL11).<br>3. Replace the Duplex Driver PCB (PCB4). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 04-0075 | Error in Reverse Detachment Solenoid connection | Movement: Jam occurred at the time of large size paper reverse delivery.<br>Cause: Connection of the Reverse Detachment Solenoid (SL12) cannot be detected.<br>Measures:<br>1. Check the connection of the Reverse Detachment Solenoid (SL12).<br>Solenoid side: J2176, Duplex Driver PCB side: J340<br>2. Replace the Reverse Detachment Solenoid (SL12).<br>3. Replace the Duplex Driver PCB (PCB4). |
| 06-0003 | Web absence notice | Movement: The Web Drive Solenoid is turned ON 4 times after the Fixing Cleaning Web Level Sensor performs detection.<br>Cause: Remaining level of the Fixing Cleaning Web is low.<br>Measures: Replace the Fixing Cleaning Web. |
| 09-0006 | 2D Shading ROM error 1 | Movement: Turn OFF the 2D Shading.<br>Cause: After clearing the drum, not reading the EEPROM.<br>Measures: Execute COPIER>FUNCTION>2D-SHADE>2D-READ. |
| 09-0007 | 2D Shading ROM error 2 | Movement: Turn OFF the 2D Shading.<br>Cause: After reading ROM data, calculated checksum value and checksum of ROM does not match.<br>Measures: Install the correct ROM. |
| 09-0008 | Drum HP signal noise alarm | Movement: Only when the 2D shading is ON, the accuracy of shading is degraded and an image error occurs. Uneven density may occur.<br>Cause: The Drum HP cycle is shorter than the specified cycle.<br>Measures:<br>1. Install the Drum HP Sensor (PS61) and check the connector.<br>2. Check the Drum HP Flag.<br>3. Check the harness between the Drum HP Sensor (PS61) and the Main Driver PCB (PCB2).<br>(Between J2137 and J107)<br>4. Replace the Drum HP Sensor (PS61).<br>5. Replace the Main Driver PCB (PCB2).<br>6. Check the harness between the Main Driver PCB (PCB2) and the DCON PCB (PCB1).<br>(Between J125 and J411 and between J126 and J412)<br>7. Replace the DCON PCB (PCB1). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 09-0009 | Drum HP signal absence alarm | Movement: Only when the 2D shading is ON, the accuracy of shading is degraded and an image error occurs. Uneven density may occur.<br>Cause: The Drum HP cycle is longer than the specified cycle.<br>Measures:<br>1. Install the Drum HP Sensor (PS61) and check the connector.<br>2. Check the Drum HP Flag.<br>3. Check the harness between the Drum HP Sensor (PS61) and the Main Driver PCB (PCB2).<br>(Between J2137 and J107)<br>4. Replace the Drum HP Sensor (PS61).<br>5. Replace the Main Driver PCB (PCB2).<br>6. Check the harness between the Main Driver PCB (PCB2) and the DCON PCB (PCB1).<br>(Between J125 and J411 and between J126 and J412)<br>7. Replace the DCON PCB (PCB1). |
| 10-0001 | No toner (Bk) (RDS creates) | - |
| 10-0006 | Patch Sensor error 1 | Movement: Not update the D-max control value.<br>Cause: At LED light intensity correction, P(0) is at target value or higher, or P(6) is at target value or lower.<br>Measures:<br>1. Clean the Patch Sensor (PS90).<br>2. Check the connector connection of the Patch Sensor (PS90).<br>Sensor: J2143, Relay: J3255, J3060, J3177, Main Driver PCB (PCB2): J107<br>3. Check the connector connection of the Patch Sensor Shutter Solenoid (SL10).<br>Sensor: J2143, Relay: J3249, J3060, J3177, Main Driver PCB (PCB2): J107<br>4. Replace the Patch Sensor (PS90).<br>5. Replace the Patch Sensor Shutter Solenoid (SL10).<br>6. Replace the Patch Shutter. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 10-0007 | Patch Sensor error 2 | Movement: Not update the D-max control value.<br>Cause: Max-Min of the background is 100 level or higher.<br>Measures:<br>1. Clean the Patch Sensor (PS90).<br>2. Check the connector connection of the Patch Sensor (PS90).<br>Sensor: J2143, Relay: J3255, J3060, J3177, Main Driver PCB (PCB2): J107<br>3. Check the connector connection of the Patch Sensor Shutter Solenoid (SL10).<br>Sensor: J2143, Relay: J3249, J3060, J3177, Main Driver PCB (PCB2): J107<br>4. Replace the Patch Sensor (PS90).<br>5. Replace the Patch Sensor Shutter Solenoid (SL10).<br>6. Replace the Patch Shutter. |
| 10-0008 | Patch Sensor error 3 | Movement: Not update the D-max control value.<br>Cause: Patch density is too dark.<br>Measures:<br>1. Clean the Patch Sensor (PS90).<br>2. Check the connector connection of the Patch Sensor (PS90).<br>Sensor: J2143, Relay: J3255, J3060, J3177, Main Driver PCB (PCB2): J107<br>3. Check the connector connection of the Patch Sensor Shutter Solenoid (SL10).<br>Sensor: J2143, Relay: J3249, J3060, J3177, Main Driver PCB (PCB2): J107<br>4. Replace the Patch Sensor (PS90).<br>5. Replace the Patch Sensor Shutter Solenoid (SL10).<br>6. Replace the Patch Shutter. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 10-0009 | Patch Sensor error 4 | Movement: Not update the D-max control value.<br>Cause: Patch density is too light.<br>Supplement for cause(alarm detection at installation and at replacement of the Developing Assembly):<br>Although this alarm is detected right after installation and replacement of the Developing Assembly, it is not an error. The alarm is detected because toner in the Developing Assembly is empty.<br>When the patch density becomes normal by executing toner stirring (COPIER>FUNCTION>INSTALL>TONER-S) and auto gradation adjustment, the alarm is cleared.<br>If the date and time of occurrence of the alarm differs from the timing of installation and replacement of the Developing Assembly, perform the following measures.<br>Measures:<br>1. Clean the Patch Sensor (PS90).<br>2. Check the connector connection of the Patch Sensor (PS90).<br>Sensor: J2143, Relay: J3255, J3060, J3177, Main Driver PCB (PCB2): J107<br>3. Check the connector connection of the Patch Sensor Shutter Solenoid (SL10).<br>Sensor: J2143, Relay: J3249, J3060, J3177, Main Driver PCB (PCB2): J107<br>4. Replace the Patch Sensor (PS90).<br>5. Replace the Patch Sensor Shutter Solenoid (SL10).<br>6. Replace the Patch Shutter. |
| 10-0010 | D-max control contrast potential (Vcont) error 1 | Movement: Vcont of D-max control is between 150V and 270V, and correction amount at a time is 50V or less.<br>Cause: Vcont calculated with D-max control is less than 150V.<br>Measures:<br>• If density of output image is sufficient, measures are not needed.<br>• When the density is light (dark), execute PASCAL.<br>• If the problem is not corrected, check/replace the Developing Assembly. |
| 10-0011 | D-max control contrast potential (Vcont) error 2 | Movement: Vcont of D-max control is between 150V and 270V, and correction amount at a time is 50V.<br>Cause: Vcont calculated with D-max control is greater than 270V.<br>Measures:<br>• If density of output image is sufficient, measures are not needed.<br>• When the density is light (dark), execute PASCAL.<br>• If the problem is not corrected, check/replace the Developing Assembly. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 10-0012 | D-max control contrast potential (Vcont) error 3 | Movement: Vcont of D-max control is between 150V and 270V, and correction amount at a time is 50V or less.<br>Cause: Difference of Vcont from its of the last D-max control is 50V or higher.<br>Supplement for cause(alarm detection at installation and replacement of the Developing Assembly):<br>Although the alarm is detected after execution of auto gradation adjustment (full adjust) at installation and replacement of the Developing Assembly, it is not an error. The alarm is detected because “previous Vcont” that is a target for comparison is 0V at installation. At replacement of the Developing Assembly, “previous Vcont” that is a target for comparison is the value determined by the original Developing Assembly. Therefore, depending on the individual difference in the Developing Assembly, 50V or more difference occurs and the alarm is detected.<br>The alarm is cleared by either re-executing auto gradation adjustment (full adjust) or printing 6,000 or more sheets (auto execution of D-max control).<br>If the date and time of occurrence of the alarm differs from the timing of installation and replacement of the Developing Assembly, perform the following measures.<br>Measures:<br>• If density of output image is sufficient, measures are not needed.<br>• When the density is light (dark), execute PASCAL.<br>• If the problem is not corrected, check/replace the Developing Assembly. |
| 11-0002 | Waste Toner Container full (Photosensitive Drum) | Movement: A message “The waste toner container is full.” is displayed on the Control Panel, and the machine is stopped.<br>Cause: The Waste Toner Counter reaches 600000.<br>Measures: Clean the Waste Toner Container. Reset the Waste Toner Counter. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 30-0004 | Pre-transfer Charging PCB Harness disconnection (connection error) | Movement: Pre-transfer charging high voltage is not output. An image error like discharge trace occurs.<br>Cause: Connection error of the Pre-transfer Charging PCB (PCB26).<br>Measures:<br>1. Check the connection between the Main Driver PCB (PCB2) and the High Voltage Unit.<br>Main Driver PCB side: J112, High Voltage Unit side: J3098<br>2. Check the connection inside of the High Voltage Unit.<br>High Voltage Unit inlet side: J3098, Pre-transfer Charging PCB side: J3544<br>3. Replace the Pre-transfer Charging PCB (PCB26).<br>4. Replace the Main Driver PCB (PCB2). |
| 31-0005 | Environment Sensor reading alarm | Movement: It becomes as follow: environment temperature= 0 degC, environment humidity= 0%.<br>Cause: Connection of the Environment Sensor cannot be detected.<br>Measures:<br>1. Check the connection of the Environment Sensor (THU1).<br>2. Replace the Environment Sensor (THU1). |
| 31-0007 | Error in Patch Sensor Shutter Solenoid connection | Movement: Patch control (D-max/D-half control) is not executed. Use the previous correction value.<br>Cause: Connection of the Patch Sensor Shutter Solenoid (SL10) cannot be detected.<br>Measures:<br>1. Check the connection of the Patch Sensor Shutter Solenoid (SL10).<br>Solenoid side: J3049, Relay: J3060, J3177, Main Driver PCB side: J107<br>2. Replace the Patch Sensor Shutter Solenoid (SL10).<br>3. Replace the Main Driver PCB (PCB2). |
| 31-0008 | Error in Patch Sensor Shutter Solenoid connection | Movement: HDD failure is expected to occur in a short time due to occurrence of physical error in HDD. It does not occur in the HDD of mirroring configuration.<br>Cause: Error in the S.M.A.R.T. value of HDD<br>Measures:<br>1. Back up the data stored in HDD.<br>2. Replace the HDD.<br>3. Restore the data.<br><br>S.M.A.R.T. (Self-Monitoring Analysis and Reporting Technology): Self-diagnosis function built in the HDD. The occurrence rate of reading error, reading and writing speed, the total number of Motor start-up and stop times, the total length of power-on time, etc. are monitored. |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 32-0002 | Potential control (VL control) error | Movement: Not reflecting the result of VL control. To the laser power determined with VL control, the power with which the previous potential control was succeeded (within target potential +/-10V) is applied.<br>Cause: The measured value in the dark area (VL) differs over +/-10V but less than +/-30V than the target potential at potential control.<br>Measures: If there is no influence on image, measures are not needed. If not, execute the following measures.<br>1. Check the installation of the Pre-exposure LED (connector connection, open circuit, the caught cable).<br>2. Check the installation of the Primary Charging Assembly (connector connection, open circuit, the caught cable).<br>3. Check the fixation state of the Drum and the Drum Shaft (check if the drum fixation cylinder is properly installed).<br>4. Check if the Dustproof Glass is soiled. If necessary, clean it.<br>5. Check the installation of the Laser Scanner Unit (connector connection, open circuit, the caught cable).<br>6. Check the installation and connection of the Primary Charging High Voltage PCB (PCB11) (connector connection, open circuit, the caught cable).<br>7. Check the installation of the Potential Sensor (connector connection, open circuit, the caught cable).<br>8. Check the installation and connection of the Drum Motor (M1) (connector connection, open circuit, the caught cable).<br>9. Replace the parts.<br>• Primary Charging Assembly<br>• Laser Scanner Unit<br>• Potential Sensor<br>• Primary Charging High Voltage PCB (PCB11)<br>• Drum Motor (M1)<br>• Main Driver PCB (PCB2)<br>• DC Controller PCB (PCB1) |
| 33-0001 | Delivery Assembly Decurler Fan alarm | Movement: No change.<br>Cause: Connector disconnection of the Paper Cooling Fan (FM5).<br>Failure of the Paper Cooling Fan (FM5).<br>Measures: Check the connector -> Replace the Paper Cooling Fan (FM5). |
| 33-0002 | Feed Fan alarm | Movement: No change.<br>Cause: Connector disconnection of the Registration Motor/ Duplex Motor Cooling Fan (FM42).<br>Failure of the Registration Motor/Duplex Motor Cooling Fan (FM42).<br>Measures: Check the connector -> Replace the Registration Motor/Duplex Motor Cooling Fan (FM42). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 33-0010 | Stream Reading Fan alarm | Movement: Nothing in particular (Fan stops).<br>Cause: The Fan rotation signal cannot be detected after 3 seconds have passed since the Scanner Unit Heat Exhaust Fan (FM1) is turned ON.<br>Measures: Check the connector connection -> Replace the Scanner Unit Heat Exhaust Fan (FM1). |
| 33-0013 | Power Unit Fan 1 alarm | Movement: No change.<br>Cause: Connector disconnection of the Feed Driver Cooling Fan (FM40).<br>Failure of the Feed Driver Cooling Fan (FM40).<br>Measures: Check the connector -> Replace the Feed Driver Cooling Fan (FM40). |
| 33-0022 | Read Motor Cooling Fan alarm | Movement: Nothing in particular (Fan stops).<br>Cause: The Fan rotation signal cannot be detected after 3 seconds have passed since the Motor Driver Cooling Fan (FM1) or the Read Motor Cooling Fan (FM2) is turned ON.<br>Measures: Check the connector connection -> Replace the Motor Driver Cooling Fan (FM1) or the Read Motor Cooling Fan (FM2). |
| 33-0023 | Scanner Unit (DADF) Cooling Fan alarm | Movement: Nothing in particular (Fan stops).<br>Cause: The Fan rotation signal cannot be detected after 3 seconds have passed since the (DADF) Scanner Unit Cooling Fan (FM3) is turned ON.<br>Measures: Check the connector connection -> Replace the DADF Scanner Unit Cooling Fan (FM3). |
| 33-0025 | Scanner Unit (Reader) Cooling Fan alarm | Movement: Nothing in particular (Fan stops).<br>Cause: The Fan rotation signal cannot be detected after 3 seconds have passed since the (Reader) Scanner Unit Cooling Fan (FM2) is turned ON.<br>Measures: Check the connector connection -> Replace the (Reader) Scanner Unit Cooling Fan (FM2). |
| 33-0026 | Charging Assembly Fan 1 alarm | Movement: No change.<br>Cause: Connector disconnection of the Pre-transfer Charging Assembly Air Supply Fan (FM32) or the Pre-transfer Charging Assembly Exhaust Fan (FM33).<br>Failure of the Pre-transfer Charging Assembly Air Supply Fan (FM32) or the Pre-transfer Charging Assembly Exhaust Fan (FM33).<br>Measures: Check the connector connection -> Replace the Pre-transfer Charging Assembly Air Supply Fan (FM32) or the Pre-transfer Charging Assembly Exhaust Fan (FM33). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 33-0027 | Charging Assembly Fan 2 alarm | Movement: No change.<br>Cause: Connector disconnection of the Primary Charging Assembly Exhaust Fan (FM17).<br>Failure of the Primary Charging Assembly Exhaust Fan (FM17).<br>Measures: Check the connector -> Replace the Primary Charging Assembly Exhaust Fan (FM17). |
| 33-0028 | Power Unit Fan 2 alarm | Movement: No change.<br>Cause: Connector disconnection of the Duplex Driver Cooling Fan (FM41).<br>Failure of the Duplex Driver Cooling Fan (FM41).<br>Measures: Check the connector -> Replace the Duplex Driver Cooling Fan (FM41). |
| 37-0001 | For R&D | - |
| 37-0002 | For R&D | - |
| 37-0003 | For R&D | - |
| 37-0004 | For R&D | - |
| 37-0005 | For R&D | - |
| 37-0006 | For R&D | - |
| 37-0007 | For R&D | - |
| 37-1000 | For R&D | - |
| 37-2000 | For R&D | - |
| 38-0001 | For R&D | - |
| 38-0002 | For R&D | - |
| 50-0007 | Insufficient light intensity in Post-separation Sensor 3 | Movement: Nothing in particular.<br>Cause: Light intensity is insufficient when adjusting output of the Post-separation Sensor 3 (PCB2).<br>Measures: Clean the Post-separation Sensor 3 (PCB2) (periodical maintenance). |
| 50-0008 | Insufficient light intensity in Lead Sensor 1 | Movement: Nothing in particular.<br>Cause: Light intensity is insufficient when adjusting output of the Lead Sensor 1 (PCB4).<br>Measures: Clean the Lead Sensor 1 (PCB4) (periodical maintenance). |
| 50-0009 | Insufficient light intensity in Delivery Sensor | Movement: Nothing in particular.<br>Cause: Light intensity is insufficient when adjusting output of the Delivery Sensor (PCB5).<br>Measures: Clean the Delivery Sensor (PCB5) (periodical maintenance). |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 50-0010 | Alarm due to original separation failure | Movement: Nothing in particular.<br>Cause: Condition unable to separate 1st sheet of original from the ADF occurs 3 times .<br>Measures: Check rotation of the Pickup Motor (M1) -> Check the life of the Pickup Roller -> Check if paper lint is at the Pickup Slot. |
| 50-0013 | Insufficient light intensity in Registration Sensor | Movement: Nothing in particular.<br>Cause: Light intensity is insufficient when adjusting output of the Registration Sensor (PCB3).<br>Measures: Clean the Registration Sensor (PCB3) (periodical maintenance). |
| 60-0001 | Shift Tray alarm | Movement: Shift Tray operation is stopped.<br>Cause: Home position at startup of the host machine cannot be detected.<br>Measure: Check connector disconnection of the HP Sensor (Front) (PS101) and the HP Sensor (Rear) (PS102) -> Replace the HP Sensor (Front) (PS101) and the HP Sensor (Rear) (PS102). |
| 61-0001 | Finisher Staple alarm | Movement: A user message is displayed on the Control Panel. If staple job is being processed during a print job, printing is stopped.<br>Measures: Load staples. |
| 62-0001 | Saddle Staple alarm | Movement: A user message is displayed on the Control Panel, and printing is stopped. If staple job is being processed during a print job, printing is stopped.<br>Measures: Load staples. |
| 64-0003 | Finisher Upper Neat Stack Unit Alignment Plate Lifting Alarm | "(1) The HP Sensor is not turned ON although 1 sec has passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation. " |
| 64-0004 | Finisher Upper Neat Stack Unit Front Alignment Plate Alarm | "(1) The operation is not completed although 3 sec have passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation.<br>(3) The alignment operation is not completed although 400 msec have passed during the alignment operation." |
| 64-0005 | Finisher Upper Neat Stack Unit Rear Alignment Plate Alarm | "(1) The operation is not completed although 3 sec have passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation.<br>(3) The alignment operation is not completed although 400 msec have passed during the alignment operation." |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 64-0006 | Finisher Lower Neat Stack Unit Alignment Plate Lifting Alarm | "(1) The HP Sensor is not turned ON although 1 sec has passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation." |
| 64-0007 | Finisher Lower Neat Stack Unit Front Alignment Plate Alarm | "(1) The operation is not completed although 3 sec have passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation.<br>(3) The alignment operation is not completed although 400 msec have passed during the alignment operation." |
| 64-0008 | Finisher Lower Neat Stack Unit Rear Alignment Plate Alarm | "(1) The operation is not completed although 3 sec have passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation.<br>(3) The alignment operation is not completed although 400 msec have passed during the alignment operation." |
| 64-0009 | Upper Neat Stack Unit Return Roller Lifting Alarm | "(1) The HP Sensor is not turned ON although 1 sec has passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation." |
| 64-000A | Lower Neat Stack Unit Return Roller Lifting Alarm | "(1) The HP Sensor is not turned ON although 1 sec has passed since the start of operation.<br>(2) The HP Sensor is not turned OFF although 1 sec has passed since the start of operation." |
| 65-0001 | Punch alarm | Movement: A user message is displayed on the Control Panel. If punching is being operated during a print job, operation varies depending on the detection level.<br>• Level 1: Continue operation.<br>• Level 2 (in case that punching operated 1000 times after the detection level 1): Stop printing.<br>Measures: Remove the punched trash. |
| 73-0006 | LIPS | Error in configuration acquisition/management |
| 73-0007 | LIPS | Memory management error in LIPS |
| 73-0008 | LIPS | File management error in LIPS |
| 73-0009 | LIPS | Reception data management error |
| 73-0011 | LIPS | Macro management error |
| 73-0014 | LIPS | Font management error |
| 73-0015 | LIPS | Letter drawing error |
| 73-0017 | LIPS | Image drawing error |
| 73-0021 | LIPS | Utility execution control error |
| 73-0024 | LIPS | Boot error in LIPS |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 73-0026 | LIPS | Data format error of image mode |
| 75-0001 | Error occurred in Yukon | - |
| 75-0002 | Error occurred due to invalid SVG analysis from Yukon | - |
| 76-0001 | Font | No memory for internal font |
| 76-0002 | Font | Fails to secure the work area to analyze the font that is downloaded at “Resource Download”. |
| 76-0003 | Font | Fails to access to the file that stores the font. |
| 76-0004 | Font | Fails to allocate the FM work memory. |
| 76-0005 | Font | Fails to analyze the internal font. |
| 76-0006 | Font | Alignment of font data is wrong. |
| 76-0007 | Font | Fails to allocate work memory with scalar. There are 3 types depending on where to occur. |
| 76-0008 | Font | Fails to allocate work memory with scalar. There are 3 types depending on where to occur. |
| 78-0003 | GL | Invalid GL entry |
| 78-0005 | GL | System memory full |
| 79-0001 | Canon-made PCL | PCL initialization error |
| 79-0002 | Canon-made PCL | PCL processing error |
| 79-0003 | Canon-made PCL | Overflow of work memory for translator |
| 79-0004 | Canon-made PCL | Download overflow |
| 80-0001 | BDL | Admin error |
| 80-0003 | BDL | Data Area error |
| 80-0004 | BDL | Wrapper error |
| 80-0007 | BDL | Resource error |
| 80-0008 | BDL | Attribute error |
| 80-0009 | BDL | VolatileResource error |
| 80-0010 | BDL | Graphics error |
| 80-0011 | BDL | Char error |
| 80-0012 | BDL | Image error |
| 80-0013 | BDL | Image error |
| 80-0015 | BDL | Print data cannot process this version. |
| 80-0016 | BDL | Overflow of work memory for translator |
| 80-0019 | BDL | In case of invalid data format in BDL custom mode |

| Alarm Code | Title | A. movement /B. cause /C. measures |
|---|---|---|
| 81-0001 | Imaging | Fails to allocate the memory. |
| 81-0002 | Imaging | Rendering error |
| 81-0003 | Imaging | Overflow of work memory for translator |
| 81-0004 | Imaging | Imaging initialization error |
| 81-0005 | Imaging | Imaging processing error |
| 81-0006 | Imaging | Error when the setting is long length paper + 1200dpi. (Because of memory, long length paper + 1200dpi is not available.) |
| 81-0007 | Imaging | Error when long length paper + color is set. |
| 83-0005 | PDF | PDF memory full |
| 83-0015 | PDF | PDF data decoding error |
| 83-0016 | PDF | Page range error |
| 83-0017 | PDF | PDF error |
| 84-0001 | XPS memory full error | - |
| 84-0002 | XPS spool full error | - |
| 84-0003 | XPS print range error | - |
| 84-0004 | XPS document data error | - |
| 84-0005 | XPS page data error | - |
| 84-0006 | XPS image data error | - |
| 84-0007 | XPS font data error | - |
| 84-0008 | XPS non-support image error | - |
| 84-0009 | XPS rendering error | - |

T-7-28

# 8 Service Mode

- Overview
- COPIER
- FEEDER
- SORTER
- BOARD

# Overview

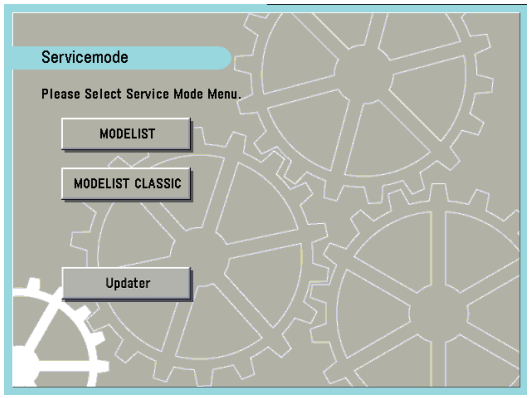
Instructions on how to use service mode items can be found within the service mode itself. The information explains what items have been added or changed from previous models.

## Entering Service Mode

Contact the sales company for the method to enter service mode.

## Service Mode Menu

TOP Screen




F-8-1

| | |
|---|---|
| "MODELIST" | A brand new additional mode in the host machine.<br>A function that can be used as a reference on how to use each item in Service Mode is installed. The new function, which will be described later, is available in MODELIST Mode. |
| "MODELIST CLASSIC" | This mode is same as the old machine. The new function, which will be described later, is not available in the MODELIST CLASSIC Mode. |
| “Updater” | This is a MEAP application with functions of network communication to Content Delivery System V1.0 (hereinafter CDS) and installation of firmware, MEAP applications or system options. (Refer to Updater V1.0 service manual.) |

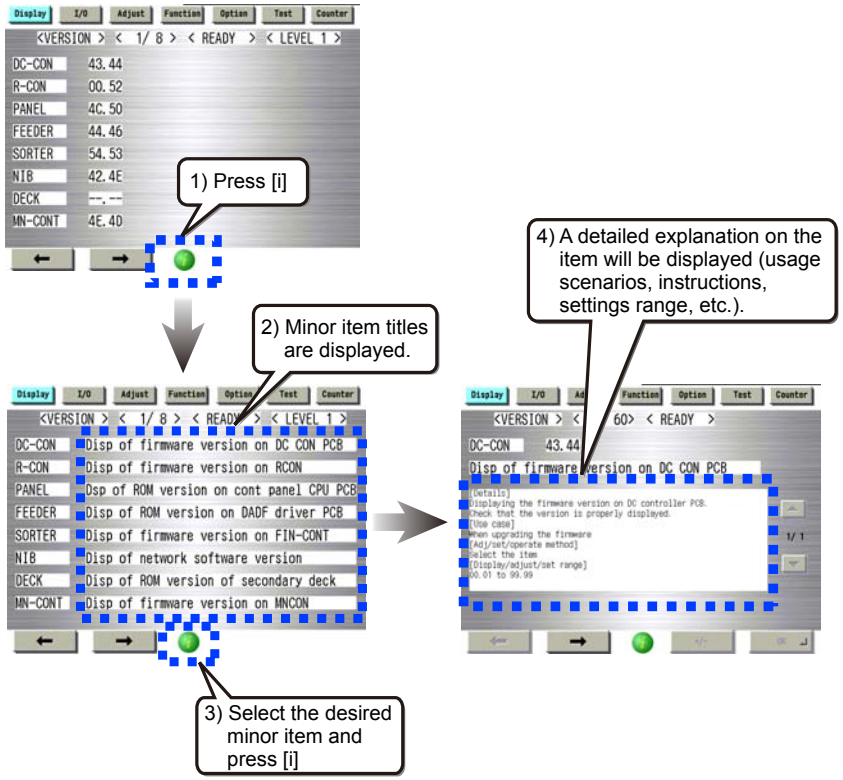
If " MODELIST " or " MODELIST CLASSIC " or “Updater” is pressed, the screen will switch to initial screen for each mode.

## Service mode item explanations

Explanatory texts for the initial window, main items, sub items and minor items can be displayed.

Select the desired initial window, main item, sub item or minor item, then pres [i] (Information button) to display an explanatory text (hereafter, service mode contents) on the selected item.

E.g., COPIER > DISPLAY > Version window

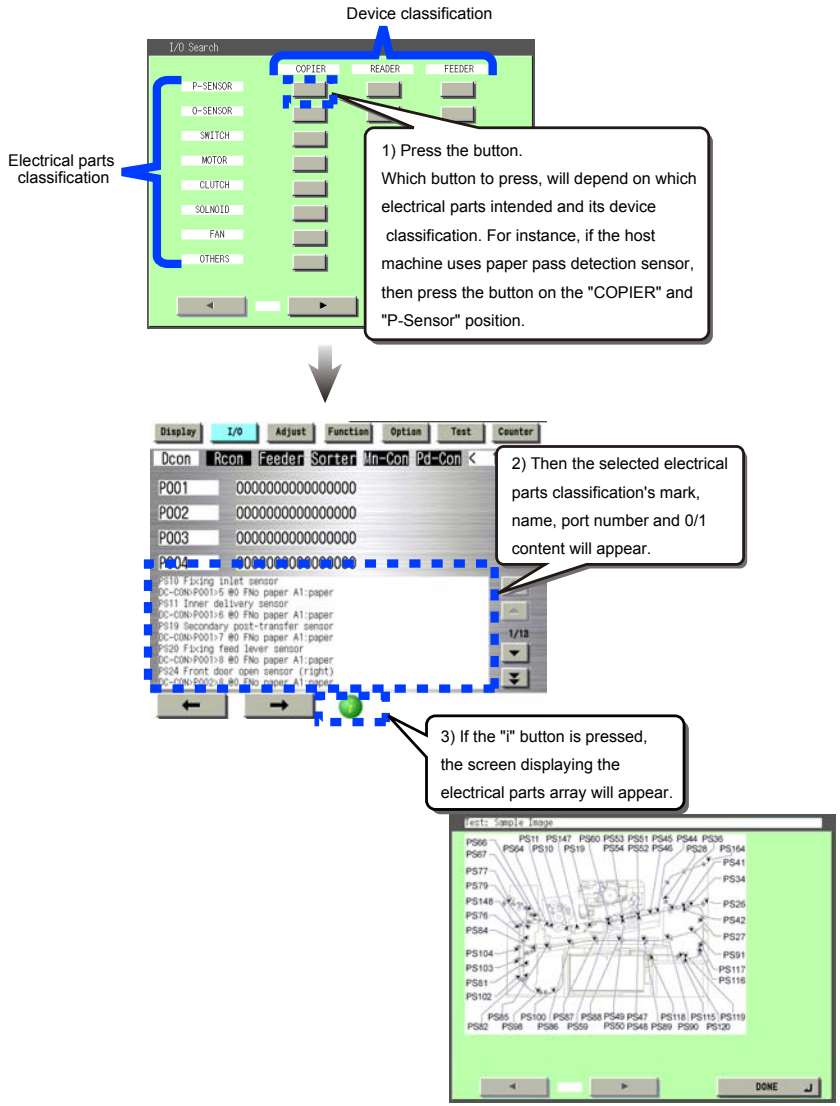



F-8-2

- The service mode contents can be displayed in J/E/F/I/G/S languages.
- Service mode contents, like system software, can be upgraded by SST.

## I/O information enhancement

On the COPIER > I/O, the mode to confirm input output signal of electrical parts used (sensor, motor, fan, etc), makes it easier to look for the intended electrical part.
And the screen will also display the input output signal.

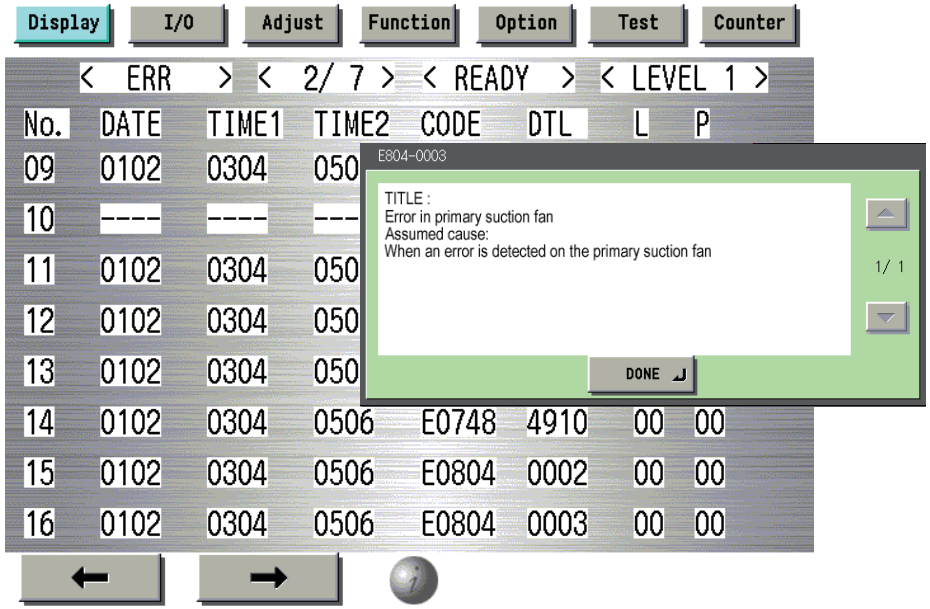



F-8-3

## Display of Error Code/Alarm Code description

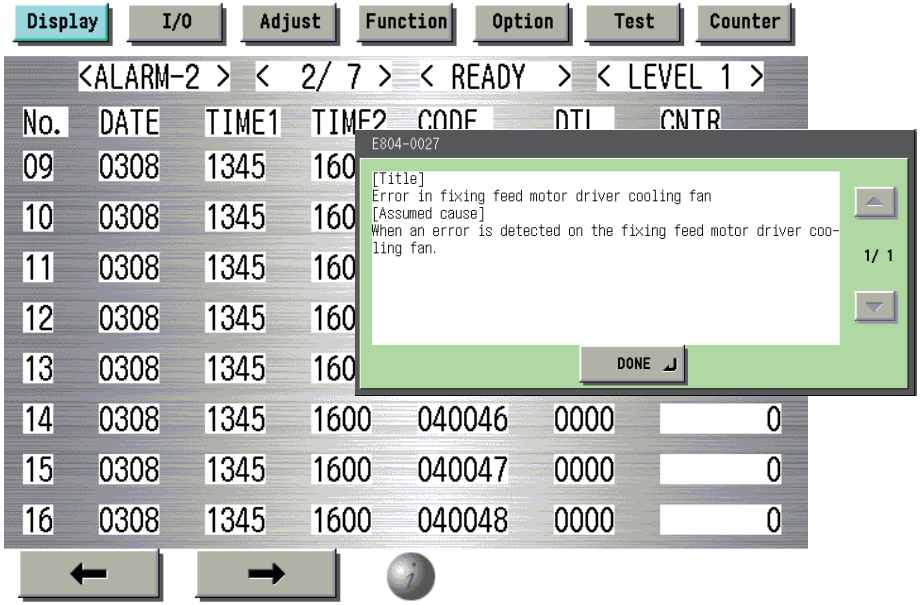
The detail description of each code can be viewed on the error code and alarm code occurrence record screen.

ERROR CODE : COPIER > DISPLAY >ERR




F-8-4

ALARM CODE : COPIER > DISPLAY >ERR




F-8-5

## COPIER > OPTION > BODY, Item Segmentation

On the current machine, there are extremely many items in the COPIER > OPTION > BODY (in related to host machine specification), that it is difficult to reach the intended item.
In order to reach the intended item in shorter time, all items inside the BODY is classified to 15 categories.

| Classification | Name | Description |
|---|---|---|
| Function switching | **FNC-SW** | Language, cassette, paper size type, NAVI/ DA connection, count-up spec., document size detection, dirt detection level |
| Display switching/ display timing | **DSPLY-SW** | UI (User Interface) display related |
| Image related (fixing) | **IMG-FIX** | Fixing related |
| Image related (transfer) | **IMG-TR** | Transfer related |
| Image related (developing) | **IMG-DEV** | Developer related |
| Image related (laser/ latent image) | **IMG-LSR** | Laser, latent image related |
| Image related (reader/ ADF) | **IMG-RDR** | Reader, ADF image related |
| Image related (controller, other general items) | **IMG-MCON** | MN-CON image related, and image related items other than those referred to above. |
| Image quality/ copy speed | **IMG-SPD** | Power down sequence |
| Cleaning | **CLEANING** | Cleaning of charging unit, drum, transfer roller, etc. |
| Environment settings | **ENV-SET** | Temperature, humidity, environmental heater, condensation, log acquisition |
| Paper feed (pickup, delivery) | **FEED-SW** | Stack performance, motor speed adjustment, delivery functions, etc. |
| Noise reduction | **SOUND** | Noise related |
| Network | **NETWORK** | Network settings, IFAX, SEND, E-RDS, etc. |
| Customization | **CUSTOM** | Customization |

T-8-1

# Security features

To prevent unauthorized access to Service Mode, Password set is enabled.

## Related service modes

- COPIER > OPTION > FNC-SW > PSWD-SW (Level1)
  Set password type for transition to service mode.
  <Setting range>
  0: No password (default)
  1: Service engineer
  2: System administrator and Service engineer.

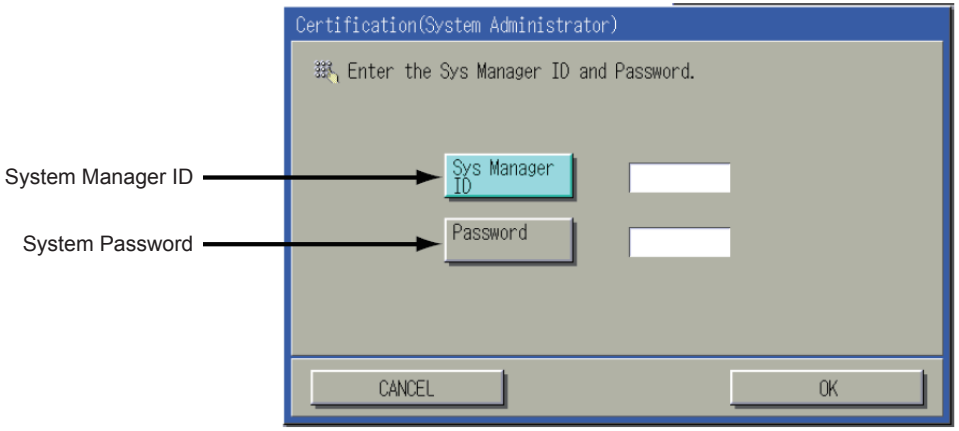
- COPIER > OPTION > FNC-SW > SM-PSWD (Level2)
  Password for service engineer for transition to service mode.
  <Setting range>

| To reinforce the security, change the password from a default. |
|---|

  ******** (eight digit numeral) [default: 11111111]

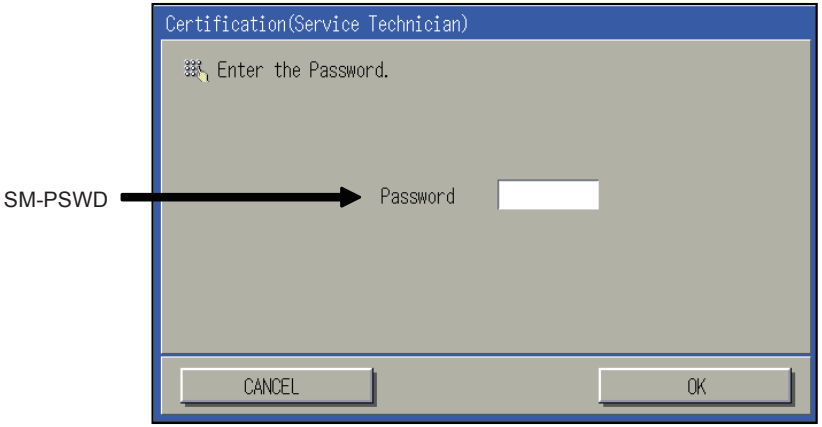
After the above setting, to enter Service Mode, enter password screen will appear.

1) Additional Functions > System Settings > System Manager Settings > enter System Manager ID > enter System Password Settings > press OK button.




F-8-6

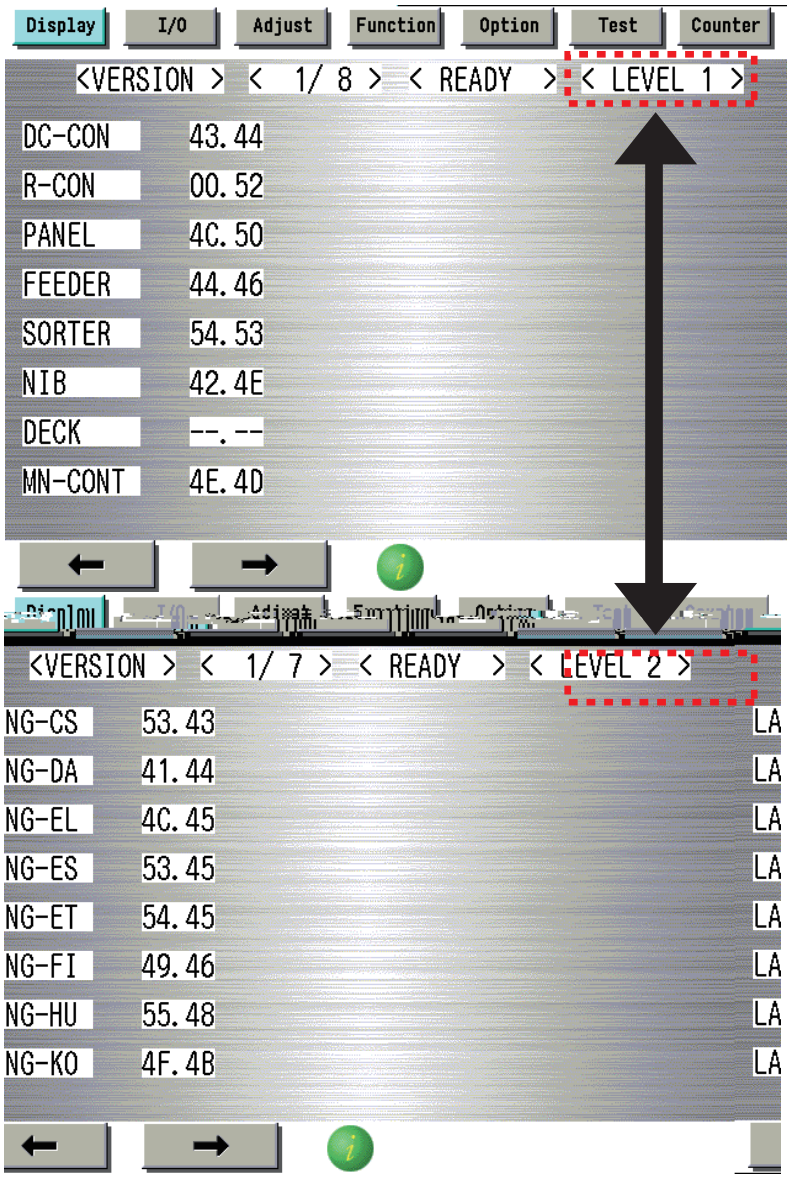
2) After entering the password for service technician (Service mode: COPIER > Option > FNC-SW > SM-PSWD), press OK button.




F-8-7

## Switching Screen (Level 1 < - > 2)

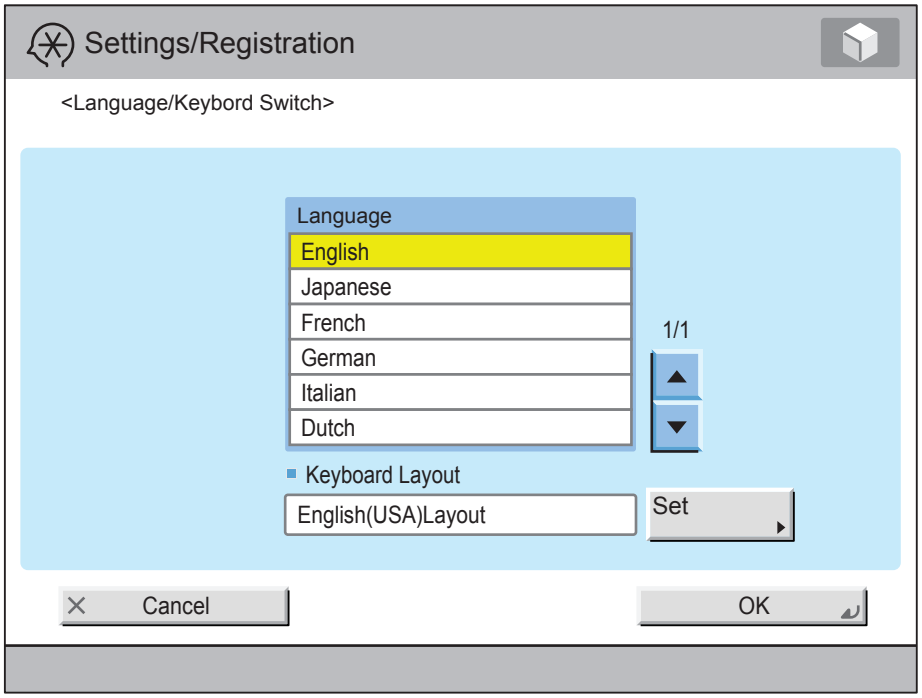
Switching screens between level 1 and 2 has been made easier.
When level 1 screen is displayed, press <LEVEL 1> in the right upper side of the screen, and it will switch to level 2.




F-8-8

## Language switch

The language of the explanatory text displayed in the Service Mode can be switched by performing the below languange switch operation in User Mode
The explanatory text can be displayed by installing the Service Mode Content (SCMNT) in HDD.
Service Mode Content (SCMNT) can be installed and upgraded on SST.
Settings/Registration > Prefernces > Display Settings > Language/Keyboard Switch

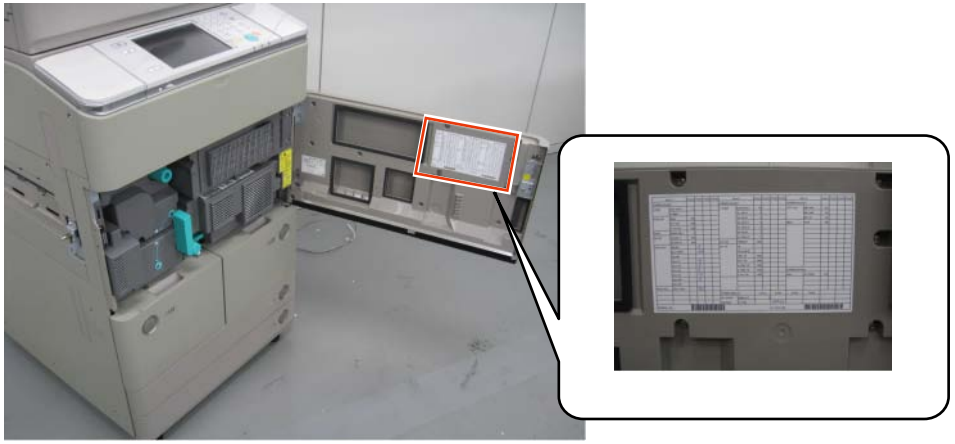



F-8-9

NOTE:
If the Service Mode Content (SMCNT) of the concerned language is not installed, English explanatory text will be displayed.
If English-language Service Mode Content (SMCNT) is not installed either, explanatory text can't be displayed.

## Back-up of service mode

In factory setting, adjustments are made for each machine, and adjustment values are written in the service label.
When you replaced the DC controller PCB, or executed the RAM clear function, adjustment values for ADJUST or OPTION return to default. Therefore, when you made adjustments and changed values of the Service Mode in the field, be sure to write down the changed values in the service label. When there is no relevant field in the service label, write down the values in a blank field.



F-8-10

# COPIER

## DISPLAY

### VERSION

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| DC-CON | | Display of DCON firmware version |
| Lv.1 | Details | To display the firmware version of DC Controller PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| R-CON | | Display of RCON firmware version |
| Lv.1 | Details | To display the firmware version of Reader Controller PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| PANEL | | Dspl of Control Panel CPU PCB ROM ver |
| Lv.1 | Details | To display the ROM version of Control Panel CPU PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ECO | | Display of ECO-ID PCB ROM version |
| Lv.1 | Details | To display the ROM version of ECO-ID PCB. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| FEEDER | | Display of DADF Driver PCB ROM version |
| Lv.1 | Details | To display the firmware version of DADF Driver PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SORTER | | Display of FIN-CONT firmware version |
| Lv.1 | Details | To display the firmware version of Finisher Controller PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| NIB | | Display of network software version |
| Lv.1 | Details | To display the version of the network software. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| PS/PCL | | Display of PS/PCL function version |
| Lv.1 | Details | Display of PS/PCL function version |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | To display the version of UFR Board (PS/PCL function). |
| | Display/adj/set range | 00.01 to 99.99 |
| SDL-STCH | | Dspl of Saddle Sttch Ctrollr PCB ROM ver |
| Lv.1 | Details | To display the ROM version of the Saddle Stitcher Controller PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| DECK | | Display of POD Deck ROM version |
| Lv.1 | Details | To display the ROM version of ROM version. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MN-CONT | | Display of MNCON firmware version |
| Lv.1 | Details | To display the firmware version of Main Controller PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| RIP1 | | Display of RIP1 software version |
| Lv.1 | Details | To display the software version to be downloaded to RIP1 (PS/PCL Expansion Accelerator Board). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| DIAG-DVC | | Dspl of self diagnosis device ROM ver |
| Lv.1 | Details | To display the ROM version of self diagnosis device. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| RUI | | Display of remote UI version |
| Lv.1 | Details | To display the version of remote UI. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| PUNCH | | Display of Finisher Inner Punch Unit |
| Lv.1 | Details | To display the version of Finisher Inner Punch Unit. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| LANG-EN | | Display of English language file version |
| Lv.1 | Details | To display the version of English language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-FR | | Display of French language file version |
| Lv.1 | Details | To display the version of French language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-DE | | Display of German language file version |
| Lv.1 | Details | To display the version of German language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-IT | | Display of Italian language file version |
| Lv.1 | Details | To display the version of Italian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-JP | | Display of Japanese language file ver |
| Lv.1 | Details | To display the version of Japanese language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-CS | | Display of Czech language file version |
| Lv.2 | Details | To display the version of Czech language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-DA | | Display of Danish language file version |
| Lv.2 | Details | To display the version of Danish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-EL | | Display of Greek language file version |
| Lv.2 | Details | To display the version of Greek language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-ES | | Display of Spanish language file version |
| Lv.1 | Details | To display the version of Spanish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| LANG-ET | | Display of Estonian language file ver |
| Lv.2 | Details | To display the version of Estonian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-FI | | Display of Finnish language file version |
| Lv.2 | Details | To display the version of Finnish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-HU | | Display of Hungarian language file ver |
| Lv.2 | Details | To display the version of Hungarian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-KO | | Display of Korean language file version |
| Lv.2 | Details | To display the version of Korean language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-NL | | Display of Dutch language file version |
| Lv.2 | Details | To display the version of Dutch language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-NO | | Display of Norwegian language file ver |
| Lv.2 | Details | To display the version of Norwegian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-PL | | Display of Polish language file version |
| Lv.2 | Details | To display the version of Polish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-PT | | Display of Portuguese language file ver |
| Lv.2 | Details | To display the version of Portuguese language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-RU | | Display of Russian language file version |
| Lv.2 | Details | To display the version of Russian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| LANG-SL | | Display of Slovenian language file ver |
| Lv.2 | Details | To display the version of Slovenian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-SV | | Display of Swedish language file version |
| Lv.2 | Details | To display the version of Swedish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-TW | | Dspl of Chinese language file ver: trad |
| Lv.2 | Details | To display the version of Chinese language file (traditional). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-ZH | | Dspl of Chinese language file ver: smpl |
| Lv.2 | Details | To display the version of Chinese language file (simplified). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-BU | | Display of Bulgarian language file ver |
| Lv.2 | Details | To display the version of Bulgarian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-CR | | Display of Croatian language file ver |
| Lv.2 | Details | To display the version of Croatian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-RM | | Display of Romanian language file ver |
| Lv.2 | Details | To display the version of Romanian language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-SK | | Display of Slovak language file version |
| Lv.2 | Details | To display the version of Slovak language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-TK | | Display of Turkish language file version |
| Lv.2 | Details | To display the version of Turkish language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| MEAP | | Display of MEAP contents version |
| Lv.1 | Details | To display the version of MEAP contents in HDD. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| OCR-CN | | Display of Chinese OCR: simplified |
| Lv.1 | Details | To display the version of Chinese OCR (simplified).<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| OCR-JP | | Display of Japanese OCR version |
| Lv.1 | Details | To display the version of Japanese OCR.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| OCR-KR | | Display of Korean OCR version |
| Lv.1 | Details | To display the version of Korean OCR.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| OCR-TW | | Display of Chinese OCR ver: traditional |
| Lv.1 | Details | To display the version of Chinese OCR (traditional).<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TTS-JA | | Dspl of Japanese voice dictionary ver |
| Lv.1 | Details | To display the version of Japanese voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TTS-EN | | Dspl of English voice dictionary version |
| Lv.1 | Details | To display the version of English voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| TTS-IT | | Dspl of Italian voice dictionary version |
| Lv.1 | Details | To display the version of Italian voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TTS-FR | | Dspl of French voice dictionary version |
| Lv.1 | Details | To display the version of French voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TTS-ES | | Dspl of Spanish voice dictionary version |
| Lv.1 | Details | To display the version of Spanish voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TTS-DE | | Dspl of German voice dictionary version |
| Lv.1 | Details | To display the version of German voice dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| WEB-BRWS | | Display of Web browser version |
| Lv.1 | Details | To display the version of Web browser.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HELP | | Display of easy NAVI version |
| Lv.1 | Details | To display the version of "EASY NAVI" file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Caution | Version should be displayed for EASY NAVI function because it is an external file. |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | EASY NAVI function is equipped as standard instead of the conventional HELP function. |
| LANG-CA | | Display of Catalan language file version |
| Lv.2 | Details | To display the version of Catalan language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| WEBDAV | | Display of WebDAV version |
| Lv.1 | Details | To display the version of "WebDAV" file.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TIMESTMP | | Display of timestamp version |
| Lv.1 | Details | To display the version of "Time Stamp" file.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ASR-JA | | Dspl of Japanese ASR dictionary version |
| Lv.1 | Details | To display the version of Japanese automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |
| ASR-EN | | Dspl of English ASR dictionary version |
| Lv.1 | Details | To display the version of English automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |
| MEDIA-JA | | Dspl of Japanese media information ver |
| Lv.2 | Details | To display the version of Japanese media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-EN | | Dspl of English media information ver |
| Lv.2 | Details | To display the version of English media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-DE | | Dspl of German media information version |
| Lv.2 | Details | To display the version of German media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| MEDIA-IT | | Dspl of Italian media information ver |
| Lv.2 | Details | To display the version of Italian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-FR | | Dspl of French media information version |
| Lv.2 | Details | To display the version of French media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-ZH | | Dspl of Chinese media info ver: smpl |
| Lv.2 | Details | To display the version of Chinese media information (simplified). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-SK | | Dspl of Slovak media information version |
| Lv.2 | Details | To display the version of Slovak media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-TK | | Dspl of Turkish media information ver |
| Lv.2 | Details | To display the version of Turkish media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-CS | | Dspl of Czech media information version |
| Lv.2 | Details | To display the version of Czech media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-EL | | Dspl of Greek media information version |
| Lv.2 | Details | To display the version of Greek media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-ES | | Dspl of Spanish media information ver |
| Lv.2 | Details | To display the version of Spanish media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-ET | | Dspl of Estonian media information ver |
| Lv.2 | Details | To display the version of Estonian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| MEDIA-FI | | Dspl of Finnish media information ver |
| Lv.2 | Details | To display the version of Finnish media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-HU | | Dspl of Hungarian media information ver |
| Lv.2 | Details | To display the version of Hungarian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-KO | | Dspl of Korean media information version |
| Lv.2 | Details | To display the version of Korean media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-NL | | Dspl of Dutch media information version |
| Lv.2 | Details | To display the version of Dutch media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-NO | | Dspl of Norwegian media information ver |
| Lv.2 | Details | To display the version of Norwegian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-PL | | Dspl of Polish media information version |
| Lv.2 | Details | To display the version of Polish media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-PT | | Dspl of Portuguese media information ver |
| Lv.2 | Details | To display the version of Portuguese media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-RU | | Dspl of Russian media information ver |
| Lv.2 | Details | To display the version of Russian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-SL | | Dspl of Slovenian media information ver |
| Lv.2 | Details | To display the version of Slovenian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| MEDIA-SV | | Dspl of Swedish media information ver |
| Lv.2 | Details | To display the version of Swedish media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-TW | | Dspl of Chinese media info version:trad |
| Lv.2 | Details | To display the version of Chinese media information (traditional). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-BU | | Dspl of Bulgarian media information ver |
| Lv.2 | Details | To display the version of Bulgarian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-CR | | Dspl of Croatian media information ver |
| Lv.2 | Details | To display the version of Croatian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-RM | | Dspl of Romanian media information ver |
| Lv.2 | Details | To display the version of Romanian media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MEDIA-CA | | Dspl of Catalan media information ver |
| Lv.2 | Details | To display the version of Catalan media information. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| FAX1 | | Display of 1-line FAX PCB ROM version |
| Lv.1 | Details | To display the ROM version of 1-line FAX PCB.<br>Nothing is displayed if the PCB is not connected. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | ASCII character string (21 digits) |
| FAX2/3/4 | | Dspl of 2/3/4-line FAX PCB ROM version |
| Lv.1 | Details | To display the ROM version of 2/3/4-line FAX PCB.<br>"NULL" is displayed if the PCB is not connected. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | ASCII character string (21 digits) |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| IOCS | | Display of BIOS version |
| Lv.1 | Details | To display the BIOS version. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SYSTEM | | Dspl Linux kernel/tool/driver/file ver |
| Lv.1 | Details | To display the version of Linux kernel/tool/driver/file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ROOT | | Display of ROOT version |
| Lv.1 | Details | To display the ROOT version. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TRIM | | Display of Trimmer ROM version |
| Lv.1 | Details | To display the ROM version of Trimmer. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| FOLD | | Dspl of Paper Folding Unit ROM version |
| Lv.1 | Details | To display the ROM version of Paper Folding Unit. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INS | | Display of Inserter ROM version |
| Lv.1 | Details | To display the ROM version of Inserter. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INS-IF | | Dspl of Inserter Relay PCB ROM version |
| Lv.1 | Details | To display the ROM version of Inserter Relay PCB. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| PUNCH-IF | | Dspl of Multi-hole Puncher IFU ROM ver |
| Lv.1 | Details | To display the ROM version of Interface Unit for Multi-hole Puncher. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| S-LNG-JP | | Dspl of service mode Japanese file ver |
| Lv.1 | Details | To display the version of Japanese language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| S-LNG-EN | | Dspl of service mode English file ver |
| Lv.1 | Details | To display the version of English language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| S-LNG-FR | | Dspl of service mode French file version |
| Lv.1 | Details | To display the version of French language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| S-LNG-IT | | Dspl of service mode Italian file ver |
| Lv.1 | Details | To display the version of Italian language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| S-LNG-GR | | Dspl of service mode German file version |
| Lv.1 | Details | To display the version of German language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| S-LNG-SP | | Dspl of service mode Spanish file ver |
| Lv.1 | Details | To display the version of Spanish language file in service mode. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| UI-RES | | Display of UI resource file version |
| Lv.1 | Details | To display the UIRES version.<br>UIRES consists of the resource file which is necessary to display the native screen (top screen and software keyboard screen) of UI. |
| | Use case | When checking the version at the time of downloading UIRES to MFP |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-AP | | Display of COPY (JAVA UI) version |
| Lv.1 | Details | To display the version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-AP | | Display of SEND (JAVA UI) version |
| Lv.1 | Details | To display the version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| BOX-AP | | Display of BOX (JAVA UI) version |
| Lv.1 | Details | To display the version of BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| MOBPR-AP | | [Not used] |
| RPTL-AP | | Display of RUI portal version |
| Lv.1 | Details | To display the RUI portal version. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-AP | | Dspl of useful feat introduce appli ver |
| Lv.1 | Details | To display the version of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| TSP-JLK | | Dspl of PCAM Option Board version |
| Lv.1 | Details | To display the version of the PCAM Option Board. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-FR | | Dspl of COPY appli French file version |
| Lv.1 | Details | To display the French language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-IT | | Dspl of COPY appli Italian file version |
| Lv.1 | Details | To display the Italian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-DE | | Dspl of COPY appli German file version |
| Lv.1 | Details | To display the German language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-ES | | Dspl of COPY appli Spanish file version |
| Lv.1 | Details | To display the Spanish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| COPY-ZH | | Dspl COPY appli Chinese file ver: smpl |
| Lv.2 | Details | To display the simplified Chinese language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-TW | | Dspl of COPY appli Chinese file ver:trad |
| Lv.2 | Details | To display the traditional Chinese language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-KO | | Dspl of COPY appli Korean file version |
| Lv.2 | Details | To display the Korean language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-CS | | Dspl of COPY appli Czech file version |
| Lv.2 | Details | To display the Czech language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-DA | | Dspl of COPY appli Danish file version |
| Lv.2 | Details | To display the Danish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-EL | | Dspl of COPY appli Greek file version |
| Lv.2 | Details | To display the Greek language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-ET | | Dspl of COPY appli Estonian file version |
| Lv.2 | Details | To display the Estonian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| COPY-FI | | Dspl of COPY appli Finnish file version |
| Lv.2 | Details | To display the Finnish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-HU | | Dspl of COPY appli Hungarian file ver |
| Lv.2 | Details | To display the Hungarian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-NL | | Dspl of COPY appli Dutch file version |
| Lv.2 | Details | To display the Dutch language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-NO | | Dspl of COPY appli Norwegian file ver |
| Lv.2 | Details | To display the Norwegian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-PL | | Dspl of COPY appli Polish file version |
| Lv.2 | Details | To display the Polish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-PT | | Dspl of COPY appli Portuguese file ver |
| Lv.2 | Details | To display the Portuguese language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-RU | | Dspl of COPY appli Russian file version |
| Lv.2 | Details | To display the Russian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| COPY-SL | | Dspl of COPY appli Slovenian file ver |
| Lv.2 | Details | To display the Slovenian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-SV | | Dspl of COPY appli Swedish file version |
| Lv.2 | Details | To display the Swedish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-ID | | Dspl of COPY appli Indonesian file ver |
| Lv.2 | Details | To display the Indonesian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-BU | | Dspl of COPY appli Bulgarian file ver |
| Lv.2 | Details | To display the Bulgarian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-CR | | Dspl of COPY appli Croatian file version |
| Lv.2 | Details | To display the Croatian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-RM | | Dspl of COPY appli Romanian file version |
| Lv.2 | Details | To display the Romanian language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-SK | | Dspl of COPY appli Slovak file version |
| Lv.2 | Details | To display the Slovak language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| COPY-TK | | Dspl of COPY appli Turkish file version |
| Lv.2 | Details | To display the Turkish language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-CA | | Dspl of COPY appli Catalan file version |
| Lv.2 | Details | To display the Catalan language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-TH | | Dspl of COPY appli Thai file version |
| Lv.2 | Details | To display the Thai language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| COPY-VN | | Dspl of COPY appli Vietnamese file ver |
| Lv.2 | Details | To display the Vietnamese language file version of COPY application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-FR | | Dspl of SEND appli French file version |
| Lv.1 | Details | To display the French language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-IT | | Dspl of SEND appli Italian file version |
| Lv.1 | Details | To display the Italian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-DE | | Dspl of SEND appli German file version |
| Lv.1 | Details | To display the German language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| SEND-ES | | Dspl of SEND appli Spanish file version |
| Lv.1 | Details | To display the Spanish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-ZH | | Dspl SEND appli Chinese file ver: smpl |
| Lv.2 | Details | To display the simplified Chinese language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-TW | | Dspl of SEND appli Chinese file ver:trad |
| Lv.2 | Details | To display the traditional Chinese language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-KO | | Dspl of SEND appli Korean file version |
| Lv.2 | Details | To display the Korean language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-CS | | Dspl of SEND appli Czech file version |
| Lv.2 | Details | To display the Czech language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-DA | | Dspl of SEND appli Danish file version |
| Lv.2 | Details | To display the Danish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-EL | | Dspl of SEND appli Greek file version |
| Lv.2 | Details | To display the Greek language file version of the SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| SEND-ET | | Dspl of SEND appli Estonian file version |
| Lv.2 | Details | To display the Estonian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-FI | | Dspl of SEND appli Finnish file version |
| Lv.2 | Details | To display the Finnish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-HU | | Dspl of SEND appli Hungarian file ver |
| Lv.2 | Details | To display the Hungarian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-NL | | Dspl of SEND appli Dutch file version |
| Lv.2 | Details | To display the Dutch language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-NO | | Dspl of SEND appli Norwegian file ver |
| Lv.2 | Details | To display the Norwegian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-PL | | Dspl of SEND appli Polish file version |
| Lv.2 | Details | To display the Polish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-PT | | Dspl of SEND appli Portuguese file ver |
| Lv.2 | Details | To display the Portuguese language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| SEND-RU | | Dspl of SEND appli Russian file version |
| Lv.2 | Details | To display the Russian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-SL | | Dspl of SEND appli Slovenian file ver |
| Lv.2 | Details | To display the Slovenian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-SV | | Dspl of SEND appli Swedish file version |
| Lv.2 | Details | To display the Swedish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-ID | | Dspl of SEND appli Indonesian file ver |
| Lv.2 | Details | To display the Indonesian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-BU | | Dspl of SEND appli Bulgarian file ver |
| Lv.2 | Details | To display the Bulgarian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-CR | | Dspl of SEND appli Croatian file version |
| Lv.2 | Details | To display the Croatian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-RM | | Dspl of SEND appli Romanian file version |
| Lv.2 | Details | To display the Romanian language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| SEND-SK | | Dspl of SEND appli Slovak file version |
| Lv.2 | Details | To display the Slovak language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-TK | | Dspl of SEND appli Turkish file version |
| Lv.2 | Details | To display the Turkish language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-CA | | Dspl of SEND appli Catalan file version |
| Lv.2 | Details | To display the Catalan language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-TH | | Dspl of SEND appli Thai file version |
| Lv.2 | Details | To display the Thai language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| SEND-VN | | Dspl of SEND appli Vietnamese file ver |
| Lv.2 | Details | To display the Vietnamese language file version of SEND application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-FR | | Dspl of usful feat intro French file ver |
| Lv.1 | Details | To display the version of French language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-IT | | Dspl useful feat intro Italian file ver |
| Lv.1 | Details | To display the version of Italian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| INTRO-DE | | Dspl of usful feat intro German file ver |
| Lv.1 | Details | To display the version of German language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-ES | | Dspl useful feat intro Spanish file ver |
| Lv.1 | Details | To display the version of Spanish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-ZH | | Useful feat intro Chinese file ver: smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-TW | | Useful feat intro Chinese file ver: trad |
| Lv.2 | Details | To display the version of traditional Chinese language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-KO | | Dspl of usful feat intro Korean file ver |
| Lv.2 | Details | To display the version of Korean language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-CS | | Dspl of useful feat intro Czech file ver |
| Lv.2 | Details | To display the version of Czech language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-DA | | Dspl of usful feat intro Danish file ver |
| Lv.2 | Details | To display the version of Danish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| INTRO-EL | | Dspl of useful feat intro Greek file ver |
| Lv.2 | Details | To display the version of Greek language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-ET | | Dspl useful feat intro Estonian file ver |
| Lv.2 | Details | To display the version of Estonian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-FI | | Dspl useful feat intro Finnish file ver |
| Lv.2 | Details | To display the version of Finnish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-HU | | Dspl usful feat intro Hungarian file ver |
| Lv.2 | Details | To display the version of Hungarian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-NL | | Dspl of useful feat intro Dutch file ver |
| Lv.2 | Details | To display the version of Dutch language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-NO | | Dspl usful feat intro Norwegian file ver |
| Lv.2 | Details | To display the version of Norwegian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-PL | | Dspl of usful feat intro Polish file ver |
| Lv.2 | Details | To display the version of Polish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| INTRO-PT | | Dspl usful feat intro Portuguese filever |
| Lv.2 | Details | To display the version of Portuguese language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-RU | | Dspl useful feat intro Russian file ver |
| Lv.2 | Details | To display the version of Russian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-SL | | Dspl usful feat intro Slovenian file ver |
| Lv.2 | Details | To display the version of Slovenian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-SV | | Dspl useful feat intro Swedish file ver |
| Lv.2 | Details | To display the version of Swedish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-ID | | Dspl of useful feat intro Indon file ver |
| Lv.2 | Details | To display the version of Indonesian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-BU | | Dspl usful feat intro Bulgarian file ver |
| Lv.2 | Details | To display the version of Bulgarian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-CR | | Dspl useful feat intro Croatian file ver |
| Lv.2 | Details | To display the version of Croatian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| INTRO-RM | | Dspl useful feat intro Romanian file ver |
| Lv.2 | Details | To display the version of Romanian language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-SK | | Dspl of usful feat intro Slovak file ver |
| Lv.2 | Details | To display the version of Slovak language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-TK | | Dspl useful feat intro Turkish file ver |
| Lv.2 | Details | To display the version of Turkish language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-CA | | Dspl useful feat intro Catalan file ver |
| Lv.2 | Details | To display the version of Catalan language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-TH | | Dspl useful feat intro Thai file version |
| Lv.2 | Details | To display the version of Thai language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| INTRO-VN | | Useful feat intro Vietnamese file ver |
| Lv.2 | Details | To display the version of Vietnamese language file of Introduction to Useful Features application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-FR | | Dspl of custom menu French file version |
| Lv.1 | Details | To display the version of French language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| CSTMN-IT | | Dspl of custom menu Italian file version |
| Lv.1 | Details | To display the version of Italian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-DE | | Dspl of custom menu German file version |
| Lv.1 | Details | To display the version of German language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-ES | | Dspl of custom menu Spanish file version |
| Lv.1 | Details | To display the version of Spanish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-ZH | | Dspl custom menu Chinese file ver: smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-TW | | Dspl custom menu Chinese file ver:trad |
| Lv.2 | Details | To display the version of traditional Chinese language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-KO | | Dspl of custom menu Korean file version |
| Lv.2 | Details | To display the version of Korean language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-CS | | Dspl of custom menu Czech file version |
| Lv.2 | Details | To display the version of Czech language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| CSTMN-DA | | Dspl of custom menu Danish file version |
| Lv.2 | Details | To display the version of Danish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-EL | | Dspl of custom menu Greek file version |
| Lv.2 | Details | To display the version of Greek language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-ET | | Dspl of custom menu Estonian file ver |
| Lv.2 | Details | To display the version of Estonian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-FI | | Dspl of custom menu Finnish file version |
| Lv.2 | Details | To display the version of Finnish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-HU | | Dspl of custom menu Hungarian file ver |
| Lv.2 | Details | To display the version of Hungarian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-NL | | Dspl of custom menu Dutch file version |
| Lv.2 | Details | To display the version of Dutch language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-NO | | Dspl of custom menu Norwegian file ver |
| Lv.2 | Details | To display the version of Norwegian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| CSTMN-PL | | Dspl of custom menu Polish file version |
| Lv.2 | Details | To display the version of Polish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-PT | | Dspl of custom menu Portuguese file ver |
| Lv.2 | Details | To display the version of Portuguese language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-RU | | Dspl of custom menu Russian file version |
| Lv.2 | Details | To display the version of Russian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-SL | | Dspl of custom menu Slovenian file ver |
| Lv.2 | Details | To display the version of Slovenian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-SV | | Dspl of custom menu Swedish file version |
| Lv.2 | Details | To display the version of Swedish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-ID | | Dspl of custom menu Indonesian file ver |
| Lv.2 | Details | To display the version of Indonesian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-BU | | Dspl of custom menu Bulgarian file ver |
| Lv.2 | Details | To display the version of Bulgarian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| CSTMN-CR | | Dspl of custom menu Croatian file ver |
| Lv.2 | Details | To display the version of Croatian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-RM | | Dspl of custom menu Romanian file ver |
| Lv.2 | Details | To display the version of Romanian language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-SK | | Dspl of custom menu Slovak file version |
| Lv.2 | Details | To display the version of Slovak language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-TK | | Dspl of custom menu Turkish file version |
| Lv.2 | Details | To display the version of Turkish language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-CA | | Dspl of custom menu Catalan file version |
| Lv.2 | Details | To display the version of Catalan language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-TH | | Dspl of custom menu Thai file version |
| Lv.2 | Details | To display the version of Thai language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| CSTMN-VN | | Dspl of custom menu Vietnamese file ver |
| Lv.2 | Details | To display the version of Vietnamese language file for custom menu application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ACSBT-FR | | Dspl of accessibility French file ver |
| Lv.1 | Details | To display the version of French language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-IT | | Dspl of accessibility Italian file ver |
| Lv.1 | Details | To display the version of Italian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-DE | | Dspl of accessibility German file ver |
| Lv.1 | Details | To display the version of German language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-ES | | Dspl of accessibility Spanish file ver |
| Lv.1 | Details | To display the version of Spanish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-ZH | | Dspl Accessibility Chinese file ver:smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-TW | | Dspl accessibility Chinese file ver:trad |
| Lv.2 | Details | To display the version of traditional Chinese language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-KO | | Dspl of accessibility Korean file ver |
| Lv.2 | Details | To display the version of Korean language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ACSBT-CS | | Dspl of accessibility Czech file version |
| Lv.2 | Details | To display the version of Czech language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-DA | | Dspl of accessibility Danish file ver |
| Lv.2 | Details | To display the version of Danish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-EL | | Dspl of accessibility Greek file version |
| Lv.2 | Details | To display the version of Greek language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-ET | | Dspl of accessibility Estonian file ver |
| Lv.2 | Details | To display the version of Estonian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-FI | | Dspl of accessibility Finnish file ver |
| Lv.2 | Details | To display the version of Finnish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-HU | | Dspl of accessibility Hungarian file ver |
| Lv.2 | Details | To display the version of Hungarian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-NL | | Dspl of accessibility Dutch file version |
| Lv.2 | Details | To display the version of Dutch language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ACSBT-NO | | Dspl of accessibility Norwegian file ver |
| Lv.2 | Details | To display the version of Norwegian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-PL | | Dspl of accessibility Polish file ver |
| Lv.2 | Details | To display the version of Polish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-PT | | Dspl accessibility Portuguese file ver |
| Lv.2 | Details | To display the version of Portuguese language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-RU | | Dspl of accessibility Russian file ver |
| Lv.2 | Details | To display the version of Russian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-SL | | Dspl of accessibility Slovenian file ver |
| Lv.2 | Details | To display the version of Slovenian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-SV | | Dspl of accessibility Swedish file ver |
| Lv.2 | Details | To display the version of Swedish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-ID | | Dspl accessibility Indonesian file ver |
| Lv.2 | Details | To display the version of Indonesian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ACSBT-BU | | Dspl of accessibility Bulgarian file ver |
| Lv.2 | Details | To display the version of Bulgarian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-CR | | Dspl of accessibility Croatian file ver |
| Lv.2 | Details | To display the version of Croatian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-RM | | Dspl of accessibility Romanian file ver |
| Lv.2 | Details | To display the version of Romanian language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-SK | | Dspl accessibility Slovak file version |
| Lv.2 | Details | To display the version of Slovak language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-TK | | Dspl of accessibility Turkish file ver |
| Lv.2 | Details | To display the version of Turkish language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-CA | | Dspl of accessibility Catalan file ver |
| Lv.2 | Details | To display the version of Catalan language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ACSBT-TH | | Dspl of accessibility Thai file version |
| Lv.2 | Details | To display the version of Thai language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ACSBT-VN | | Dspl accessibility Vietnamese file ver |
| Lv.2 | Details | To display the version of Vietnamese language file for Accessibility application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-FR | | Display of ERS French file version |
| Lv.1 | Details | To display the version of French language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-IT | | Display of ERS Italian file version |
| Lv.1 | Details | To display the version of Italian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-DE | | Display of ERS German file version |
| Lv.1 | Details | To display the version of German language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-ES | | Display of ERS Spanish file version |
| Lv.1 | Details | To display the version of Spanish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-ZH | | Display of ERS Chinese file ver:smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-TW | | Display of ERS Chinese file ver:trad |
| Lv.2 | Details | To display the version of traditional Chinese language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-KO | | Display of ERS Korean file version |
| Lv.2 | Details | To display the version of Korean language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ERS-CS | | Display of ERS Czech file version |
| Lv.2 | Details | To display the version of Czech language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-DA | | Display of ERS Danish file version |
| Lv.2 | Details | To display the version of Danish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-EL | | Display of ERS Greek file version |
| Lv.2 | Details | To display the version of Greek language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-ET | | Display of ERS Estonian file version |
| Lv.2 | Details | To display the version of Estonian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-FI | | Display of ERS Finnish file version |
| Lv.2 | Details | To display the version of Finnish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-HU | | Display of ERS Hungarian file version |
| Lv.2 | Details | To display the version of Hungarian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-NL | | Display of ERS Dutch file version |
| Lv.2 | Details | To display the version of Dutch language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-NO | | Display of ERS Norwegian file version |
| Lv.2 | Details | To display the version of Norwegian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ERS-PL | | Display of ERS Polish file version |
| Lv.2 | Details | To display the version of Polish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-PT | | Display of ERS Portuguese file ver |
| Lv.2 | Details | To display the version of Portuguese language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-RU | | Display of ERS Russian file version |
| Lv.2 | Details | To display the version of Russian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-SL | | Display of ERS Slovenian file version |
| Lv.2 | Details | To display the version of Slovenian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-SV | | Display of ERS Swedish file version |
| Lv.2 | Details | To display the version of Swedish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-ID | | Display of ERS Indonesian file ver |
| Lv.2 | Details | To display the version of Indonesian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-BU | | Display of ERS Bulgarian file version |
| Lv.2 | Details | To display the version of Bulgarian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-CR | | Display of ERS Croatian file version |
| Lv.2 | Details | To display the version of Croatian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ERS-RM | | Display of ERS Romanian file version |
| Lv.2 | Details | To display the version of Romanian language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-SK | | Display of ERS Slovak file version |
| Lv.2 | Details | To display the version of Slovak language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-TK | | Display of ERS Turkish file version |
| Lv.2 | Details | To display the version of Turkish language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-CA | | Display of ERS Catalan file version |
| Lv.2 | Details | To display the version of Catalan language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-TH | | Display of ERS Thai file version |
| Lv.2 | Details | To display the version of Thai language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ERS-VN | | Display of ERS Vietnamese file version |
| Lv.2 | Details | To display the version of Vietnamese language file for ERS application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-FR | | Display of UAC French file version |
| Lv.1 | Details | To display the version of French language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-IT | | Display of UAC Italian file version |
| Lv.1 | Details | To display the version of Italian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-DE | | Display of UAC German file version |
| Lv.1 | Details | To display the version of German language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| NLS-ES | | Display of UAC Spanish file version |
| Lv.1 | Details | To display the version of Spanish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-ZH | | Display of UAC Chinese file ver:smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-TW | | Display of UAC Chinese file ver:trad |
| Lv.2 | Details | To display the version of traditional Chinese language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-KO | | Display of UAC Korean file version |
| Lv.2 | Details | To display the version of Korean language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-CS | | Display of UAC Czech file version |
| Lv.2 | Details | To display the version of Czech language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-DA | | Display of UAC Danish file version |
| Lv.2 | Details | To display the version of Danish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-EL | | Display of UAC Greek file version |
| Lv.2 | Details | To display the version of Greek language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-ET | | Display of UAC Estonian file version |
| Lv.2 | Details | To display the version of Estonian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-FI | | Display of UAC Finnish file version |
| Lv.2 | Details | To display the version of Finnish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-HU | | Display of UAC Hungarian file version |
| Lv.2 | Details | To display the version of Hungarian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| NLS-NL | | Display of UAC Dutch file version |
| Lv.2 | Details | To display the version of Dutch language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-NO | | Display of UAC Norwegian file version |
| Lv.2 | Details | To display the version of Norwegian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-PL | | Display of UAC Polish file version |
| Lv.2 | Details | To display the version of Polish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-PT | | Display of UAC Portuguese file ver |
| Lv.2 | Details | To display the version of Portuguese language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-RU | | Display of UAC Russian file version |
| Lv.2 | Details | To display the version of Russian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-SL | | Display of UAC Slovenian file version |
| Lv.2 | Details | To display the version of Slovenian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-SV | | Display of UAC Swedish file version |
| Lv.2 | Details | To display the version of Swedish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-ID | | Display of UAC Indonesian file ver |
| Lv.2 | Details | To display the version of Indonesian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-BU | | Display of UAC Bulgarian file version |
| Lv.2 | Details | To display the version of Bulgarian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-CR | | Display of UAC Croatian file version |
| Lv.2 | Details | To display the version of Croatian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| NLS-RM | | Display of UAC Romanian file version |
| Lv.2 | Details | To display the version of Romanian language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-SK | | Display of UAC Slovak file version |
| Lv.2 | Details | To display the version of Slovak language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-TK | | Display of UAC Turkish file version |
| Lv.2 | Details | To display the version of Turkish language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-CA | | Display of UAC Catalan file version |
| Lv.2 | Details | To display the version of Catalan language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| LS-ROM-V | | Dspl of Laser Scanner Unit EEPROM ver |
| Lv.2 | Details | To display the EEPROM version of Laser Scanner Unit. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 001 to 999 |
| LS-UNT-V | | Dspl of Laser Scanner Unit version |
| Lv.2 | Details | To display the version of Laser Scanner Unit. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 001 to 999 |
| LS-SRL | | Dspl of serial No. of Laser Scanner Unit |
| Lv.2 | Details | To display the serial number of Laser Scanner Unit. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00000001 to 99999999 |
| BCT | | Display of self diagnosis tool version |
| Lv.1 | Details | To display the version of self diagnosis tool. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| ASR-ES | | Dis of Spanish ASR dictionary version |
| Lv.1 | Details | To display the version of Spanish automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| ASR-FR | | Dis of French ASR dictionary version |
| Lv.1 | Details | To display the version of French automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |
| ASR-IT | | Dis of Italian ASR dictionary version |
| Lv.1 | Details | To display the version of Italian automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |
| ASR-DE | | Dis of German ASR dictionary version |
| Lv.1 | Details | To display the version of German automatic speech recognition dictionary.<br>"--.--" is displayed when no file is found. |
| | Use case | When upgrading the firmware |
| | Display/adj/set range | 00.01 to 99.99 |
| | Supplement/memo | ASR: Automatic Speech Recognition (voice recognition) |
| LANG-TH | | Display of Thai language file version |
| Lv.2 | Details | To display the version of Thai language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| LANG-VN | | Display of Vietnamese language file ver |
| Lv.2 | Details | To display the version of Vietnamese language file. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-FR | | Display of BOX appli French file version |
| Lv.1 | Details | To display the version of French language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-IT | | Dspl of BOX appli Italian file version |
| Lv.1 | Details | To display the version of Italian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| BOX-DE | | Display of BOX appli German file version |
| Lv.1 | Details | To display the version of German language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-ES | | Dspl of BOX appli Spanish file version |
| Lv.1 | Details | To display the version of Spanish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-ZH | | Dspl of BOX appli Chinese file ver:smpl |
| Lv.2 | Details | To display the version of simplified Chinese language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-TW | | Dspl of BOX appli Chinese file ver:trad |
| Lv.2 | Details | To display the version of traditional Chinese language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-KO | | Display of BOX appli Korean file version |
| Lv.2 | Details | To display the version of Korean language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-CS | | Display of BOX appli Czech file version |
| Lv.2 | Details | To display the version of Czech language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-DA | | Display of BOX appli Danish file version |
| Lv.2 | Details | To display the version of Danish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| BOX-EL | | Display of BOX appli Greek file version |
| Lv.2 | Details | To display the version of Greek language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-ET | | Dspl of BOX appli Estonian file version |
| Lv.2 | Details | To display the version of Estonian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-FI | | Dspl of BOX appli Finnish file version |
| Lv.2 | Details | To display the version of Finnish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-HU | | Dspl of BOX appli Hungarian file version |
| Lv.2 | Details | To display the version of Hungarian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-NL | | Display of BOX appli Dutch file version |
| Lv.2 | Details | To display the version of Dutch language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-NO | | Dspl of BOX appli Norwegian file version |
| Lv.2 | Details | To display the version of Norwegian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-PL | | Display of BOX appli Polish file version |
| Lv.2 | Details | To display the version of Polish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| BOX-PT | | Display of BOX appli Portuguese file ver |
| Lv.2 | Details | To display the version of Portuguese language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-RU | | Dspl of BOX appli Russian file version |
| Lv.2 | Details | To display the version of Russian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-SL | | Dspl of BOX appli Slovenian file version |
| Lv.2 | Details | To display the version of Slovenian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-SV | | Dspl of BOX appli Swedish file version |
| Lv.2 | Details | To display the version of Swedish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-ID | | Display of BOX appli Indonesian file ver |
| Lv.2 | Details | To display the version of Indonesian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-BU | | Dspl of BOX appli Bulgarian file version |
| Lv.2 | Details | To display the version of Bulgarian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-CR | | Dspl of BOX appli Croatian file version |
| Lv.2 | Details | To display the version of Croatian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| BOX-RM | | Dspl of BOX appli Romanian file version |
| Lv.2 | Details | To display the version of Romanian language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-SK | | Display of BOX appli Slovak file version |
| Lv.2 | Details | To display the version of Slovak language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-TK | | Dspl of BOX appli Turkish file version |
| Lv.2 | Details | To display the version of Turkish language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-CA | | Dspl of BOX appli Catalan file version |
| Lv.2 | Details | To display the version of Catalan language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-TH | | Dspl of BOX appli Thai file version |
| Lv.2 | Details | To display the version of Thai language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| BOX-VN | | Dspl of BOX appli Vietnamese file ver |
| Lv.2 | Details | To display the version of Vietnamese language file for BOX application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-AP | | Display of job hold application version |
| Lv.1 | Details | To display the version of the job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| HOLD-FR | | Dspl of job hold French file version |
| Lv.1 | Details | To display the French language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-IT | | Dspl of job hold Italian file version |
| Lv.1 | Details | To display the Italian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-DE | | Dspl of job hold German file version |
| Lv.1 | Details | To display the German language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-ES | | Dspl of job hold Spanish file version |
| Lv.1 | Details | To display the Spanish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-ZH | | Job hold Chinese file version: smpl |
| Lv.2 | Details | To display the simplified Chinese language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-TW | | Job hold Chinese file version: trad |
| Lv.2 | Details | To display the traditional Chinese language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-KO | | Dspl of job hold Korean file version |
| Lv.2 | Details | To display the Korean language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| HOLD-CS | | Dspl of job hold Czech file version |
| Lv.2 | Details | To display the Czech language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-DA | | Dspl of job hold Danish file version |
| Lv.2 | Details | To display the Danish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-EL | | Dspl of job hold Greek file version |
| Lv.2 | Details | To display the Greek language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-ET | | Dspl of job hold Estonian file version |
| Lv.2 | Details | To display the Estonian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-FI | | Dspl of job hold Finnish file version |
| Lv.2 | Details | To display the Finnish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-HU | | Dspl of job hold Hungarian file version |
| Lv.2 | Details | To display the Hungarian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-NL | | Dspl of job hold Dutch file version |
| Lv.2 | Details | To display the Dutch language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| HOLD-NO | | Dspl of job hold Norwegian file version |
| Lv.2 | Details | To display the Norwegian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-PL | | Dspl of job hold Polish file version |
| Lv.2 | Details | To display the Polish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-PT | | Dspl of job hold Portuguese file version |
| Lv.2 | Details | To display the Portuguese language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-RU | | Dspl of job hold Russian file version |
| Lv.2 | Details | To display the Russian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-SL | | Dspl of job hold Slovenian file version |
| Lv.2 | Details | To display the Slovenian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-SV | | Dspl of job hold Swedish file version |
| Lv.2 | Details | To display the Swedish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-ID | | Dspl of job hold Indonesian file version |
| Lv.2 | Details | To display the Indonesian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| HOLD-BU | | Dspl of job hold Bulgarian file version |
| Lv.2 | Details | To display the Bulgarian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-CR | | Dspl of job hold Croatian file version |
| Lv.2 | Details | To display the Croatian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-RM | | Dspl of job hold Romanian file version |
| Lv.2 | Details | To display the Romanian language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-SK | | Dspl of job hold Slovak file version |
| Lv.2 | Details | To display the Slovak language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-TK | | Dspl of job hold Turkish file version |
| Lv.2 | Details | To display the Turkish language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| HOLD-CA | | Dspl of job hold Catalan file version |
| Lv.2 | Details | To display the Catalan language file version of job hold application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| WSDS-AP | | Display of WSD-SCAN (JAVA UI) version |
| Lv.1 | Details | To display the version of WSD-SCAN application (JAVA UI). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

| COPIER > DISPLAY > VERSION | | |
|---|---|---|
| NLS-TH | | Display of UAC Thai file version |
| Lv.2 | Details | To display the version of Thai language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| NLS-VN | | Display of UAC Vietnamese file version |
| Lv.2 | Details | To display the version of Vietnamese language file for UAC application. |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |

T-8-2

## USER

| COPIER > DISPLAY > USER | | |
|---|---|---|
| SPDTYPE | | Dspl of Ctrollr Board engine speed type |
| Lv.1 | Details | To display the engine speed type (ppm) of Controller Board. |
| | Use case | When checking the engine speed type of Controller Board |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 55 to 75 |
| BRWS-STS | | Display of service browser ON/OFF |
| Lv.1 | Details | To display whether the service browser can be used.<br>If the value is 1, [Service Browser] button is displayed on the service mode initial screen.<br>The value of BRWS-STS switches whenever COPIER> FUNCTION> INSTALL> BRWS-ACT is executed, but ON/OFF of service browser is enabled after reboot. If the service browser does not start even though the value of BRWS-STS is 1, turn OFF/ON the main power switch. |
| | Use case | When checking the operation mode of the service browser |
| | Caution | The value of BRWS-STS is linked with COPIER> FUNCTION> INSTALL> BRWS-ACT, but the service browser cannot start even though 1 is displayed unless the main power switch is turned OFF/ON. |
| | Display/adj/set range | 1 to 2<br>1: ON (Available), 2: OFF (Not available) |
| | Related service mode | COPIER> FUNCTION> INSTALL> BRWS-ACT |

T-8-3

## ACC-STS

| COPIER > DISPLAY > ACC-STS | | |
|---|---|---|
| FEEDER | | Display of DADF connection state |
| Lv.1 | Details | To display the connecting state of DADF. |
| | Use case | When checking the connection between the machine and DADF |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not connected, 1: Connected |
| SORTER | | Connect state of Finisher-related option |
| Lv.1 | Details | To display the connecting state of Finisher-related options. |
| | Use case | When checking the connection of Finisher-related options |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | Left column (connecting state of Finisher-related options): 1 to 5<br>1: Without Saddle<br>2: With Saddle, without Folding Unit<br>3: With Saddle and Inserter, without Folding Unit<br>4: With Saddle and Folding Unit, without Inserter<br>5: With Saddle, Inserter and Folding Unit<br>Right column (connecting state of Finisher-belonged Inserter): 0 to 4<br>0: no hole, 1: 2-hole, 2: 2/3-hole, 3: 4-hole, 4: 4-hole (SW) |
| DECK | | Dspl of Paper Deck connection state |
| Lv.1 | Details | To display the connecting state of the Paper Deck. |
| | Use case | When checking the connection between the machine and the Paper Decks |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 8<br>0: Not connected<br>1: Connected (small) (Display is hidden on this machine.)<br>2: Connected (large)<br>3: POD Deck Lite (with Multi-purpose Tray)<br>4: POD Deck Lite (without Multi-purpose Tray )<br>5: Multi-purpose Tray only<br>6: POD deck<br>7: 2-POD deck connected<br>8: 3-POD deck connected (Display is hidden on this machine.) |
| CARD | | Dspl of connection state of Card Reader |
| Lv.1 | Details | To display the connecting state of Card Reader. |
| | Use case | When checking the connection between the machine and the Card Reader |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: No card is inserted while the Card Reader is connected. (Copy is not available.)<br>1: Card Reader is not connected, or card is inserted while the Card Reader is connected. (Copy is available.) |

| COPIER > DISPLAY > ACC-STS | | |
|---|---|---|
| DATA-CON | | Dspl of NE Controller connection state |
| Lv.1 | Details | To display the connecting state of NE Controller. |
| | Use case | When checking the connection between the machine and the NE Controller |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not connected, 1: Connected |
| RAM | | Dspl of MNCON PCB 2 DDR2-SDRAM capacity |
| Lv.1 | Details | To display the memory (DDR2-SDRAM) capacity of the Main Controller PCB 2. |
| | Use case | When checking the memory capacity of the machine |
| | Adj/set/operate method | N/A (Display only) |
| COINROBO | | Dspl of Coin Manager connection state |
| Lv.1 | Details | To display the connecting state of the Coin Manager. |
| | Use case | When checking the connection between the machine and the Coin Manager |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not connected, 1: Connected |
| NIB | | Display of Network PCB connection state |
| Lv.1 | Details | To display the connecting state of the Network PCB. |
| | Use case | When checking the connection between the machine and the Network PCB |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 3<br>0: Not connected, 1: Ethernet PCB connected, 2: Token Ring PCB connected, 3: Ethernet PCB + Token Ring PCB connected |
| PS/PCL | | Install state dis of PS/PCL firmware |
| Lv.1 | Details | To display the installation state of PS/PCL firmware. |
| | Use case | When checking whether NetWare firmware is installed to the machine |
| | Display/adj/set range | 0 to 2<br>0: Not installed, 1: PS/PCL, 2: PS Kanji |
| RIP1 | | Display of RIP1 software version |
| Lv.1 | Details | To display the software version to be downloaded to RIP1 (PS/PCL Expansion Accelerator Board). |
| | Use case | When upgrading the firmware |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 00.01 to 99.99 |
| NETWARE | | Install state dspl of NetWare firmware |
| Lv.1 | Details | To display the installation state of the NetWare firmware. |
| | Use case | When checking whether NetWare firmware is installed to the machine |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not installed, 1: Installed |

| COPIER > DISPLAY > ACC-STS | | |
|---|---|---|
| SEND | | Display of SEND support PCB existence |
| Lv.1 | Details | To display whether there is PCB to support SEND function.<br>SEND function can be used only when the PCB is mounted. |
| | Use case | When checking the connection between the machine and the PCB that supports SEND function |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not mounted, 1: Mounted |
| TRIM-CN | | Display of Trimmer connection state |
| Lv.1 | Details | To display the connecting state of Trimmer. |
| | Use case | When checking the connection between the machine and Trimmer |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: Not connected, 1: Connected |
| HDD | | Display of HDD model name |
| Lv.1 | Details | To display the model name of HDD. |
| | Use case | When checking the model name of HDD used on the machine |
| | Adj/set/operate method | N/A (Display only) |
| PCI1 | | Display of PCI1-connected PCB name |
| Lv.1 | Details | To display the name of the PCB that is connected to PCI1. |
| | Use case | When checking the name of the PCB that is connected to PCI1 |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | -: No PCB connected<br>Voice Board: Voice PCB<br>3DES Board: Encryption PCB<br>1Gbit-Board: Giga Ethernet PCB |
| PCI2 | | Display of PCI2-connected PCB name |
| Lv.1 | Details | To display the name of the PCB that is connected to PCI2. |
| | Use case | When checking name of the PCB that is connected to PCI2 |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | -: No PCB connected<br>iSLOT: iSLOT Wireless LAN PCB<br>Voice Board: Voice PCB<br>Voice Board R: Voice Recognition PCB (Display is hidden on this machine.)<br>3DES Board: Encryption PCB<br>1Gbit-Board: Giga Ethernet PCB |
| IA-RAM | | Dspl of MNCON PCB 1 DDR2-SDRAM capacity |
| Lv.1 | Details | To display the memory (DDR2-SDRAM) capacity of the Main Controller PCB 1. |
| | Use case | When checking the memory capacity of the Main Controller PCB |
| | Adj/set/operate method | N/A (Display only) |

T-8-4

## ANALOG

| COPIER > DISPLAY > ANALOG | | |
|---|---|---|
| TEMP | | Display of inside temperature |
| Lv.1 | Details | To display the temperature inside the machine detected by Environment Sensor. |
| | Use case | When checking the temperature inside the machine |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 60 |
| | Appropriate target value | 20 - 27 |
| | Related service mode | COPIER> DISPLAY> ANALOG> HUM, ABS-HUM, PDK-TEMP |
| HUM | | Display of inside humidity |
| Lv.1 | Details | To display the humidity inside the machine detected by Environment Sensor. |
| | Use case | When checking the humidity inside the machine |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 100 |
| | Appropriate target value | 30 - 70 |
| | Related service mode | COPIER> DISPLAY> ANALOG> TEMP, ABS-HUM, PDK-HUM |
| ABS-HUM | | Display of inside moisture content |
| Lv.1 | Details | To display the absolute moisture content inside the machine detected by Environment Sensor. |
| | Use case | When checking the moisture content inside the machine |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 100 |
| | Appropriate target value | 0 - 22 |
| | Related service mode | COPIER> DISPLAY> ANALOG> TEMP, HUM |
| FIX-U | | Dspl of Fixing Roller center temperature |
| Lv.1 | Details | To display the center temperature of the Fixing Roller detected by the Fixing Main Thermistor. |
| | Use case | When checking the temperature at the center of Fixing Roller |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 999 |
| FIX-UE | | Dspl of Fixing Roller edge temperature |
| Lv.1 | Details | To display the edge temperature of the Fixing Roller detected by the Fixing Sub Thermistor 1.<br>Fixing Sub Thermistor 1 is located in the rear nip inlet side of Fixing Roller. |
| | Use case | When checking the edge temperature of the Fixing Roller |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 999 |

| COPIER > DISPLAY > ANALOG | | |
|---|---|---|
| FIX-UE2 | | Dspl of Fixing Roller edge temperature 2 |
| Lv.1 | Details | To display the edge temperature of the Fixing Roller detected by the Fixing Sub Thermistor 2.<br>Fixing Sub Thermistor 2 is located in the rear nip outlet side of Fixing Roller. |
| | Use case | When checking the edge temperature of the Fixing Roller |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 999 |
| PDK-TEMP | | Dspl of POD Deck compartment temp |
| Lv.1 | Details | To display the compartment temperature of POD Deck Lite.<br>It may be out of order if the indicated temperature is greatly different from the machine right after power-on. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 60 |
| | Related service mode | COPIER> DISPLAY> ANALOG> TEMP, PDK-HUM |
| PDK-HUM | | Dspl of POD Deck compartment humidity |
| Lv.1 | Details | To display the compartment humidity of POD Deck Lite.<br>It may be out of order if the indicated temperature is greatly different from the machine right after power-on. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 100 |
| | Related service mode | COPIER> DISPLAY> ANALOG> HUM, PDK-TEMP |

T-8-5

## CST-STS

| COPIER > DISPLAY > CST-STS | | |
|---|---|---|
| WIDTH-C3 | | Display of Cassette 3 paper size |
| Lv.2 | Details | To display the paper size of Cassette 3. |
| | Use case | When checking the paper size of Cassette 3 |
| | Adj/set/operate method | N/A (Display only) |
| WIDTH-C4 | | Display of Cassette 4 paper size |
| Lv.2 | Details | To display the paper size of Cassette 4. |
| | Use case | When checking the paper size of Cassette 4 |
| | Adj/set/operate method | N/A (Display only) |
| WIDTH-MF | | Display of MP Tray paper width size |
| Lv.2 | Details | To display the paper width size set on the Multi-purpose Tray. |
| | Use case | When checking the paper width side set on the Multi-purpose Tray |
| | Adj/set/operate method | N/A (Display only) |

T-8-6

## HV-STS

| COPIER > DISPLAY > HV-STS | | |
|---|---|---|
| PRIMARY | | Display of primary charging current |
| Lv.1 | Details | To display the current that is applied to the Primacy Charging Assembly at the latest.<br>The result set in COPIER> ADJUST> HV-PRI> PRIMARY is reflected. |
| | Use case | When checking ON/OFF of potential control |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1600 |
| | Related service mode | COPIER> ADJUST> HV-PRI> PRIMARY |
| PRI-GRID | | Dspl of Primary Charging Ass'y grid bias |
| Lv.1 | Details | To display the grid bias voltage that is applied to the Primacy Charging Assembly at the latest.<br>The result set in COPIER> ADJUST> HV-PRI> PRI-GRID is reflected. |
| | Use case | When checking ON/OFF of potential control |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 500 to 900 |
| | Related service mode | COPIER> ADJUST> HV-PRI> PRI-GRID |
| PRE-TR | | Dspl of pre-transfer charge DC current |
| Lv.1 | Details | To display the DC component of current that is applied to the Pre-transfer Charging Assembly at the latest. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | -650 to 0 |
| TR | | Dspl of trns current: Plain, 1st side |
| Lv.1 | Details | To display the current that is applied to plain paper (1st side) in the Pre-transfer Charging Assembly at the latest. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| BIAS | | Dspl of developing DC bias setting VL |
| Lv.1 | Details | To display the setting value of developing DC bias. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| TR-V | | Dspl of ATVC detection voltage value |
| Lv.1 | Details | To display the ATVC detection voltage value. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| TR-LV-I | | Dspl ppr lead edge trns bias outpt crrnt |
| Lv.1 | Details | To display the current value in the paper leading edge position at transfer bias output. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 100 |

| COPIER > DISPLAY > HV-STS | | |
|---|---|---|
| TR-LV-T | | Dspl ppr lead edge trns bias output tmg |
| Lv.1 | Details | To display the transfer bias output timing in the paper leading edge position. |
| | Use case | For checking |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | -50 to 50 |

T-8-7

## CCD

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| TARGET-B | | Shading target value (B) |
| Lv.2 | Details | To display the shading target value of Blue.<br>Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to FFFF |
| | Appropriate target value | 512 - 2047 |
| TARGET-G | | Shading target value (G) |
| Lv.2 | Details | To display the target value of Green.<br>Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to FFFF |
| | Appropriate target value | 512 - 2047 |
| TARGET-R | | Shading target value (R) |
| Lv.2 | Details | To display the shading target value of Red.<br>Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to FFFF |
| | Appropriate target value | 512 - 2047 |
| GAIN-OB | | Gain level of Img Sensor odd bit(B): frt |
| Lv.2 | Details | To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| GAIN-OG | | Gain level of Img Sensor odd bit(G): frt |
| Lv.2 | Details | To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| GAIN-OR | | Gain level of Img Sensor odd bit(R): frt |
| Lv.2 | Details | To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| GAIN-EB | | Gain level of Img Sensor even bit(B):frt |
| Lv.2 | Details | To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| GAIN-EG | | Gain level of Img Sensor even bit(G):frt |
| Lv.2 | Details | To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| GAIN-ER | | Gain level of Img Sensor even bit(R):frt |
| Lv.2 | Details | To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| LAMP-BW | | Scan Lamp intensity adj VL(B&W): front |
| Lv.2 | Details | To display the LED light intensity adjustment value of Scanner Unit (paper front) in B&W scanning mode. |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 164 |
| | Appropriate target value | 20 - 163 |
| | Supplement/memo | LED cannot be replaced individually. Replace the Scanner Unit. |

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| LAMP-CL | | Scan Lamp intensity adj VL(color): frt |
| Lv.2 | Details | To display the LED light intensity adjustment value of Scanner Unit (paper front) in color scanning mode. |
| | Use case | When image failure occurs at front side scanning in color mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 164 |
| | Appropriate target value | 33 - 163 |
| | Supplement/memo | LED cannot be replaced individually. Replace the Scanner Unit. |
| LAMP2-BW | | Scan Lamp intensity adj VL(B&W): back |
| Lv.2 | Details | To display the LED light intensity adjustment value of Scanner Unit (paper back) in B&W scanning mode. |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 164 |
| | Appropriate target value | 33 - 163 |
| | Supplement/memo | LED cannot be replaced individually. Replace the Scanner Unit. |
| LAMP2-CL | | Scan Lamp intensity adj VL(color): back |
| Lv.2 | Details | To display the LED light intensity adjustment value of Scanner Unit (paper back) in color scanning mode. |
| | Use case | When image failure occurs at back side scanning in color mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 164 |
| | Appropriate target value | 33 - 163 |
| | Supplement/memo | LED cannot be replaced individually. Replace the Scanner Unit. |
| OFST-BW | | Img Sensor offset value (B&W) [Front] |
| Lv.2 | Details | To display the CMOS Sensor offset value at B&W scanning. |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 96 |
| | Appropriate target value | 1 - 95 |
| OFST-CL | | Img Sensor offset value (color) [Front] |
| Lv.2 | Details | To display the CMOS Sensor offset value at color scanning. |
| | Use case | When image failure occurs at front side scanning in color mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 96 |
| | Appropriate target value | 1 - 95 |
| OFST2-BW | | Img Sensor offset value (B&W) [Back] |
| Lv.2 | Details | To display the CMOS Sensor offset value at B&W scanning. |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 96 |
| | Appropriate target value | 1 - 95 |

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| GAIN-BW1 | | Img Sensor gain level adj VL1(B&W): frt |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper front). |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN-BW2 | | Img Sensor gain level adj VL2(B&W): frt |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper front). |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN-BW3 | | Img Sensor gain level adj VL3(B&W): frt |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper front). |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN-BW4 | | Img Sensor gain level adj VL4(B&W): frt |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper front). |
| | Use case | When image failure occurs at front side scanning in B&W mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2BW1 | | Img Sensor gain level adj VL1(B&W): Back |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper back). |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2BW2 | | Img Sensor gain level adj VL2(B&W): Back |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper back). |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| GAIN2BW3 | | Img Sensor gain level adj VL3(B&W): Back |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper back). |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2BW4 | | Img Sensor gain level adj VL4(B&W): Back |
| Lv.2 | Details | To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper back). |
| | Use case | When image failure occurs at back side scanning in B&W mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2-OR | | Gain level of Img Sensor odd bit(R): bck |
| Lv.2 | Details | To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2-OG | | Gain level of Img Sensor odd bit(G): bck |
| Lv.2 | Details | To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2-OB | | Gain level of Img Sensor odd bit(B): bck |
| Lv.2 | Details | To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |

| COPIER > DISPLAY > CCD | | |
|---|---|---|
| GAIN2-ER | | Gain level of Img Sensor even bit(R):bck |
| Lv.2 | Details | To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2-EG | | Gain level of Img Sensor even bit(G):bck |
| Lv.2 | Details | To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| GAIN2-EB | | Gain level of Img Sensor even bit(B):bck |
| Lv.2 | Details | To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back).<br>Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB. |
| | Use case | • When replacing the Reader Controller PCB<br>• At scanned image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 48 |
| | Appropriate target value | 1 - 47 |
| OFST2-CL | | Img Sensor offset value (color) [Back] |
| Lv.2 | Details | To display the CMOS Sensor offset value at color scanning. |
| | Use case | When image failure occurs at back side scanning in color mode |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 96 |
| | Appropriate target value | 1 - 95 |

T-8-8

## ■ DPOT

| COPIER > DISPLAY > DPOT | | |
|---|---|---|
| DPOT-K | | Display of Bk Drum surface potential |
| Lv.1 | Details | To display the current surface potential Vd on the Bk Photosensitive Drum that is specified as a result of the potential control.<br>The value after the calculation of potential offset is displayed.<br>If the offset value is not adjusted, negative value may be detected during printing. |
| | Use case | When the density failure or foggy image occurs, check whether the surface potential of the Drum is the factor. |
| | Adj/set/operate method | N/A (Display only) |
| | Caution | • To update the display, be sure to move to a different screen, and then move back to display it again. (The potential at the moment of showing this screen is displayed.)<br>• If the value is out of range (-30 to 30), there is a possibility of Potential Sensor disconnection. |
| | Display/adj/set range | -30 to 600 |
| VL1T | | Dspl of bright area target potential VL |
| Lv.1 | Details | To display the bright area target potential value. |
| | Adj/set/operate method | N/A (Display only) |
| VL1M | | Dspl bright area measured potential VL |
| Lv.1 | Details | To display the bright area measured potential value. |
| | Adj/set/operate method | N/A (Display only) |
| VDT | | Dspl of dark area target potential VL |
| Lv.1 | Details | To display the dark area target potential value. |
| | Adj/set/operate method | N/A (Display only) |
| VDM | | Dspl of dark area measured potential VL |
| Lv.1 | Details | To display the dark area measured potential value. |
| | Adj/set/operate method | N/A (Display only) |
| VLT-L | | Bright area target potential VL: thin |
| Lv.1 | Details | To display the bright area target potential VL with thin paper. |
| | Use case | At occurrence of an image density failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 50 to 500 |
| VLT-H1 | | Bright area target potential VL: heavy 1 |
| Lv.1 | Details | To display the bright area target potential VL with heavy paper 1. |
| | Use case | At occurrence of an image density failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 50 to 500 |
| VLT-H2 | | Bright area target potential VL: heavy 2 |
| Lv.1 | Details | To display the bright area target potential VL with heavy paper 2. |
| | Use case | At occurrence of an image density failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 50 to 500 |

T-8-9

## DENS

| COPIER > DISPLAY > DENS | | |
|---|---|---|
| DMAX-STS | | Display of D-max control execution state |
| Lv.1 | Details | To display the D-max control execution state. |
| | Use case | • At periodical maintenance<br>• When a density failure occurs<br>• When an alarm or error occurs |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 2<br>0: During execution<br>1: D-max control is not reflected due to failure in Patch Sensor output value. (Only potential control is executed.)<br>2: Not executed (D-max control is OFF with DMAX-SW, DMAXS-SW). |
| | Appropriate target value | 0 |
| | Related service mode | COPIER> OPTION> IMG-MCON> DMAX-SW<br>COPIER> OPTION> IMG-DEV> DMAXS-SW |
| DMAX-N | | Dspl of uncoated ppr group dev contrast |
| Lv.1 | Details | To display the developing contrast Vcont determined by D-max control for uncoated paper group.<br>This value is reflected to VCONT-N, but when the offset adjustment is performed with DUPDWN-N, this value becomes different. |
| | Use case | When any error occurs on the maximum density or gradation, identify the cause with this mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 50 to 300 |
| | Appropriate target value | 90 - 248 |
| | Related service mode | COPIER> OPTION> IMG-DEV> DUPDWN-N<br>COPIER> DISPLAY> DPOT> VCONT-N |
| | Supplement/memo | Uncoated paper group: uncoated paper/recycled paper/textured paper/label/postcard/cotton |

| COPIER > DISPLAY > DENS | | |
|---|---|---|
| DMAX-N-L | | Uncoat ppr D-max ctrl Vcont, dens/tgt VL |
| Lv.2 | Details | To display the list of uncoated paper group's D-max control Vcont, patch detection density and target density value at the latest.<br>This list consists of maximum Vcont during D-max control and patch detection density (DENS) 1 to 5. |
| | Use case | When any error occurs on the maximum density or gradation, identify the cause with this mode. Characteristics of V-D (Vcont and density) can be grasped, and it is easily identified as high voltage error, laser error, etc. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | Vcont: 50 to 300<br>Patch detection density: 0 to 1023 |
| | Appropriate target value | Vcont: 150 - 250<br>Patch detection density: 500 - 1023 |
| | Related service mode | COPIER> DISPLAY> DENS> DMAX-N |
| | Supplement/memo | Uncoated paper group: uncoated paper/recycled paper/textured paper/label/postcard/cotton |
| P-LED | | Patch sensor LED light correction result |
| Lv.2 | Details | Displaying the LED light intensity correction result (DA value) of the patch sensor<br>The correction result is used for D-max control or D-half control. |
| | Use case | To separate the cause in the case of failure in maximum density or gradation. |
| | Adj/set/operate method | N/A (display only) |
| | Display/adj/set range | 0 to 255 |
| | Appropriate target value | 35 - 96 |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-LED |
| P-B-AVE | | ETB background dtct result average VL |
| Lv.2 | Details | To display the average value of ETB background detection result by Patch Sensor.<br>Detection result is used for D-max control and D-half control. |
| | Use case | When any error occurs on the maximum density or gradation, identify the cause with this mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1023 |
| | Appropriate target value | 650 - 850 |
| | Related service mode | COPIER> DISPLAY> DENS> P-B-MAX, P-B-MIN |

| COPIER > DISPLAY > DENS | | |
|---|---|---|
| P-B-MAX | | ETB background dtct result maximum VL |
| Lv.2 | Details | To display the maximum value of ETB background detection result by Patch Sensor.<br>Detection result is used for D-max control and D-half control. |
| | Use case | When any error occurs on the maximum density or gradation, identify the cause with this mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1023 |
| | Appropriate target value | 650 - 900 |
| | Related service mode | COPIER> DISPLAY> DENS> P-B-AVE, P-B-MIN |
| P-B-MIN | | ETB background dtct result minimum VL |
| Lv.2 | Details | To display the minimum value of ETB background detection result by Patch Sensor.<br>Detection result is used for D-max control and D-half control. |
| | Use case | When any error occurs on the maximum density or gradation, identify the cause with this mode. |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1023 |
| | Appropriate target value | 600 - 850 |
| | Related service mode | COPIER> DISPLAY> DENS> P-B-AVE, P-B-MAX |

T-8-10

## SENSOR

| COPIER > DISPLAY > SENSOR | | |
|---|---|---|
| DOC-SZ | | Dspl size detect by Original Size Sensr |
| Lv.2 | Details | To display the original size detected by Original Size Sensor. |
| | Use case | When checking whether the machine detects the paper on Copyboard Glass correctly |
| | Adj/set/operate method | 1) Place the original on Copyboard Glass.<br>2) Close the Copyboard Cover/DADF.<br>3) Select the item. |
| | Caution | Unless the Copyboard Cover/DADF is closed, this is not displayed correctly. |
| | Display/adj/set range | A, B, L configuration size |

T-8-11

## MISC

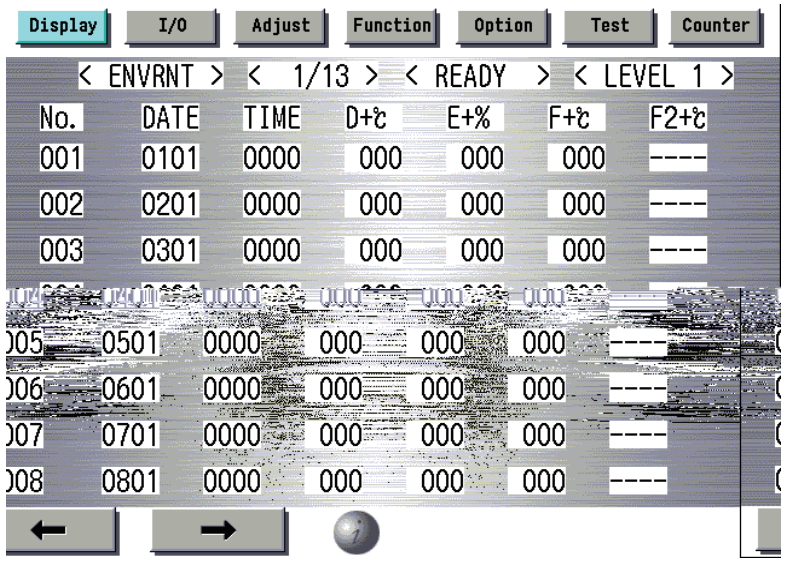
| COPIER > DISPLAY > MISC | | |
|---|---|---|
| LPOWER | | Display of laser light intensity |
| Lv.2 | Details | To display the laser power setting value during image formation in real time.<br>Check that laser power is different between coated paper and plain paper. |
| | Use case | At occurrence of an image failure |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 255 |

T-8-12

## ENVRNT

### Environment Indication

The readings of the environment sensor and the fixing thermistor (main) are indicated as a history of changes in the following: machine inside temperature (deg C), humidity (%), fixing roller surface (middle; deg C).




F-8-11

| Item | Description |
|---|---|
| No. | order of data acquisition (the higher the number, the order the data) |
| DATE | date of data acquisition |
| TIME | time of data acquisition |
| D+deg C | machine inside temperature |
| E+% | machine inside humidity |
| F+deg C | fixing roller surface (middle) temperature |

T-8-13

NOTE:
The interval at which data is acquired may be changed using the following service mode item: COPIER > OPTION > BODY > ENVP-IN.

## ■ 2D-SHADE

| COPIER > DISPLAY > 2D-SHADE | | |
|---|---|---|
| 2D-STS | | Display of 2D shading ON/OFF |
| Lv.1 | Details | To display ON/OFF of 2D shading.<br>When 0 is displayed although 1 is set with COPIER> OPTION> IMG-LSR> 2D-SHADE, check the Drum Lot number with DRM-LOT. If no number has been registered, execute COPIER> FUNCTION> 2D-SHADE> 2D-READ. |
| | Use case | When uneven image occurs |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Related service mode | COPIER> DISPLAY> 2D-SHADE> DRM-LOT<br>COPIER> FUNCTION> 2D-SHADE> 2D-READ<br>COPIER> OPTION> IMG-LSR> 2D-SHADE |
| DRM-LOT | | Display of Drum Lot number |
| Lv.2 | Details | To display the Photosensitive Drum Lot number (10 digits) read at power-on.<br>Lot number is stored in ROM for 2D shading.<br>Check that the displayed value is matched with the Lot number in the seal affixed on the Photosensitive Drum. |
| | Use case | When uneven image occurs |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 10-digit alphanumerics |
| | Related service mode | COPIER> DISPLAY> 2D-SHADE> 2D-STS |
| CHK-SUM | | Display of checksum calculation result |
| Lv.1 | Details | To display the checksum calculation result at power-on.<br>Calculation result is stored in ROM for 2D shading.<br>When the calculation result is NG, ROM for 2D shading has a failure, so replace this ROM. |
| | Use case | When uneven image occurs |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 1<br>0: at normal state, 1: at failure occurrence |

T-8-14

# I/O (I/O display mode)

## ■ Host Machine_DC Controller (DC-CON>P001 to P030)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | DC Power Supply PCB (24V) (Fixing/Feed) Remote Signal | – | 0: ON |
| | 12 | DC Power Supply PCB (24V) Remote Signal | – | 0: ON |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Fixing Feed Drawer Connector Connection Signal | – | 0: Connect |
| | 7 | Main Driver PCB Connector Connection Signal | PCB2 | 0: Connect |
| | 6 | Relay PCB Connection Signal | PCB5 | 0: Connect |
| | 5 | Not used | – | |
| | 4 | DC Power Supply PCB (12V) Laser Output Signal | PCB29 | 0: Normal |
| | 3 | DC Power Supply PCB (24V) B Interlock System Output Signal | PCB31 | 0: Normal |
| | 2 | DC Power Supply PCB (24V) B Output Signal | PCB31 | 0: Normal |
| | 1 | DC Power Supply PCB (24V) A Interlock System Output Signal | PCB30 | 0: Normal |
| | 0 | DC Power Supply PCB (24V) A Output Signal | PCB30 | 0: Normal |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P002 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Power Supply Cooling Fan 1/2 Error | FM14/FM15 | 1: Error |
| | 7 | For R&D use | – | |
| | 6 | For R&D use | – | |
| | 5 | For R&D use | – | |
| | 4 | For R&D use | – | |
| | 3 | For R&D use | – | |
| | 2 | For R&D use | – | |
| | 1 | For R&D use | – | |
| | 0 | For R&D use | – | |
| P003 | 15 | Primary Charging Shutter Sensor | PS94 | 1: HP front |
| | 14 | Not used | – | |
| | 13 | For R&D use | – | |
| | 12 | For R&D use | – | |
| | 11 | For R&D use | – | |
| | 10 | For R&D use | – | |
| | 9 | For R&D use | – | |
| | 8 | For R&D use | – | |
| | 7 | For R&D use | – | |
| | 6 | For R&D use | – | |
| | 5 | For R&D use | – | |
| | 4 | For R&D use | – | |
| | 3 | Fixing Sub Thermistor 2 Excessive Temperature Rise Detection | THM4 | 1: Excessive temperature rise * The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 2 | Not used | – | |
| | 1 | Fixing Sub Thermistor 1 Excessive Temperature Rise Detection | THM2 | 1: Excessive temperature rise * The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 0 | Fixing Main Thermistor Excessive Temperature Rise Detection | THM1 | 1: Excessive temperature rise * The value returns to 0 when temperature of the Fixing Assembly decreases. |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P004 | 15 | Not used | – | |
| | 14 | Thermistor temperature difference error detection<br>Fixing Sub Thermistor 2 > Fixing Main Thermistor | THM1/<br>THM4 | 1: Error<br>* The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 13 | Thermistor temperature difference error detection<br>Fixing Sub Thermistor 1 > Fixing Sub Thermistor 2 | THM2/<br>THM4 | 1: Error<br>* The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 12 | For R&D use | – | |
| | 11 | For R&D use | – | |
| | 10 | For R&D use | – | |
| | 9 | Thermistor temperature difference error detection<br>Fixing Main Thermistor > Fixing Sub Thermistor 1 | THM1/<br>THM2 | 1: Error<br>* The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 8 | Thermistor temperature difference error detection<br>Fixing Sub Thermistor 1 > Fixing Main Thermistor | THM1/<br>THM2 | 1: Error<br>* The value returns to 0 when temperature of the Fixing Assembly decreases. |
| | 7 | Thermistor Connection | THM1 | 0: Connect |
| | 6 | Front Door Open Detection Switch | SW2 | 0: Close, 1: Open |
| | 5 | Fixing Feed Lever | – | 1: Fixing Feed Unit presence |
| | 4 | Fixing Power Supply PCB 12V OFF | PCB10 | 1: 12V to Fixing Power Supply PCB is OFF or safety circuit operation |
| | 3 | Outer Delivery Sensor | PS36 | 1: Paper presence |
| | 2 | Not used | – | |
| | 1 | Fixing Motor Error | M3 | 1: Stop |
| | 0 | Fixing Power Supply Cooling Fan Error | FM7 | 1: Stop |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P005 | 15 | Roller Bias OFF | – | 0: OFF, 1: ON |
| | 14 | Pre-transfer Charging PCB Remote | PCB26 | 0: ON |
| | 13 | Develop High Voltage PCB Remote | PCB12 | 0: ON |
| | 12 | Primary Charging High Voltage PCB Remote | PCB11 | 0: ON |
| | 11 | Fixing Motor ON | M3 | 1: ON |
| | 10 | Fixing Motor CCW | M3 | 0: CW (paper feed direction) |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Fixing Power Supply PCB 12V ON | PCB10 | 0: 12V forcible OFF |
| | 6 | Fixing Power Supply PCB Relay 2 ON | – | 1: ON |
| | 5 | Fixing Power Supply PCB Relay 1 ON | – | 1: ON |
| | 4 | Not used | – | |
| | 3 | Developer Lower Cooling Fan/ Developer Upper Cooling Fan Half Speed | FM30/FM31 | 1: Half Speed |
| | 2 | Developer Lower Cooling Fan/ Developer Upper Cooling Fan Full Speed | FM30/FM31 | 1: Full Speed |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P006 | 15 | For R&D use | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Multi Cassette Heater ON | H02 | 0: ON |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | For R&D use | – | |
| | 2 | For R&D use | – | |
| | 1 | Pre-transfer Charging Wire Cleaning Motor ON 2 | M7 | ON1/ON2 Signal=<br>0/0: Stop<br>0/1: Front -> Rear<br>1/0: Rear -> Front |
| | 0 | Pre-transfer Charging Wire Cleaning Motor ON 1 | M7 | ON1/ON2 Signal=<br>0/0: Stop<br>0/1: Front -> Rear<br>1/0: Rear -> Front |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P007 | 15 | Shift Tray Rear Tray Full Sensor / Shift Tray Front Tray Full Sensor | PS104 (rear) / PS105 (front) | 0: Full |
| | 14 | Shift Tray Paper Sensor | PS103 | 0: Paper presence |
| | 13 | Shift Tray Rear Home Position Sensor | PS102 | 1: HP |
| | 12 | Shift Tray Front Home Position Sensor | PS101 | 1: HP |
| | 11 | Process Unit Connection | – | 0: Connect |
| | 10 | Shift Tray Connection | – | 0: Connect |
| | 9 | Fixing Cleaning Web Drive Solenoid Connection | SL9 | 0: Connect, 1: Not connect or Driving |
| | 8 | Patch Sensor Shutter Solenoid Connection | SL10 | 0: Connect, 1: Not connect or Driving |
| | 7 | Fixing Cleaning Web Level Sensor | PS45 | 1: Web level is low or Connector disconnection |
| | 6 | Fixing Toenail Jam Sensor | PS4 | 0: JAM |
| | 5 | Fixing Outlet Sensor | PS52 | 1: Paper presence |
| | 4 | Fixing Inlet Sensor | PS51 | 1: Paper presence or Connector disconnection |
| | 3 | Not used | – | |
| | 2 | Fixing Shutter Home Position Sensor | PS53 | 0: HP or middle size 1, or small size 1 |
| | 1 | Not used | – | |
| | 0 | Pre-transfer Charging Shutter Sensor | PS95 | 1: HP front |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P008 | 15 | Fixing Power Supply Detection | PCB10 | 0: iRA8105 Series |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Fixing Power Supply PCB 12V Detection | PCB10 | 0: Fixing Power Supply PCB 12V-ON |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Primary Charging High Voltage PCB 24V Detection | PCB11 | 0: 24V-ON, 1: Error |
| | 8 | Primary Charging High Voltage PCB Connection | PCB11 | 0: Connect |
| | 7 | Develop High Voltage PCB 24V Detection | PCB12 | 0: 24V-ON, 1: Error |
| | 6 | Develop High Voltage PCB Connection | PCB12 | 0: Connect |
| | 5 | Pre-transfer Charging PCB 24V Detection | PCB26 | 0: 24V-ON, 1: Error |
| | 4 | Pre-transfer Charging PCB Connection | PCB26 | 0: Connect |
| | 3 | Drum Home Position Sensor | PS61 | 1: HP |
| | 2 | Fixing Drawer Connection | – | 0: Connect |
| | 1 | Reserve Fan Error | – | 1: Error |
| | 0 | AC Driver PCB Location Detection | PCB6 or PCB7 | 0: 100V, 1: 200V |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P009 | 15 | 5V sensor ON Signal (Fixing Assembly) | – | 1: ON |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Transfer High Voltage PCB AC ON | PCB13 | 0: ON |
| | 9 | Transfer High Voltage PCB DC ON | PCB13 | 0: ON |
| | 8 | Not used | – | |
| | 7 | Pre-exposure LED_ON | – | 1: ON |
| | 6 | Shift Motor CW | M101 | 0: CW |
| | 5 | Shift Motor CCW | M101 | 0: CCW |
| | 4 | Not used | – | |
| | 3 | Shift Tray Rear Tray Full Sensor / Shift Tray Front Tray Full Sensor ON | PS104 (rear) / PS105 (front) | 0: ON |
| | 2 | Develop High Voltage PCB AC ON | PCB12 | 0: ON |
| | 1 | Develop High Voltage PCB DC ON | PCB12 | 0: ON |
| | 0 | Primary Charging High Voltage PCB ON | PCB11 | 0: ON |
| P010 | 15 | Not used | – | |
| | 14 | Patch Sensor_ON | PS90 | 1: ON |
| | 13 | Primary Charging Wire Cleaning Motor ON 2 | M6 | ON1/ON2 Signal=<br>0/0: Stop<br>0/1: Front -> Rear<br>1/0: Rear -> Front |
| | 12 | Primary Charging Wire Cleaning Motor ON 1 | M6 | ON1/ON2 Signal=<br>0/0: Stop<br>0/1: Front -> Rear<br>1/0: Rear -> Front |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P011 | 15 | Developing Motor Error | M2 | 1: Stop |
| | 14 | Drum Motor Error | M1 | 1: Stop |
| | 13 | Waste Toner Lock Detection Switch | SW5 | 1: Lock (toner clogging) or Connector disconnection |
| | 12 | Toner Exchange Cover Sensor | PS54 | 0: Cover Open or Connector disconnection |
| | 11 | Not used | – | |
| | 10 | Toner Supply Motor Error | M10 | 1: Overcurrent Error (logical change) |
| | 9 | Not used | – | |
| | 8 | Toner Feed Motor Error | M28 | 1: Overcurrent Error (logical change) |
| | 7 | Buffer Toner Sensor | TS3 | 1: Toner presence |
| | 6 | Buffer Toner Sensor Connection | TS3 | 0: Connect |
| | 5 | Toner Excess Supply Sensor | TS2 | 1: Toner presence |
| | 4 | Toner Excess Supply Sensor Connection | TS2 | 0: Connect |
| | 3 | Developing Toner Sensor | TS1 | 1: Toner presence |
| | 2 | Developing Toner Sensor Connection | TS1 | 0: Connect |
| | 1 | Magnet Roller Clutch Connection | CL5 | 0: Connect, 1: Not connect or Driving |
| | 0 | Developing Clutch Connection | CL1 | 0: Connect, 1: Not connect or Driving |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P012 | 15 | Primary Charging Exhaust Fan Error | FM17 | 1: Stop |
| | 14 | Laser Scanner Cooling Fan Error | FM16 | 1: Stop |
| | 13 | Primary Charging Air Supply Fan Error | FM2 | 1: Stop |
| | 12 | Not used | – | |
| | 11 | Multi-purpose Tray Paper Last Paper Sensor | PS28 | 1: Paper presence |
| | 10 | Multi-purpose Pickup Solenoid Connection | SL2 | 0: Connect, 1: Not connect or Driving |
| | 9 | Multi-purpose Tray Paper Sensor | PS23 | 1: Paper presence |
| | 8 | Vertical Path Sensor 1 | PS24 | 1: Paper presence |
| | 7 | For R&D use | – | |
| | 6 | Front Door Open Detection Switch | SW2 | 1: Open |
| | 5 | Multi-purpose Cover Open/Close Sensor | PS3 | 0: Open |
| | 4 | For R&D use | – | |
| | 3 | For R&D use | – | |
| | 2 | Pre-transfer Charging Assembly Air Supply Fan/Pre-transfer Charging Exhaust Fan Error | FM32/FM33 | 1: Error |
| | 1 | Developer Upper Cooling Fan Error | FM31 | 1: Error |
| | 0 | Developer Lower Cooling Fan Error | FM30 | 1: Error |
| P013 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | For R&D use | – | |
| | 1 | For R&D use | – | |
| | 0 | For R&D use | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P014 | 15 | Not used | – | |
| | 14 | Pre-transfer Charging Assembly Air Supply Fan/Pre-transfer Charging Exhaust Fan Full Speed ON | FM32/FM33 | 1: Full Speed |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Drum Motor_ON | M1 | 1: ON |
| | 10 | Drum Motor_CCW | M1 | 0: CW |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Pre-transfer Charging Assembly Air Supply Fan/Pre-transfer Charging Exhaust Fan Half Speed ON | FM32/FM33 | 1: Half Speed |
| | 6 | Voltage Sensor PCB ON | PCB15 | 1: ON |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Developing Motor_ON | M2 | 1: ON |
| | 2 | Developing Motor_CCW | M2 | 0: CW |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P015 | 15 | Right Deck Pickup Sensor 1/2 | PS19 | 1: Paper presence |
| | 14 | Right Deck Pickup Solenoid Connection | SL6 | 0: Connect, 1: Not connect or Driving |
| | 13 | Right Deck Paper Height Sensor | PS6 | 0: Lifter Up |
| | 12 | Vertical Path Sensor 2 | PS25 | 1: Paper presence |
| | 11 | Vertical Path Sensor 3 | PS26 | 1: Paper presence |
| | 10 | Right Deck Upper Limit Sensor | PS8 | 1: Upper limit |
| | 9 | Vertical Path Cover Open/Close Sensor | PS2 | 0: Open |
| | 8 | Right Deck Pull Out Sensor | PS32 | 1: Paper presence |
| | 7 | For R&D use | – | |
| | 6 | For R&D use | – | |
| | 5 | For R&D use | – | |
| | 4 | For R&D use | – | |
| | 3 | Right Deck Paper Level Sensor 2 | PS48 | Detect paper level by combination of the Paper Level Sensor 1/2<br>0: OFF<br>1: ON (Condition that the flag blocks the sensor)<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 2 | Right Deck Paper Level Sensor 1 | PS47 | |
| | 1 | Right Deck Lifter Motor | M4 | 1: Error |
| | 0 | Right Deck Paper Sensor | PS7 | 0: Paper absence, 1: Paper presence |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P016 | 15 | Cassette3 Lifter Motor Error | M20 | 1: Error |
| | 14 | Cassette 3 Paper Level Sensor 2 | PS70 | Detect paper level by combination of the Paper Level Sensor 1/2<br>0: OFF<br>1: ON (Condition that the flag blocks the sensor)<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 13 | Cassette 3 Paper Level Sensor 1 | PS69 | |
| | 12 | Cassette 3 Paper Height Sensor | PS17 | 0: Lifter Up |
| | 11 | Cassette 3 Pickup Sensor 1 | PS21 | 1: Paper presence |
| | 10 | Cassette 3 Upper Limit Sensor | PS68 | 1: Upper limit |
| | 9 | Cassette 3 Paper Sensor | PS13 | 0: Paper absence, 1: Paper presence |
| | 8 | Cassette 3 Pickup Solenoid Connection | SL3 | 0: Connect, 1: Not connect or Driving |
| | 7 | Cassette 3 Paper Length Detection Switch | SW9 | Detect paper size by combination of 4 switches<br>0: ON (Condition that the switch is pressed)<br>1: OFF<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 6 | Cassette 3 Paper Length Detection Switch | SW9 | |
| | 5 | Cassette 3 Paper Length Detection Switch | SW9 | |
| | 4 | Cassette 3 Paper Length Detection Switch | SW9 | |
| | 3 | Cassette 3 Paper Width Detection Switch | SW7 | Detect paper size by combination of 4 switches<br>0: ON (Condition that the switch is pressed)<br>1: OFF<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 2 | Cassette 3 Paper Width Detection Switch | SW7 | |
| | 1 | Cassette 3 Paper Width Detection Switch | SW7 | |
| | 0 | Cassette 3 Paper Width Detection Switch | SW7 | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P017 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |
| P018 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P019 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Vertical Path Sensor 4 | PS27 | 1: Paper presence |
| | 12 | Not used | – | |
| | 11 | Feed Driver Cooling Fan Error | FM40 | 1: Error |
| | 10 | Making Image Exhaust Fan Error | FM3 | 1: Stop |
| | 9 | Cassette 4 Pickup Solenoid Connection | SL4 | 0: Connect, 1: Not connect or Driving |
| | 8 | Cassette 4 Paper Level Sensor 2 | PS73 | Detect paper level by combination of the Paper Level Sensor 1/2<br>0: OFF<br>1: ON (Condition that the flag blocks the sensor)<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 7 | Cassette 4 Paper Level Sensor 1 | PS72 | |
| | 6 | Cassette 4 Paper Height Sensor | PS18 | 0: Lifter Up |
| | 5 | Cassette 4 Lifter Motor Error | M21 | 1: Error |
| | 4 | Cassette 4 Pickup Sensor 1 | PS22 | 1: Paper presence |
| | 3 | Cassette 4 Upper Limit Sensor | PS71 | 1: Upper limit |
| | 2 | Cassette 4 Paper Sensor | PS14 | 1: Paper presence |
| | 1 | Left Deck Pickup Solenoid Connection | SL7 | 0: Connect, 1: Not connect or Driving |
| | 0 | Left Deck Paper Level Sensor 2 | PS50 | Detect paper level by combination of the Paper Level Sensor 1/2<br>0: OFF<br>1: ON (Condition that the flag blocks the sensor)<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P020 | 15 | Left Deck Paper Level Sensor 1 | PS49 | Detect paper level by combination of the Paper Level Sensor 1/2<br>0: OFF<br>1: ON (Condition that the flag blocks the sensor)<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 14 | Left Deck Lifter Motor Error | M5 | 1: Error |
| | 13 | Left Deck Upper Limit Sensor | PS12 | 1: Upper limit |
| | 12 | Left Deck Pickup Sensor 1 | PS20 | 1: Paper presence |
| | 11 | Left Deck Pull Out Sensor | PS33 | 1: Paper presence |
| | 10 | Left Deck Paper Height Sensor | PS10 | 0: Lifter Up |
| | 9 | Left Deck Paper Sensor | PS11 | 1: Paper presence |
| | 8 | Not used | – | |
| | 7 | Cassette 4 Paper Length Detection Switch | SW10 | Detect paper size by combination of 4 switches<br>0: ON (Condition that the switch is pressed)<br>1: OFF<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 6 | Cassette 4 Paper Length Detection Switch | SW10 | |
| | 5 | Cassette 4 Paper Length Detection Switch | SW10 | |
| | 4 | Cassette 4 Paper Length Detection Switch | SW10 | |
| | 3 | Cassette 4 Paper Width Detection Switch | SW8 | Detect paper size by combination of 4 switches<br>0: ON (Condition that the switch is pressed)<br>1: OFF<br>As for the combination, refer to the Pickup/Feed System in Service Manual. |
| | 2 | Cassette 4 Paper Width Detection Switch | SW8 | |
| | 1 | Cassette 4 Paper Width Detection Switch | SW8 | |
| | 0 | Cassette 4 Paper Width Detection Switch | SW8 | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P021 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Feed Driver Cooling Fan Half Speed | FM40 | 1: ON |
| | 10 | Feed Driver Cooling Fan Full Speed | FM40 | 1: ON |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Making Image Exhaust Fan Half Speed | FM3 | 1: ON |
| P022 | 15 | Making Image Exhaust Fan Full Speed | FM3 | 1: ON (priority) |
| | 14 | For factory use | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P023 | 15 | For R&D use | – | |
| | 14 | For R&D use | – | |
| | 13 | For R&D use | – | |
| | 12 | For R&D use | – | |
| | 11 | Registration Sensor | PS29 | 1: Paper presence |
| | 10 | Duplex Outlet Sensor | PS64 | 1: Paper presence |
| | 9 | Not used | – | |
| | 8 | Left Deck Merging Solenoid Connection | SL11 | 0: Connect, 1: Not connect or Driving |
| | 7 | Not used | – | |
| | 6 | Reverse Upper Flapper Solenoid Connection | SL5 | 0: Connect, 1: Not connect or Driving |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |
| P024 | 15 | ETB Disengage Sensor | PS56 | 1: HP |
| | 14 | ETB Engage Sensor | PS55 | 1: Engage |
| | 13 | Side Registration Sensor | PS31 | 0: Detect |
| | 12 | Transfer Cleaner Cooling Fan Error | FM8 | 1: Stop |
| | 11 | Duplex Left Sensor | PS66 | 1: Paper presence |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Duplex Driver Cooling Fan Error | FM41 | 1: Stop |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P025 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | For factory use | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |
| P026 | 15 | Not used | – | |
| | 14 | Not used | – | |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P027 | 15 | Transfer High Voltage PCB Connection | PCB13 | 0: Connect |
| | 14 | Not used | – | |
| | 13 | Transfer High Voltage PCB 24V Check | PCB13 | 1: Error |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Duplex Merging Sensor | PS67 | 1: Paper presence |
| | 6 | Registration Motor/Duplex Motor Cooling Fan | FM42 | 1: Stop |
| | 5 | Reverse Vertical Path Sensor | PS65 | 1: Paper presence |
| | 4 | Not used | – | |
| | 3 | Paper Cooling Fan Error | FM5 | 1: Stop |
| | 2 | Not used | – | |
| | 1 | For R&D use | – | |
| | 0 | For R&D use | – | |
| P028 | 15 | For R&D use | – | |
| | 14 | For R&D use | – | |
| | 13 | For R&D use | – | |
| | 12 | For R&D use | – | |
| | 11 | For R&D use | – | |
| | 10 | For R&D use | – | |
| | 9 | For R&D use | – | |
| | 8 | For R&D use | – | |
| | 7 | Reverse Detachment Solenoid Connection | SL12 | 0: Connect, 1: Not connect or Driving |
| | 6 | Inner Delivery Sensor | PS35 | 1: Paper presence |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P029 | 15 | Transfer High Voltage Positive Bias Constant Current mode | PCB13 | 0: ON |
| | 14 | Transfer High Voltage Negative Bias Constant Current | PCB13 | 0: ON |
| | 13 | Transfer High Voltage Positive Bias Constant Voltage mode | PCB13 | 0: ON |
| | 12 | Transfer High Voltage PCB Remote | PCB13 | 0: Active |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Not used | – | |
| | 3 | Not used | – | |
| | 2 | Paper Cooling Fan Half Speed | FM5 | 1: Half Speed |
| | 1 | Paper Cooling Fan Full Speed | FM5 | 1: Full Speed |
| | 0 | Operation Check LED Port | – | 1: ON |
| P030 | 15 | Registration Motor/Duplex Motor Cooling Fan Half Speed | FM42 | 1: Half Speed |
| | 14 | Registration Motor/Duplex Motor Cooling Fan Full Speed | FM42 | 1: Full Speed |
| | 13 | Not used | – | |
| | 12 | Not used | – | |
| | 11 | Not used | – | |
| | 10 | Not used | – | |
| | 9 | Not used | – | |
| | 8 | Not used | – | |
| | 7 | Not used | – | |
| | 6 | Not used | – | |
| | 5 | Not used | – | |
| | 4 | Transfer Cleaner Cooling Fan Half Speed | FM8 | 1: Half Speed |
| | 3 | Transfer Cleaner Cooling Fan Full Speed | FM8 | 1: Full Speed (priority) |
| | 2 | Not used | – | |
| | 1 | Not used | – | |
| | 0 | Not used | – | |

T-8-15

## ■ Host Machine_Main Controller (DC-CON>P001 to P005))

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 0 – 7 | For R&D use | – | |
| | 8 | Data Analyzer Board power state | – | 0: Abnormal, 1: Normal |
| | 9 – 11 | For R&D use | – | |
| | 12 | Main Controller PCB 2 Version bit0 | PCB51 | |
| | 13 | Main Controller PCB 2 Version bit1 | PCB51 | |
| | 14 | Main Controller PCB 2 Version bit2 | PCB51 | |
| | 15 | Main Controller PCB 2 Version bit3 | PCB51 | |
| P002 | 0 – 15 | Not used | – | |
| P003 | 0 – 15 | Not used | – | |
| P004 | 0 – 10 | Not used | – | |
| | 11 | Power Supply Cooling Fan 1/2 | FM14/FM15 | 0: Normal, 1: Abnormal |
| | 12 – 14 | For R&D use | – | |
| | 15 | Reader Controller PCB power state | – | 0: ON, 1: OFF |
| P005 | 0 | SCPRDY (Controller reception is available) | – | |
| | 1 – 3 | For R&D use | – | |
| | 4 | SPRDY (Reader power ON) | – | |
| | 5 – 10 | For R&D use | – | |
| | 11 | /PPRDY (Printer power ON) | – | |
| | 12 | /PCPRDY (Controller reception is available) | – | |
| | 13 – 15 | For R&D use | – | |
| P006 | 0 – 4 | For R&D use | – | |
| | 5 | Channel Link PCB Connection | PCB52 | 0: Connect, 1: Not connect |
| | 6 | DC Controller PCB Connection | PCB1 | 0: Connect, 1: Not connect |
| | 7 – 15 | For R&D use | – | |

T-8-16

## ■ Reader (R-CON>P001 to P005)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 0 | Scanner Unit HP Sensor Interruption | SR2 | 1: HP |
| | 1 | DDI-SPO1 | – | Not used |
| | 2 | Fan Lock Signal (Reserve) | – | – |
| | 3 | DDI-SRTS | – | 0: Reception is available |
| | 4 | DDI-SCPRDY | – | 0: Controller ready |
| | 5 | Silent Mode | – | 1: Normal start-up, 0: Silent start-up |
| | 6 | Board Test | – | 1: Normal start-up, 0: PCB check |
| | 7 | 12V Power Supply Monitor | – | 0: Power supply |
| P002 | 0 | 24V Power Supply Monitor | – | 0: Power supply |
| | 1 | Reader-DADF Connect | – | 1: Connect, 0: Unconnected AP |
| | 2 | Location Information 0 | – | Not used |
| | 3 | Location Information 1 | – | Not used |
| | 4 | Debug LED | – | Not used |
| | 5 | Memory Identification | – | 1: Model with memory, 0: Model without memory |
| | 6 | Model Identification | – | 1: X-system or Copyboard, 0: S-system |
| | 7 | Original Size Sensor 1 | CF1 | 0: Original presence |
| P003 | 0 | Original Size Sensor 2 | CF2 | 0: Original presence |
| | 1 | DADF Sensor 1 | SR1 | 1: Close, 0: Open |
| | 2 | DADF Sensor 2 | SR3 | 1: Close, 0: Open |
| | 3 | Scanner Unit Heat Exhaust Fan Lock Signal | FM1 | 1: Failure |
| | 4 | Scanner Unit Cooling Fan Lock Signal | FM2 | 1: Failure |
| | 5 | LED Select 1 | – | DIPSW2, 3 (1,1): Rank A, (1,0): Rank B, (0,1): Rank C |
| | 6 | LED Select 2 | – | |
| | 7 | – | – | – |
| P004 | 0 | B_DDI_SPI1 | – | Fix to 1 |
| | 1 | B_DDI_SCTS | – | 0: Transmission is available |
| | 2 | B_DDI_SPRDY | – | 0: Engine ready |
| | 3 | Debug Inspection Activation LED | – | 1: ON |
| | 4 | DF/Reader Selector | – | 1: DADF, 0: Reader |
| | 5 | Size Detection LED | – | 1: ON |
| | 6 | Watchdog Output | – | 0: (Toggle operation) |
| | 7 | Scanner Motor Current Setting 1 | M1 | (0,0): 100%, (0,1): 75%, (1,0): 50%, (1,1): 25% |
| P005 | 0 | Scanner Motor Current Setting 2 | M1 | |
| | 1 | Scanner Motor Reset | M1 | 0: Reset (100nsec) |
| | 2 | Scanner Motor Enable | M1 | 1: Enable |
| | 3 | Scanner Unit Cooling Fan ON | FM2 | 1: ON |
| | 4 | Scanner Motor Direction | M1 | 1: Back scan, 0: Scan |
| | 5 | – | – | – |
| | 6 | – | – | – |
| | 7 | – | – | – |

T-8-17

## ■ ADF (FEEDER>P001 to P007)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 0 | 24V Power Supply Monitor | – | 0: Power supply |
| | 1 | Reverse Sensor | SR23 | 1: Paper presence |
| | 2 | DADF Fan Alarm | – | 0: Failure |
| | 3 | LTR-R/LGL Identification Sensor | SR8 | 1: Paper presence |
| | 4 | AB/Inch Identification Sensor | SR7 | 1: A4R, STMTR, B6R |
| | 5 | Tray Sensor | SR9 | 0: Open |
| | 6 | Tray HP Sensor | SR13 | 1: HP (lower limit) |
| | 7 | Paper Surface Sensor | SR6 | 1: Paper surface detection |
| P002 | 0 | Cover Sensor | SR10 | 0: Open |
| | 1 | Original Sensor | SR1 | 1: Original presence |
| | 2 | Stamp Presence/Absence | – | 0: Stamp presence |
| | 3 | Post-separation 3 Sensor (Reserve) | PCB2 | 1: Paper presence |
| | 4 | Post-separation 2 Sensor | SR3 | 0: Paper presence |
| | 5 | Post-separation 1 Sensor | SR2 | 0: Paper presence |
| | 6 | Pickup Roller Unit Lifting HP Sensor | SR12 | 1: HP (Escape) |
| | 7 | Scanner Unit Cooling Fan Alarm | FM3 | 0: Failure |
| P003 | 0 | Disengagement HP Sensor 2 | SR16 | 1: HP (Disengagement) |
| | 1 | 1-path Duplex Model Identification | – | 1: 1-path duplex, 0: Reverse duplex |
| | 2 | Leading Edge Position Sensor | SR22 | 1: Paper presence |
| | 3 | Disengagement HP Sensor 1 | SR15 | 1: HP (Disengagement) |
| | 4 | Original Size Sensor 4 | SR20 | 1: Paper presence |
| | 5 | Original Size Sensor 3 | SR19 | 1: Paper presence |
| | 6 | Original Size Sensor 2 | SR18 | 1: Paper presence |
| | 7 | Original Size Sensor 1 | SR17 | 1: Paper presence |
| P004 | 0 | Delivery Sensor | PCB5 | 0: Paper presence |
| | 1 | Read Sensor 2 | SR5 | 1: Paper presence |
| | 2 | Read Sensor 1 | PCB4 | 0: Paper presence |
| | 3 | Registration Sensor | PCB3 | 0: Paper presence |
| | 4 | ITOP | – | Not used |
| | 5 | Glass Shift HP Sensor | SR11 | 0: HP |
| | 6 | Feed Sensor | – | 0: Paper presence |
| | 7 | Post-separation Sensor 3 | PCB2 | 0: Paper presence |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P005 | 0 | Pickup Motor Direction | M1 | 1: Rotation direction, 0: (Not used) |
| | 1 | DA Enable | – | 1: Enable, 0: Reset |
| | 2 | Tray Lifting Motor Direction | M8 | 1: Up, 0: Down |
| | 3 | Stamp Solenoid | SL2 | 1: ON |
| | 4 | Original LED | LED | 1: ON |
| | 5 | Tray Lifting Motor Current | M8 | 1: Operation is available |
| | 6 | Disengagement Motor 1 Current | M6 | 1: Operation is available |
| | 7 | Disengagement Motor 2 Current | M7 | 1: Operation is available |
| P006 | 0 | Glass Shift Motor Current | M9 | 1: Operation is available |
| | 1 | Glass Shift Motor Direction | M9 | 1: Shading direction (Right upper) |
| | 2 | DADF Fan ON | – | 1: ON |
| | 3 | Pickup Motor Direction | M1 | 1: ON |
| | 4 | Separation Motor Current | – | 1: Operation is available |
| | 5 | Pickup Motor Current | M1 | 1: Operation is available |
| | 6 | Registration Motor Current | M3 | 1: Operation is available |
| | 7 | Read Motor Current | M4 | 1: Operation is available |
| P007 | 0 | Pickup Motor Current | M1 | 1: Operation is available |
| | 1 | Scanner Unit Cooling Fan ON | FM3 | 1: ON |
| | 2 | Pickup Clutch | – | 1: ON |
| | 3 | Delivery Motor Current | M5 | 1: Operation is available |
| | 4 | Delivery Motor Direction | M5 | 1: CCW (Delivery direction) |
| | 5 | – | – | – |
| | 6 | – | – | – |
| | 7 | – | – | – |

T-8-18

## ■ Paper Deck Unit – C1 (DC-CON>P048 to P050)

| Addres | bit | Description | Symbol | Remarks |
|---|---|---|---|---|
| P048 | 15 | | – | – |
| | 14 | not used | – | – |
| | 13 | not used | – | – |
| | 12 | not used | – | – |
| | 11 | not used | – | – |
| | 10 | deck main motor hold | M1 | – |
| | 9 | deck open solenoid | SL2 | 0:open/1:close |
| | 8 | deck lifter motor | M2 | 0:up/1:down |
| | 7 | deck lifter motor ON signal | M2 | 0:OFF/1:ON |
| | 6 | deck main motor ON signal | M1 | 0:OFF/1:ON |
| | 5 | not used | – | – |
| | 4 | not used | – | – |
| | 3 | deck pickup clutchON ON signal | CL2 | 0:OFF/1:ON |
| | 2 | not used | – | – |
| | 1 | deck pickup roller releasing solenoid | SL1 | 0:OFF/1:ON |
| | 0 | deck open indicator | LED100 | – |
| P049 | 15 | not used | – | – |
| | 14 | not used | – | – |
| | 13 | not used | – | – |
| | 12 | not used | – | – |
| | 11 | not used | – | – |
| | 10 | not used | – | – |
| | 9 | not used | – | – |
| | 8 | not used | – | – |
| | 7 | not used | – | – |
| | 6 | not used | – | – |
| | 5 | not used | – | – |
| | 4 | not used | – | – |
| | 3 | not used | – | – |
| | 2 | not used | – | – |
| | 1 | not used | – | – |
| | 0 | not used | – | – |

| Addres | bit | Description | Symbol | Remarks |
|---|---|---|---|---|
| P050 | 15 | for R&D | – | – |
| | 14 | not used | – | – |
| | 13 | for R&D | – | – |
| | 12 | for R&D | – | – |
| | 11 | deck open sensor | PS9 | 0:close/1:open |
| | 10 | deck set sensor | PS5 | 0:connected/1:unconnected |
| | 9 | deck lifter lower limit detecting switch | SW2 | 0:ON/1:OFF |
| | 8 | deck paper level sensor | PS8 | 0:paper present/1:paper absent |
| | 7 | deck paper supply position sensor | PS7 | 0:paper present/1:paper absent |
| | 6 | deck main motor lock signal | M1 | – |
| | 5 | deck pickup roller releasing solenoid ON signal | SL1 | 0:ON/1:OFF |
| | 4 | deck pickup sensor | PS6 | 0:paper present/1:paper absent |
| | 3 | deck feed sensor | PS1 | 0:paper present/1:paper absent |
| | 2 | deck lifter position sensor | PS4 | 0:ON/1:OFF |
| | 1 | deck paper sensor | PS2 | 0:paper present/1:paper absent |
| | 0 | deck open detecting switch | SW1 | 0:open/1:close |

T-8-19

## ■ POD Deck Lite – A1 (DC-CON>P047 to P050)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P047 | 15 | Not used | – | – |
| | 14 | Not used | – | – |
| | 13 | Not used | – | – |
| | 12 | Not used | – | – |
| | 11 | Not used | – | – |
| | 10 | Not used | – | – |
| | 9 | Not used | – | – |
| | 8 | Not used | – | – |
| | 7 | Expansion Fan OFF | FAN3 | 1: OFF, 0: ON |
| | 6 | Not used | – | – |
| | 5 | Air Heater Control Signal | H1 | 0 (0,0): 60 degC, 3 (1,1): 90 degC |
| | 4 | | | |
| | 3 | Swing Control Signal | M3 | 0 (0,0): 250 pps, 3 (1,1): 850 pps |
| | 2 | | | |
| | 1 | Fan Control Signal | FAN1, FAN2, FAN3 | 0 (0,0): 26V, 3 (1,1): 13.5V |
| | 0 | | | |
| P048 | 15 | BANK-RX1 | – | Auto at bank switching |
| | 14 | BANK-RX0 | – | Auto at bank switching |
| | 13 | BANK-TX | – | Fix to 1 |
| | 12 | Deck Pickup Clutch ON | CL1 | 1: ON, 0: OFF |
| | 11 | Hot Air Fan OFF | FAN1 | 1: OFF, 0: ON |
| | 10 | Air Heater ON | H1 | 1: ON, 0: OFF |
| | 9 | Open/Close Solenoid ON | SL2, SL3 | 1: ON, 0: OFF |
| | 8 | Lifter DOWN/UP | – | 1: Down, 0: Up |
| | 7 | Deck Lifter Motor ON | M2 | 1: ON, 0: OFF |
| | 6 | Cold Fan OFF | FAN2 | 1: ON, 0: OFF |
| | 5 | Cassette Heater ON | H2, H3 | 1: ON, 0: OFF |
| | 4 | Motor Cooling Fan | FAN4 | 1: ON, 0: OFF |
| | 3 | Deck Pickup Motor Current 1 | M1 | – |
| | 2 | Deck Pickup Motor Current 0 | M1 | – |
| | 1 | Deck Pickup Solenoid ON | SL1 | 1: OFF, 0: ON |
| | 0 | Indication LED ON | – | 1: ON, 0: OFF |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P049 | 15 | Not used | – | – |
| | 14 | Heater Error 1 | – | 1: Normal, 0: Error |
| | 13 | Heater Ready | – | 1: Ready, 0: Not ready |
| | 12 | POD Deck Detection | – | 1: Detect, 0: Not detect |
| | 11 | Motor Cooling Fan Error | FAN4 | 1: Normal, 0: Error |
| | 10 | Deck Foreign Matter Sensor | PS13 | 1: Foreign matter absence, 0: Foreign matter presence |
| | 9 | Paper Level Sensor | PS12 | 1: Paper absence, 0: Paper presence |
| | 8 | Hot Air Fan/Cold Air Fan/ Expansion Fan/Swing Motor Error, Receptacle Load Error | FAN1, FAN2, FAN3, M3 | 1: Normal, 0: Error |
| | 7 | Temperature DATA [3] | – | 1: bit3=1, 0: bit3=0 |
| | 6 | Temperature DATA [2] | – | 1: bit2=1, 0: bit2=0 |
| | 5 | Temperature DATA [1] | – | 1: bit1=1, 0: bit1=0 |
| | 4 | Temperature DATA [0] | – | 1: bit0=1, 0: bit0=0 |
| | 3 | Humidity DATA [3] | – | 1: bit3=1, 0: bit3=0 |
| | 2 | Humidity DATA [2] | – | 1: bit2=1, 0: bit2=0 |
| | 1 | Humidity DATA [1] | – | 1: bit1=1, 0: bit1=0 |
| | 0 | Humidity DATA [0] | – | 1: bit0=1, 0: bit0=0 |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P050 | 15 | Large Deck ID | – | Fix to 0 |
| | 14 | Deck Lifter Motor Error | M2 | 1: Error, 0: Normal |
| | 13 | Deck Lite ID | – | Fix to 0 |
| | 12 | Deck Lite ID | – | Fix to 1 |
| | 11 | Deck Receptacle Left Open Sensor | PS9 | 1: Open, 0: Close |
| | 10 | Deck Engagement/Disengagement Sensor | PS5 | 1: Unconnected, 0: Connected |
| | 9 | Deck Lifter Lower Limit Detection Switch | SW2 | 1: Normal, 0: Abnormal |
| | 8 | Deck Paper Level Sensor | PS8 | 1: Paper absence, 0: Paper presence |
| | 7 | Deck Supply Position Sensor | PS7 | 1: Paper absence, 0: Paper presence |
| | 6 | Deck Receptacle Right Open Sensor | PS10 | 1: Open, 0: Close |
| | 5 | 5V Detection | – | 1: 5V OFF, 0: 5V ON |
| | 4 | Deck Pullout Sensor | PS6 | 1: Paper presence, 0: Paper absence |
| | 3 | Deck Pickup Sensor | PS1 | 1: Paper presence, 0: Paper absence |
| | 2 | Deck Lifter Position Sensor | PS4 | 1: Paper absence, 0: Paper presence |
| | 1 | Deck Paper Sensor | PS2 | 1: Paper absence, 0: Paper presence |
| | 0 | Receptacle Open Switch | SW3 | 1: ON, 0: OFF |

T-8-20

## ■ Inserter - K1 : ARCNET Connection (SORTER > P425 to P451)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P425 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | paper delivery start response | – | 0 : OFF / 1ON |
| | 2 | paper delivery start Request | – | 0 : ON / 1 : OFF |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P426 | 15 | – | – | – |
| | 14 | Inlet motor CLK | – | – |
| | 13 | lower tray document set LED | – | 0 : ON / 1 : OFF |
| | 12 | exit motor1CLK | – | – |
| | 11 | upper tray document set LED | – | 0 : ON / 1 : OFF |
| | 10 | exit motor phase switching 2 | – | P31=0,P32=0 : 2phase |
| | 9 | exit motor phase switching 1 | – | P31=1,P32=0 : 1-2phase |
| | 8 | exit motor2CLK | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | upper tray width sensor | S10 | – |
| | 4 | lower tray width sensor | S13 | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P427 | 15 | - | - | - |
| | 14 | - | - | - |
| | 13 | Reserve solenoid | SOL1 | 0 : PWM / 1 : PWM |
| | 12 | upper tray registration sensor | S3 | 0 : no paper / 1 : paper |
| | 11 | lower tray registration sensor | S7 | 0 : no paper / 1 : paper |
| | 10 | - | - | - |
| | 9 | - | - | - |
| | 8 | - | - | - |
| | 7 | EEPROM / IO DO signal | - | 0 : data bit 0 / 1 : data bit 1 |
| | 6 | - | - | - |
| | 5 | - | - | - |
| | 4 | - | - | - |
| | 3 | - | - | - |
| | 2 | - | - | - |
| | 1 | - | - | - |
| | 0 | - | - | - |
| P428 | 15 | - | - | - |
| | 14 | - | - | - |
| | 13 | - | - | - |
| | 12 | - | - | - |
| | 11 | - | - | - |
| | 10 | EEPROM CS signal | - | - |
| | 9 | EEPROM / DA / IO / DIsignal | - | - |
| | 8 | EEPROM / DA / IO / CLK signal | - | - |
| | 7 | PMmotoroutput Enable | - | 0 : OFF / 1ON |
| | 6 | upper tray registration clutch | CL1 | 0 : OFF / 1ON |
| | 5 | lower tray registration clutch | CL2 | 0 : OFF / 1ON |
| | 4 | - | - | - |
| | 3 | - | - | - |
| | 2 | - | - | - |
| | 1 | Reserve unit motor rotation direction | - | 0 : CCW / 1 : CW |
| | 0 | Reserve unit motor phase switching1 | - | 0 : 2phase / 1 : 1-2phase |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P429 | 15 | - | - | - |
| | 14 | - | - | - |
| | 13 | PM motor chip Enable | - | 0 : OFF / 1ON |
| | 12 | exit motor1Enable | - | 0 : OFF / 1ON |
| | 11 | Brushless motor Enable | - | 0 : OFF / 1ON |
| | 10 | HB motor Enable | - | 0 : OFF / 1ON |
| | 9 | Inlet motor phase switching2 | - | PH0=0,PH1=0 : 2phase |
| | 8 | Inlet motor phase switching1 | - | PH0=1,PH1=0 : 1-2phase |
| | 7 | paper delivery start response | - | 0 : ON / 1 : OFF |
| | 6 | paper delivery start | - | 0 : OFF / 1ON |
| | 5 | drive switching motor rotation direction | - | 0 : CW / 1 : CCW |
| | 4 | drive switching motor CLK | - | - |
| | 3 | lower tray lift motor rotation direction | - | 0 : CW / 1 : CCW |
| | 2 | lower tray lift motor CLK | - | - |
| | 1 | upper tray lift motor rotation direction | - | 0 : CW / 1 : CCW |
| | 0 | upper tray lift motor CLK | - | - |
| P430 | 15 | pickup motor rotation direction | - | 0 : CCW / 1 : CW |
| | 14 | upper tray lift motor current | - | 0 : PWM / 1 : PWM |
| | 13 | lower tray lift motor current | - | 0 : PWM / 1 : PWM |
| | 12 | drive switching motor current | - | 0 : PWM / 1 : PWM |
| | 11 | - | - | - |
| | 10 | - | - | - |
| | 9 | - | - | - |
| | 8 | - | - | - |
| | 7 | external I / O data bus 6 | - | - |
| | 6 | Reserve unit motor CLK | - | - |
| | 5 | external I / O data bus 5 | - | - |
| | 4 | external I / O data bus 4 | - | - |
| | 3 | external I / O data bus 3 | - | - |
| | 2 | external I / O data bus 2 | - | - |
| | 1 | external I / O data bus 1 | - | - |
| | 0 | pickup motor CLK | - | - |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P431 | 15 | lower tray pick sensor | S6 | 0 : outside pick position / 1 : pick position |
| | 14 | lower tray last paper sensor2 | S15 | 0 : no paper / 1 : paper |
| | 13 | lower tray last paper sensor1 | S14 | 0 : paper / 1 : no paper |
| | 12 | lower tray Empty sensor | S12 | 0 : paper / 1 : no paper |
| | 11 | upper tray lower limit sensor | S4 | 0 : outside lower limit / 1 : lower limit |
| | 10 | upper tray pick sensor | S2 | 0 : outside pick position / 1 : pick position |
| | 9 | upper tray last paper sensor1 | S11 | 0 : paper / 1 : no paper |
| | 8 | upper tray Empty sensor | S9 | 0 : paper / 1 : no paper |
| | 7 | Reserve timing sensor | S16 | 0 : no paper / 1 : paper |
| | 6 | Reserve sensor | S17 | 0 : no paper / 1 : paper |
| | 5 | Reserve inlet sensor | S18 | 0 : no paper / 1 : paper |
| | 4 | Intermediate feed sensor | S8 | 0 : no paper / 1 : paper |
| | 3 | drive switching sensor | S1 | 0 : outside HP / 1 : inside HP |
| | 2 | unit open / close sensor | S19 | 0 : close / 1 : open |
| | 1 | upper cover open / close switch | SW2 | 0 : close / 1 : open |
| | 0 | lower tray lower limit sensor | S5 | 0 : outside lower limit / 1 : lower limit |
| P432 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | power supply lock detect signal 3 | – | 0 : normal / 1 : lock |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Delivery2 sensor | S21 | 0 : no paper / 1 : paper |
| | 2 | inlet sensor | S20 | 0 : no paper / 1 : paper |
| | 1 | Front upper cover switch | SW1 | 0 : close / 1 : open |
| | 0 | Brushless motorLock detection signal | – | 0 : normal / 1 : lock |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P433 | 15 | DSW8 | – | 0 : ON / 1 : OFF |
| | 14 | DSW7 | – | 0 : ON / 1 : OFF |
| | 13 | DSW6 | – | 0 : ON / 1 : OFF |
| | 12 | DSW5 | – | 0 : ON / 1 : OFF |
| | 11 | DSW4 | – | 0 : ON / 1 : OFF |
| | 10 | DSW3 | – | 0 : ON / 1 : OFF |
| | 9 | DSW2 | – | 0 : ON / 1 : OFF |
| | 8 | DSW1 | – | 0 : ON / 1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Wire-speed sorting Identification signal | – | 0 : low speed machine / 1 : high speed machine |
| | 3 | PCB Identification signal2 | – | BIT2=1,BIT3=0 : insetion |
| | 2 | PCB Identification signal1 | – | – |
| | 1 | PSW2 | – | 0 : ON / 1 : OFF |
| | 0 | PSW1 | – | 0 : ON / 1 : OFF |
| P434 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | fan 2 Enable | – | 0 : OFF / 1 : ON |
| | 10 | – | – | – |
| | 9 | PCB LED2 | PCB2 | 0 : ON / 1 : OFF |
| | 8 | PCB LED1 | PCB1 | 0 : ON / 1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P439 | – | lower tray document wide detection AD | – | – |
| P440 | – | upper tray document wide detection AD | – | – |
| P445 | – | Inlet motor 1 current | – | – |
| P450 | – | pickup motor current | – | – |
| P451 | – | Reserve motor current | – | – |

T-8-21

## ■ Inserter – K1 : IPC Connection (SORTER>P038 to P047)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P038 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | paper delivery start response | – | 0:OFF/1ON |
| | 2 | paper delivery start Request | – | 0:ON/1:OFF |
| | 1 | | – | – |
| | 0 | | – | – |
| P039 | 15 | – | – | – |
| | 14 | Inlet motor CLK | – | – |
| | 13 | lower tray document set LED | – | 0:ON/1:OFF |
| | 12 | exit motor1CLK | – | – |
| | 11 | upper tray document set LED | – | 0:ON/1:OFF |
| | 10 | exit motor phase switching 2 | – | P31=0,P32=0:2phase |
| | 9 | exit motor phase switching 1 | – | P31=1,P32=0:1-2phase |
| | 8 | exit motor2CLK | – | |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | upper tray width sensor | S10 | – |
| | 4 | lower tray width sensor | S13 | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P040 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Reserve solenoid | SOL1 | 0:PWM/1:PWM |
| | 12 | upper tray registration sensor | S3 | 0:no paper /1:paper |
| | 11 | lower tray registration sensor | S7 | 0:no paper /1:paper |
| | 10 | – | – | – |
| | 9 | | – | – |
| | 8 | | – | – |
| | 7 | EEPROM/IO DO signal | – | 0:data bit 0/1:data bit 1 |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P041 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | EEPROM CS signal | – | – |
| | 9 | EEPROM/DA/IO/ DIsignal | – | – |
| | 8 | EEPROM/DA/IO/ CLK signal | – | – |
| | 7 | PMmotoroutput Enable | – | 0:OFF/1ON |
| | 6 | upper tray registration clutch | CL1 | 0:OFF/1ON |
| | 5 | lower tray registration clutch | CL2 | 0:OFF/1ON |
| | 4 | | – | – |
| | 3 | | – | – |
| | 2 | | – | – |
| | 1 | Reserve unit motor rotation direction | – | 0:CCW/1:CW |
| | 0 | Reserve unit motor phase switching1 | – | 0:2phase/1:1-2phase |
| P042 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | PM motor chip Enable | – | 0:OFF/1ON |
| | 12 | exit motor1Enable | – | 0:OFF/1ON |
| | 11 | Brushless motor Enable | – | 0:OFF/1ON |
| | 10 | HB motor Enable | – | 0:OFF/1ON |
| | 9 | Inlet motor phase switching2 | – | PH0=0,PH1=0:2phase |
| | 8 | Inlet motor phase switching1 | – | PH0=1,PH1=0:1-2phase |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| | 7 | paper delivery start response | – | 0:ON/1:OFF |
| | 6 | paper delivery start | – | 0:OFF/1ON |
| | 5 | drive switching motor rotation direction | – | 0:CW/1:CCW |
| | 4 | drive switching motor CLK | – | – |
| | 3 | lower tray lift motor rotation direction | – | 0:CW/1:CCW |
| | 2 | lower tray lift motor CLK | – | – |
| | 1 | upper tray lift motor rotation direction | – | 0:CW/1:CCW |
| | 0 | upper tray lift motor CLK | – | – |
| P043 | 15 | pickup motor rotation direction | – | 0:CCW/1:CW |
| | 14 | upper tray lift motor current | – | 0:PWM/1:PWM |
| | 13 | lower tray lift motor current | – | 0:PWM/1:PWM |
| | 12 | drive switching motor current | – | 0:PWM/1:PWM |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | external I/O data bus 6 | – | – |
| | 6 | Reserve unit motor CLK | – | – |
| | 5 | external I/O data bus 5 | – | – |
| | 4 | external I/O data bus 4 | – | – |
| | 3 | external I/O data bus 3 | – | – |
| | 2 | external I/O data bus 2 | – | – |
| | 1 | external I/O data bus 1 | – | – |
| | 0 | pickup motor CLK | – | – |
| P044 | 15 | lower tray pick sensor | S6 | 0:outside pick position/1:pick position |
| | 14 | lower tray last paper sensor2 | S15 | 0:no paper /1:paper |
| | 13 | lower tray last paper sensor1 | S14 | 0:paper/1:no paper |
| | 12 | lower tray Empty sensor | S12 | 0:paper/1:no paper |
| | 11 | upper tray lower limit sensor | S4 | 0:outside lower limit/1:lower limit |
| | 10 | upper tray pick sensor | S2 | 0:outside pick position/1:pick position |
| | 9 | upper tray last paper sensor1 | S11 | 0:paper/1:no paper |
| | 8 | upper tray Empty sensor | S9 | 0:paper/1:no paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| | 7 | Reserve timing sensor | S16 | 0:no paper /1:paper |
| | 6 | Reserve sensor | S17 | 0:no paper /1:paper |
| | 5 | Reserve inlet sensor | S18 | 0:no paper /1:paper |
| | 4 | Intermediate feed sensor | S8 | 0:no paper /1:paper |
| | 3 | drive switching sensor | S1 | 0:outside HP/1:inside HP |
| | 2 | unit open/close sensor | S19 | 0:close/1:open |
| | 1 | upper cover open/close switch | SW2 | 0:close/1:open |
| | 0 | lower tray lower limit sensor | S5 | 0:outside lower limit/1:lower limit |
| P045 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | power supply lock detect signal 3 | – | 0:normal /1:lock |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Delivery2 sensor | S21 | 0:no paper /1:paper |
| | 2 | inlet sensor | S20 | 0:no paper /1:paper |
| | 1 | Front upper cover switch | SW1 | 0:close/1:open |
| | 0 | Brushless motor Lock detection signal | – | 0:normal /1:lock |
| P046 | 15 | DSW8 | – | 0:ON/1:OFF |
| | 14 | DSW7 | – | 0:ON/1:OFF |
| | 13 | DSW6 | – | 0:ON/1:OFF |
| | 12 | DSW5 | – | 0:ON/1:OFF |
| | 11 | DSW4 | – | 0:ON/1:OFF |
| | 10 | DSW3 | – | 0:ON/1:OFF |
| | 9 | DSW2 | – | 0:ON/1:OFF |
| | 8 | DSW1 | – | 0:ON/1:OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Wire-speed sorting Identification signal | – | 0:low speed machine/1: high speed machine |
| | 3 | PCB Identification signal2 | – | BIT2=1,BIT3=0:insetion |
| | 2 | PCB Identification signal1 | – | – |
| | 1 | PSW2 | – | 0:ON/1:OFF |
| | 0 | PSW1 | – | 0:ON/1:OFF |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P047 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | fan 2 Enable | – | 0:OFF/1:ON |
| | 10 | – | – | – |
| | 9 | PCB LED2 | PCB2 | 0:ON/1:OFF |
| | 8 | PCB LED1 | PCB1 | 0:ON/1:OFF |

T-8-22

## ■ Paper Folding Unit – H1 : ARCNET Connection (SORTER > P029 to P038)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P029 | 15 | Upper stopper paper sensor | S33 | 1 : paper |
| | 14 | Fold position sensor | S32 | 1 : paper |
| | 13 | Separation timing sensor | S31 | 1 : paper |
| | 12 | Speed down timing sensor | S30 | 1 : paper |
| | 11 | paper delivery start response | – | 0 : OFF / 1 : ON |
| | 10 | paper delivery start request | – | 0 : ON / 1 : OFF |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Rotation direction of fold position adjustment motor | – | 0 : CW / 1 : CCW |
| | 6 | Rotation direction of fold position adjustment motor CLK | – | – |
| | 5 | – | – | – |
| | 4 | fold feed motor CLK | – | – |
| | 3 | C-fold stopper solenoid | SOL5 | 0 : PWM / 1 : PWM |
| | 2 | – | – | – |
| | 1 | Separation solenoid | SOL3 | 0 : PWM / 1 : PWM |
| | 0 | Fold tray branch flapper solenoid | SOL2 | 0 : PWM / 1 : PWM |
| P030 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | 0 : ON / 1 : OFF |
| | 10 | Exit Motor phase switching 2 | – | P31=0,P32=0 : 2phase |
| | 9 | Exit Motor phase switching 1 | – | P31=1,P32=0 : 1-2phase |
| | 8 | Exit Motor 2CLK | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Upper stopper paper sensor AD | S33 | 1 : paper |
| | 2 | Fold position accuracy sensor AD | S32 | 1 : paper |
| | 1 | Separation timing sensor AD | S31 | 1 : paper |
| | 0 | Speed down timing sensor AD | S30 | 1 : paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P031 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | Fold tray branch flapper solenoid | SOL4 | 0 : PWM / 1 : PWM |
| | 9 | Flash write Communication received | – | – |
| | 8 | Flash write Communication Send | – | – |
| | 7 | EEPROM / IO DO signal | – | 0 : data bit0 /<br>1 : : data bit1 |
| | 6 | C-fold tray motor CLK | – | – |
| | 5 | lead edge holding guide motor CLK | – | – |
| | 4 | Rotation direction of lead edge holding guide motor | – | 0 : CW / 1 : CCW |
| | 3 | C-fold stopper adjustment motor CLK | – | – |
| | 2 | Rotation direction of C-fold stopper adjustment motor | – | 0 : CW / 1 : CCW |
| | 1 | upper stopper motor | – | – |
| | 0 | Rotation direction of upper stopper motor | – | 0 : CW / 1 : CCW |
| P032 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | External DAC CS signal | – | 1 : OFF / 0 : ON |
| | 10 | EEPROM CS signal | – | – |
| | 9 | EEPROM / DA / IO / DI signal | – | – |
| | 8 | EEPROM / DA / IO / CLK signal | – | – |
| | 7 | PM motor output Enable | – | 0 : OFF / 1 : ON |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | External I / O Address bus3 | – | – |
| | 3 | External I / O Address bus2 | – | – |
| | 2 | External I / O Address bus1 | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P033 | 15 | Fold position adjustment clutch (negative) | CL4 | 0 : OFF / 1 : ON |
| | 14 | Fold position adjustment clutch (positive) | CL3 | 0 : OFF / 1 : ON |
| | 13 | PM motor chip Enable | – | 0 : OFF / 1 : ON |
| | 12 | exit motor1Enable | – | 0 : OFF / 1 : ON |
| | 11 | Brushless motor Enable | – | 0 : OFF / 1 : ON |
| | 10 | HB motor Enable | – | 0 : OFF / 1 : ON |
| | 9 | entrance motor phase switching 2 | – | PH0=0,PH1=0 : 2phase excitation |
| | 8 | entrance motor switching 2 | – | PH0=1,PH1=0 : 1-2phase excitation |
| | 7 | paper delivery start response | – | 0 : ON / 1 : OFF |
| | 6 | paper delivery start | – | 0 : OFF / 1 : ON |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P034 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | C-fold stopper adjustment motorcurrent | – | 0 : PWM / 1 : PWM |
| | 10 | upper stopper motor current | – | 0 : PWM / 1 : PWM |
| | 9 | C-fold stopper adjustment motor current | – | 0 : PWM / 1 : PWM |
| | 8 | lead edge holding guide motor current | – | 0 : PWM / 1 : PWM |
| | 7 | external I / O Data Bus 6 | – | – |
| | 6 | – | – | – |
| | 5 | external I / O Data Bus5 | – | – |
| | 4 | external I / O Data Bus4 | – | – |
| | 3 | external I / O Data Bus3 | – | – |
| | 2 | external I / O Data Bus2 | – | – |
| | 1 | external I / O Data Bus1 | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P035 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P036 | 15 | Fold unit pull-out sensor | S29 | 0 : close / 1 : open |
| | 14 | Fold tray paper sensor | S27 | 1 : paper |
| | 13 | Fold tray full sensor | S26 | 1 : paper |
| | 12 | Fold tray HP sensor | S28 | 0 : HP outside / 1HP input |
| | 11 | Delivery 1 sensor | S22 | 1 : paper |
| | 10 | 2nd fold push-on stopper HP sensor | S23 | 0 : HP outside / 1HP input |
| | 9 | C-fold stopper HP sensor | S24 | 0 : HP outside / 1HP input |
| | 8 | Lead edge holding guide HP sensor | S25 | 0 : HP outside / 1HP input |
| | 7 | – | – | – |
| | 6 | power supply fan lock detection signal3 | | 0 : normal / 1 : Lock |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Delivery 2 sensor | S21 | 1 : paper |
| | 2 | Inlet sensor | S20 | 1 : paper |
| | 1 | front upper cover sensor | – | 0 : close / 1 : open |
| | 0 | Brushless motor Lock detection signal | | 0 : close / 1 : open |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P037 | 15 | DSW8 | – | 0 : ON / 1 : OFF |
| | 14 | DSW7 | – | 0 : ON / 1 : OFF |
| | 13 | DSW6 | – | 0 : ON / 1 : OFF |
| | 12 | DSW5 | – | 0 : ON / 1 : OFF |
| | 11 | DSW4 | – | 0 : ON / 1 : OFF |
| | 10 | DSW3 | – | 0 : ON / 1 : OFF |
| | 9 | DSW2 | – | 0 : ON / 1 : OFF |
| | 8 | DSW1 | – | 0 : ON / 1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Wire-speed sorting Identification signal | – | 0 : low speed machine / 1 : high speed machine |
| | 3 | PCB Identification signal2 | – | BIT2=1,BIT3=0 : insetion |
| | 2 | PCB Identification signal1 | – | – |
| | 1 | PSW2 | – | 0 : ON / 1 : OFF |
| | 0 | PSW1 | – | 0 : ON / 1 : OFF |
| P038 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | fan 2 Enable | – | 0 : OFF / 1 : ON |
| | 10 | – | – | – |
| | 9 | PCB LED2 | – | 0 : ON / 1 : OFF |
| | 8 | PCB LED1 | – | 0 : ON / 1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

T-8-23

## ■ Paper Folding Unit – H1 : IPC Connection (SORTER>P028 to P037)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P028 | 7 | Upper stopper paper sensor | S33 | 1:paper |
| | 6 | Hold position sensor | S32 | 1:paper |
| | 5 | Separation timing sensor | S31 | 1:paper |
| | 4 | Speed down timing sensor | S30 | 1:paper |
| | 3 | paper delivery start response | – | 0:OFF/1:ON |
| | 2 | paper delivery start request | – | 0:ON/1:OFF |
| | 1 | | – | – |
| | 0 | | – | – |
| P029 | 15 | Rotation direction of Hold position adjustment motor | – | 0:CW/1:CCW |
| | 14 | Rotation direction of Hold position adjustment motor CLK | – | – |
| | 13 | – | – | – |
| | 12 | Saddle Holder/Feeder Motor CLK | – | – |
| | 11 | C-Hold stopper solenoid | SOL5 | 0:PWM/1:PWM |
| | 10 | – | – | – |
| | 9 | Separation solenoid | SOL3 | 0:PWM/1:PWM |
| | 8 | Hold tray branch flapper solenoid | SOL2 | 0:PWM/1:PWM |
| | 7 | – | – | – |
| | 6 | Entrance Motor CLK | – | – |
| | 5 | – | – | 0:ON/1:OFF |
| | 4 | Exit Motor 1CLK | – | – |
| | 3 | – | – | 0:ON/1:OFF |
| | 2 | Exit Motor phase switching 2 | – | P31=0,P32=0:2phase |
| | 1 | Exit Motor phase switching 1 | – | P31=1,P32=0:1-2phase |
| | 0 | Exit Motor 2CLK | – | – |
| P030 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Upper stopper paper sensor AD | S33 | 1:paper |
| | 10 | Hold position accuracy sensor AD | S32 | 1:paper |
| | 9 | Separation timing sensor AD | S31 | 1:paper |
| | 8 | Speed down timing sensor AD | S30 | 1:paper |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | Hold tray branch flapper solenoid | SOL4 | 0:PWM/1:PWM |
| | 1 | Flash write Communication received | – | – |
| | 0 | Flash write Communication Send | – | – |
| P031 | 15 | EEPROM/IO DO signal | – | 0:data bit0/1:data bit1 |
| | 14 | C-Hold tray motor CLK | – | – |
| | 13 | lead edge holding guide motor CLK | – | – |
| | 12 | Rotation direction of lead edge holding guide motor | – | 0:CW/1:CCW |
| | 11 | C-Hold stopper adjustment motor CLK | – | – |
| | 10 | Rotation direction of C-Hold stopper adjustment motor | – | 0:CW/1:CCW |
| | 9 | upper stopper motor | – | – |
| | 8 | Rotation direction of upper stopper motor | – | 0:CW/1:CCW |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | External DAC CS signal | – | 1:OFF/0:ON |
| | 2 | EEPROM CS signal | – | – |
| | 1 | EEPROM/DA/IO/ DI signal | – | – |
| | 0 | EEPROM/DA/IO/ CLK signal | – | – |
| P032 | 15 | PM motor output Enable | – | 0:OFF/1:ON |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | External I/O Address bus3 | – | – |
| | 11 | External I/O Address bus2 | – | – |
| | 10 | External I/O Address bus1 | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| | 7 | Hold position adjustment clutch (negative) | CL4 | 0:OFF/1:ON |
| | 6 | Hold position adjustment clutch (positive) | CL3 | 0:OFF/1:ON |
| | 5 | PM motor chip Enable | - | 0:OFF/1:ON |
| | 4 | exit motor1Enable | - | 0:OFF/1:ON |
| | 3 | Brushless motor Enable | - | 0:OFF/1:ON |
| | 2 | HB motor Enable | - | 0:OFF/1:ON |
| | 1 | entrance motor phase switching 2 | - | PH0=0,PH1=0:2phase excitation |
| | 0 | entrance motor switching 2 | - | PH0=1,PH1=0:1-2phase excitation |
| P033 | 15 | paper delivery start response | - | 0:ON/1:OFF |
| | 14 | paper delivery start | - | 0:OFF/1:ON |
| | 13 | - | - | - |
| | 12 | - | - | - |
| | 11 | - | - | - |
| | 10 | - | - | - |
| | 9 | - | - | - |
| | 8 | - | - | - |
| | 7 | - | - | - |
| | 6 | - | - | - |
| | 5 | - | - | - |
| | 4 | - | - | - |
| | 3 | C-Hold stopper adjustment motor current | - | 0:PWM/1:PWM |
| | 2 | upper stopper motor current | - | 0:PWM/1:PWM |
| | 1 | C-Hold stopper adjustment motor current | - | 0:PWM/1:PWM |
| | 0 | lead edge holding guide motor current | - | 0:PWM/1:PWM |
| P034 | 15 | external I/O Data Bus 6 | - | - |
| | 14 | - | - | - |
| | 13 | external I/O Data Bus5 | - | - |
| | 12 | external I/O Data Bus4 | - | - |
| | 11 | external I/O Data Bus3 | - | - |
| | 10 | external I/O Data Bus2 | - | - |
| | 9 | external I/O Data Bus1 | - | - |
| | 8 | - | - | - |
| | 7 | - | - | - |
| | 6 | - | - | - |
| | 5 | - | - | - |
| | 4 | - | - | - |
| | 3 | - | - | - |
| | 2 | - | - | - |
| | 1 | - | - | - |
| | 0 | - | - | - |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P035 | 15 | - | - | - |
| | 14 | - | - | - |
| | 13 | - | - | - |
| | 12 | - | - | - |
| | 11 | - | - | - |
| | 10 | - | - | - |
| | 9 | - | - | - |
| | 8 | - | - | - |
| | 7 | Hold unit pull-out sensor | S29 | 0:close/1:open |
| | 6 | Hold tray paper sensor | S27 | 1:paper |
| | 5 | Hold tray full sensor | S26 | 1:paper |
| | 4 | Hold tray HP sensor | S28 | 0:HP outside/1HP input |
| | 3 | Delivery 1 sensor | S22 | 1:paper |
| | 2 | 2nd Hold push-on stopper HP sensor | S23 | 0:HP outside/1HP input |
| | 1 | C-Hold stopper HP sensor | S24 | 0:HP outside/1HP input |
| | 0 | Lead edge holding guide HP sensor | S25 | 0:HP outside/1HP input |
| P036 | 15 | - | - | - |
| | 14 | power supply fan lock detection signal3 | | 0:normal/1:Lock |
| | 13 | - | - | - |
| | 12 | - | - | - |
| | 11 | Delivery 2 sensor | S21 | 1:paper |
| | 10 | Inlet sensor | S20 | 1:paper |
| | 9 | front upper cover sensor | - | 0:close/1:open |
| | 8 | Brushless motor Lock detection signal | | 0:close/1:open |
| | 7 | DSW8 | - | 0:ON/1:OFF |
| | 6 | DSW7 | - | 0:ON/1:OFF |
| | 5 | DSW6 | - | 0:ON/1:OFF |
| | 4 | DSW5 | - | 0:ON/1:OFF |
| | 3 | DSW4 | - | 0:ON/1:OFF |
| | 2 | DSW3 | - | 0:ON/1:OFF |
| | 1 | DSW2 | - | 0:ON/1:OFF |
| | 0 | DSW1 | - | 0:ON/1:OFF |
| P037 | 15 | - | - | - |
| | 14 | - | - | - |
| | 13 | - | - | - |
| | 12 | Wire-speed sorting Identification signal | - | 0:low speed machine/1: high speed machine |
| | 11 | PCB Identification signal2 | - | BIT2=1,BIT3=0:insetion |
| | 10 | PCB Identification signal1 | - | - |
| | 9 | PSW2 | - | 0:ON/1:OFF |
| | 8 | PSW1 | - | 0:ON/1:OFF |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | fan 2 Enable | – | 0:OFF/1:ON |
| | 2 | – | – | – |
| | 1 | PCB LED2 | – | 0:ON/1:OFF |
| | 0 | PCB LED1 | – | 0:ON/1:OFF |

T-8-24

## ■ Staple Finisher-F1 / Booklet Finisher-F1 (SORTER > P001 to P075)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 15 | – | – | – |
| | 14 | ARCNET-INT | – | – |
| | 13 | Not use | – | – |
| | 12 | Not use | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | Stack delivery motor | M19 | – |
| | 5 | check LED | – | 0 : OFF,1 : ON |
| | 4 | – | – | – |
| | 3 | Saddle feed motor | M101 | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P002 | 15 | Delivery motor | M5 | – |
| | 14 | Processing feed motor | M26 | – |
| | 13 | Processing feed motor | M26 | – |
| | 12 | – | – | – |
| | 11 | Inlet feed motor | M1 | – |
| | 10 | Punch motor FG | M24 | – |
| | 9 | Punch motor FG | M4 | – |
| | 8 | Shift feed motor FG | M2 | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | SST Connect | – | 1 : SST Connect |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P003 | 15 | – | – | – |
| | 14 | ASIC reset output | – | 0 : RESET |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | DL hard latch Command | – | 1 : latch |
| | 9 | DL hard latch input | – | 0 : Normal,1 : Download |
| | 8 | DL latch release | – | 0 : release |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | ASIC0 chip select | – | 0 : Active |
| | 2 | SRAM chip select | – | 0 : Active |
| | 1 | ARCNET chip select | – | 0 : Active |
| | 0 | – | – | – |
| P004 | 15 | ASIC1 chip select | – | 0 : Active |
| | 14 | Trimmer RXD | – | – |
| | 13 | Trimmer TXD | – | – |
| | 12 | WD_PULSE | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | for R&D | – | – |
| | 6 | for R&D | – | – |
| | 5 | for R&D | – | – |
| | 4 | for R&D | – | – |
| | 3 | for R&D | – | – |
| | 2 | for R&D | – | – |
| | 1 | for R&D | – | – |
| | 0 | for R&D | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P005 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Tray A lift motor CW | M22 | 0 : CCW,1 : CW |
| | 12 | Tray A lift motor Clk | M22 | |
| | 11 | Tray A lift motor OFF | M23 | 0 : ON,1 : OFF |
| | 10 | Auxiliary tray lift solenoid | SL9 | 0 : ON,1 : OFF |
| | 9 | Staple motor direction switching | M25 | – |
| | 8 | Staple motor ON | M25 | – |
| | 7 | Tray B lift motor Current switching 2 | M23 | – |
| | 6 | Tray B lift motor Current switching 1 | M23 | – |
| | 5 | Tray B lift motor CW | M23 | 0 : CCW,1 : CW |
| | 4 | Tray B lift motor Clk | M23 | – |
| | 3 | Tray B lift motor OFF | M23 | 0 : ON,1 : OFF |
| | 2 | Tray A paper surface sensor PCB A / D Input selector3 | UN16 | 0 : selected,1 : not selected |
| | 1 | Tray A paper surface sensor PCB A / D Input selector2 | UN16 | 0 : selected,1 : not selected |
| | 0 | Tray A paper surface sensor PCB A / D Input selector1 | UN16 | 0 : selected,1 : not selected |
| P006 | 15 | Buffer front feed motor Current switching 2 | M3 | – |
| | 14 | Buffer front feed motor Current switching 1 | M3 | – |
| | 13 | Buffer front feed motor | M3 | 0 : CW,1 : CCW |
| | 12 | Buffer front feed motor | M3 | – |
| | 11 | Processing feed motor Current switching 2 | M26 | – |
| | 10 | Processing feed motor Current switching 1 | M26 | – |
| | 9 | Processing feed motor | M26 | 0 : CW,1 : CCW |
| | 8 | Processing feed motor | M26 | – |
| | 7 | Buffer motor | M4 | – |
| | 6 | Buffer motor | M4 | – |
| | 5 | Buffer motor | M4 | 0 : CW,1 : CCW |
| | 4 | Buffer motor | M4 | – |
| | 3 | Staple motor | M25 | – |
| | 2 | Staple motor | M25 | – |
| | 1 | Staple motor | M25 | 0 : CCW,1 : CW |
| | 0 | Staple motor | M25 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P007 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Tray A paper sensor | PS32 | 0 : No paper,1 : paper |
| | 10 | Tray adjacent switch | MSW2 | 0 : detect, 1 : not detect |
| | 9 | guide Safety detection | | 0 : not detect,1 : detect |
| | 8 | Tray area sensor 4 | UN19 | 0 : Shading |
| | 7 | Tray area sensor 3 | UN19 | 0 : Shading |
| | 6 | Tray area sensor 2 | UN19 | 0 : Shading |
| | 5 | Tray area sensor 1 | UN19 | 0 : Shading |
| | 4 | Tray B area sensor | PS33 | 0 : no paper,1 : paper |
| | 3 | Tray area sensor 4 | UN20 | 0 : Shading |
| | 2 | Tray area sensor 3 | UN20 | 0 : Shading |
| | 1 | Tray area sensor 2 | UN20 | 0 : Shading |
| | 0 | Tray area sensor 1 | UN20 | 0 : Shading |
| P008 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | No staple detect | – | 0 : No staple,1 : staple |
| | 10 | READY detect | – | 0 : not ready,1 : ready |
| | 9 | Staple 24VDOWN detect | – | 0 : ON,1 : OFF |
| | 8 | Staple HP sensor | PS27 | 1 : HP |
| | 7 | Staple position sensor 4 | PS31 | 0 : NG,1 : OK |
| | 6 | Staple position sensor 3 | PS30 | 0 : NG,1 : OK |
| | 5 | Staple position sensor 2 | PS29 | 0 : NG,1 : OK |
| | 4 | Staple position sensor 1 | PS28 | 0 : NG,1 : OK |
| | 3 | – | – | – |
| | 2 | Needle chip full sensor | PS42 | 1 : not set or full |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P009 | 15 | Inlet feed motor | M1 | – |
| | 14 | Inlet feed motor | M1 | – |
| | 13 | Inlet feed motor | M1 | 0 : CW,1 : CCW |
| | 12 | Inlet feed motor | M1 | – |
| | 11 | feed roller disengage motor current switching 2 | M8 | – |
| | 10 | feed roller disengage motor current switching 1 | M8 | – |
| | 9 | feed roller disengage motor current switching B phase | M8 | – |
| | 8 | feed roller disengage motor current switching A phase | M8 | – |
| | 7 | Shift feed motor Current switching 2 | M2 | – |
| | 6 | Shift feed motor Current switching 1 | M2 | – |
| | 5 | Shift feed motor CW | M2 | 0 : CW,1 : CCW |
| | 4 | Shift feed motor Clk | M2 | – |
| | 3 | Inlet roller disengage motor current set | M27 | – |
| | 2 | Inlet roller disengage motor current set | M27 | – |
| | 1 | Inlet roller disengage motor current B phase | M27 | – |
| | 0 | Inlet roller disengage motor current A phase | M27 | – |
| P010 | 15 | 7segLED_A | – | 0 : OFF,1 : ON |
| | 14 | 7segLED_B | – | 0 : OFF,1 : ON |
| | 13 | 7segLED_C | – | 0 : OFF,1 : ON |
| | 12 | 7segLED_D | – | 0 : OFF,1 : ON |
| | 11 | 7segLED_E | – | 0 : OFF,1 : ON |
| | 10 | 7segLED_F | – | 0 : OFF,1 : ON |
| | 9 | 7segLED_G | – | 0 : OFF,1 : ON |
| | 8 | 7segLED_Dot | – | 0 : OFF,1 : ON |
| | 7 | Horizontal registration shift motor Current switching 2 | M7 | – |
| | 6 | Horizontal registration shift motor Current switching 1 | M7 | – |
| | 5 | Horizontal registration shift motor CW / CCW | M7 | 0 : CW,1 : CCW |
| | 4 | Horizontal registration shift motor Clock (1-2 phase) | M7 | – |
| | 3 | Delivery motor Current switching 2 | M5 | – |
| | 2 | Delivery motor Current switching 1 | M5 | – |
| | 1 | Delivery motor CW / CCW | M5 | 0 : CW,1 : CCW |
| | 0 | Delivery motor Clk | M5 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P011 | 15 | DIPSW(adjust4) | DIPSW4 | 0 : ON,1 : OFF |
| | 14 | DIPSW(adjust3) | DIPSW3 | 0 : ON,1 : OFF |
| | 13 | DIPSW(adjust2) | DIPSW2 | 0 : ON,1 : OFF |
| | 12 | DIPSW(adjust1) | DIPSW1 | 0 : ON,1 : OFF |
| | 11 | DIPSW(adjust0) | DIPSW0 | 0 : ON,1 : OFF |
| | 10 | DIPSW(PunchIdentification0) | DIPSW0 | 0 : ON,1 : OFF |
| | 9 | DIPSW(PunchIdentification1) | DIPSW1 | 0 : ON,1 : OFF |
| | 8 | DIPSW(PunchIdentification2) | DIPSW2 | 0 : ON,1 : OFF |
| | 7 | CHK-SW8 | CHK-SW8 | 0 : ON,1 : OFF |
| | 6 | CHK-SW7 | CHK-SW7 | 0 : ON,1 : OFF |
| | 5 | CHK-SW6 | CHK-SW6 | 0 : ON,1 : OFF |
| | 4 | CHK-SW5 | CHK-SW5 | 0 : ON,1 : OFF |
| | 3 | CHK-SW4 | CHK-SW4 | 0 : ON,1 : OFF |
| | 2 | CHK-SW3 | CHK-SW3 | 0 : ON,1 : OFF |
| | 1 | CHK-SW2 | CHK-SW2 | 0 : ON,1 : OFF |
| | 0 | CHK-SW1 | CHK-SW1 | 0 : ON,1 : OFF |
| P012 | 15 | Upper cover sensor | PS2 | 0 : open,1 : close |
| | 14 | feed cooling fan error | FM2 | 0 : normal,1 : error |
| | 13 | Front door sensor | PS1 | 0 : open,1 : close |
| | 12 | Chip tray sensor | PS40 | 0 : not set,1 : set |
| | 11 | Punch 2 / 3 hole sensor | PS39 | 0 : 2 hole,1 : 3hole |
| | 10 | door 24V power down detect | – | 1 : power down |
| | 9 | Chad sensor | PS46 | 1 : full |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | -PSW | – | 0 : PUSH |
| | 1 | +PSW | – | 0 : PUSH |
| | 0 | ENTER PSW | – | 0 : PUSH |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P013 | 15 | – | – | – |
| | 14 | upper guide motor Current switching | M20 | – |
| | 13 | upper guide motor B phase | M20 | – |
| | 12 | upper guide motor A phase | M20 | – |
| | 11 | | | – |
| | 10 | feed belt move motor Current switching | M17 | – |
| | 9 | feed belt move motor B phase | M17 | – |
| | 8 | feed belt move motor A phase | M17 | – |
| | 7 | | | – |
| | 6 | Paper trailing edge drop motor Current switching | M16 | – |
| | 5 | Paper trailing edge drop motor B phase | M16 | – |
| | 4 | Paper trailing edge drop motor A phase | M16 | – |
| | 3 | Punch motor | M24 | 0 : ON,1 : OFF |
| | 2 | Upper path switch solenoid | SL2 | 0 : OFF,1 : ON |
| | 1 | Saddle path switch solenoid | SL3 | 0 : OFF,1 : ON |
| | 0 | Buffer path switch solenoid | SL1 | 0 : OFF,1 : ON |
| P014 | 15 | Horizontal registration detection select 3 | – | 0 : not selected,<br>1 : selected |
| | 14 | Horizontal registration detection select 2 | – | 0 : not selected,<br>1 : selected |
| | 13 | Horizontal registration detection select 1 | – | 0 : not selected,<br>1 : selected |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Punch motor direction Switching | M24 | – |
| | 6 | Punch motor ON signal | M24 | – |
| | 5 | Horizontal registration detection unit move motor B* | M6 | – |
| | 4 | Horizontal registration detection unit move motor A* | M6 | – |
| | 3 | Horizontal registration detection motor Current switching 2 | M6 | – |
| | 2 | Horizontal registration detection motor Current switching 1 | M6 | – |
| | 1 | Horizontal registration detection unit move motor B* | M6 | – |
| | 0 | Horizontal registration detection unit move motor A* | M6 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P015 | 15 | Upper guide HP sensor | PS26 | 0 : HP outside,<br>1 : HP inside |
| | 14 | Paper trailing edge drop guide HP sensor | PS24 | 0 : HP outside,<br>1 : HP inside |
| | 13 | Feed roller HP sensor | PS9 | 0 : HP outside,<br>1 : HP inside |
| | 12 | Shift roller unit HP sensor | PS8 | 0 : HP outside,<br>1 : HP inside |
| | 11 | Punch front sensor | PS37 | 0 : front,1 : rear |
| | 10 | Punch motor HP sensor | PS36 | 0 : HP outside,<br>1 : HP inside |
| | 9 | Staple HP sensor | PS27 | 0 : HP outside,<br>1 : HP inside |
| | 8 | Horizontal registration detection unit HP sensor | PS7 | 0 : HP outside,<br>1 : HP inside |
| | 7 | Lower path sensor PCB | UN22 | 0 : paper,1no paper |
| | 6 | Upper delivery sensor | PS5 | 0 : no paper,1 : paper |
| | 5 | Inlet sensor | PS3 | 0 : no paper,1 : paper |
| | 4 | Shift unit trailing edge sensor | PS4 | 0 : no paper,1 : paper |
| | 3 | Buffer path 1 sensor PCB | UN13 | 0 : paper,1no paper |
| | 2 | | | – |
| | 1 | Buffer path 2 sensor PCB | UN14 | 0 : paper,1no paper |
| | 0 | Lower delivery sensor | PS6 | 0 : no paper,1 : paper |
| P016 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Inlet roller HP sensor | PS43 | 0 : HP outside,1 : HP inside |
| | 6 | Horizontal registration sensor 3 | UN24 | 0 : paper,1no paper |
| | 5 | Horizontal registration sensor 2 | UN24 | 0 : paper,1no paper |
| | 4 | Horizontal registration sensor 1 | UN24 | 0 : paper,1no paper |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | Feed belt HP sensor | PS25 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P017 | 15 | Trimmer Out | – | – |
| | 14 | Stack delivery auxiliary tray motor ON | M13 | – |
| | 13 | Stack delivery auxiliary tray motor B | M13 | – |
| | 12 | Stack delivery auxiliary tray motor A | M13 | – |
| | 11 | | | |
| | 10 | Paddle rotation motor Current switching 1 | M14 | – |
| | 9 | Paddle rotation motor CW | M14 | 0 : CW,1 : CCW |
| | 8 | Paddle rotation motor Clk | M14 | – |
| | 7 | Processing rib tray solenoid | SL8 | 0 : OFF,1 : ON |
| | 6 | Paddle lift motor Current switching | M15 | – |
| | 5 | Paddle lift motor B phase | M15 | – |
| | 4 | Paddle lift motor A phase | M15 | – |
| | 3 | Square hold Download | – | 0 : OFF,1 : ON |
| | 2 | Square hold mode signal | – | 0 : OFF,1 : ON |
| | 1 | Square hold remote | – | 0 : OFF,1 : ON |
| | 0 | Trimmer Remote | – | 0 : OFF,1 : ON |
| P018 | 15 | Square hold reset signal | – | 0 : RESET |
| | 14 | Delivery angle change motor current switching 1 | M28 | – |
| | 13 | Delivery angle change motor current switching B phase | M28 | – |
| | 12 | Delivery angle change motor current switching A phase | M28 | – |
| | 11 | Stack delivery motor Current switching 2 | M19 | – |
| | 10 | Stack delivery motor Current switching 1 | M19 | – |
| | 9 | Stack delivery motor CW | M19 | 0 : CW,1 : CCW |
| | 8 | Stack delivery motor Clk | M19 | – |
| | 7 | Assist motor Current switching 2 | M12 | – |
| | 6 | Assist motor Current switching 1 | M12 | – |
| | 5 | Assist motor CW | M12 | 0 : CW,1 : CCW |
| | 4 | Assist motor Clk | M12 | – |
| | 3 | Swing guide motor Current switching 2 | M18 | – |
| | 2 | Swing guide motor Current switching 1 | M18 | – |
| | 1 | Swing guide motor CW / CCW | M18 | 0 : CW,1 : CCW |
| | 0 | Swing guide motor Clk | M18 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P019 | 15 | Square hold connected detection | – | 0 : conect,1not connect |
| | 14 | Trimmer connect detection | – | 0 : conect,1not connect |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P020 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | Square hold input 3 | – | – |
| | 7 | Square hold input 2 | – | – |
| | 6 | Square hold input 1 | – | – |
| | 5 | tray B ISAsensor | – | 0 : paper,1no paper |
| | 4 | Tray B paper surface sensor PCB (receiving) | UN18 | 0 : paper,1no paper |
| | 3 | tray B sensor | – | 0 : paper,1no paper |
| | 2 | tray B SAsensor | – | 0 : paper,1no paper |
| | 1 | Tray A paper surface sensor PCB (receiving) | UN16 | 0 : paper,1no paper |
| | 0 | tray A sensor | – | 0 : paper,1no paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P021 | 15 | – | – | – |
| | 14 | Processing stopper move motor current switching | M11 | – |
| | 13 | Processing stopper move motor B phase | M11 | – |
| | 12 | Processing stopper move motor A phase | M11 | – |
| | 11 | motor standby HB | | 0 : OFF,1 : ON |
| | 10 | Staple move motor Current switching | M21 | – |
| | 9 | Staple move motor B | M21 | – |
| | 8 | Staple move motor A | M21 | – |
| | 7 | CZ hold Separate | – | 0 : Separate(Kill),<br>1 : not Separate |
| | 6 | CZ hold set | – | 0 : reset off ,1 : reset |
| | 5 | CZ hold download mode | – | 0 : OFF,1 : ON |
| | 4 | – | – | – |
| | 3 | motor standby PM | – | 0 : OFF,1 : ON |
| | 2 | 5V power on | – | 0 : DOWN,1 : ON |
| | 1 | fan on signal | – | 0 : OFF,1 : ON |
| | 0 | saddle separate | – | 0 : not separate,<br>1 : separate(kill) |
| P022 | 15 | Square hold output3 | – | – |
| | 14 | Square hold output2 | – | – |
| | 13 | Front alignment motor B* | M9 | – |
| | 12 | Front alignment motor A* | M9 | – |
| | 11 | Square hold output1 | – | – |
| | 10 | Front alignment motor current switching IH | – | – |
| | 9 | Front alignment motor B | M9 | – |
| | 8 | Front alignment motor A | M9 | – |
| | 7 | CZ hold FOLDENTRY | – | 0 : OFF,1 : paper |
| | 6 | power remote output | – | 0 : DOWN,1 : ON |
| | 5 | Front alignment motor B* phase | M10 | – |
| | 4 | Front alignment motor A* phase | M10 | – |
| | 3 | CZ hold FOLDEXITACK | – | 1 : Response |
| | 2 | Front alignment motor current switching | – | – |
| | 1 | Rear alignment motor B | M10 | – |
| | 0 | Rear alignment motor A | M10 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P023 | 15 | Saddle Press HP sensor | PS110 | 0 : HP inside,<br>1 : HP outside |
| | 14 | CZ hold FOLDENTRYACK | – | 0 : Response |
| | 13 | CZ hold FOLDEXIT | – | 0 : paper |
| | 12 | – | – | – |
| | 11 | Processing tray HP sensor | PS13 | 0 : HP outside,1<br>: HP inside |
| | 10 | Processing tray paper sensor | PS17 | 0 : no paper,1 : paper |
| | 9 | Paper edge area sensor2 | PS16 | – |
| | 8 | Front alignment motor HP sensor | PS12 | – |
| | 7 | Front alignment HP sensor | PS11 | 0 : HP outside,<br>1 : HP inside |
| | 6 | Paper edge area sensor 1 | PS15 | 0 : Transmission,1 :<br>Shading |
| | 5 | Paddle rotation HP sensor | PS20 | 0 : HP outside,<br>1 : HP inside |
| | 4 | Delivery angle HP sensor | PS45 | 0 : HP outside,<br>1 : HP inside |
| | 3 | Stack delivery auxiliary tray HP sensor | PS14 | 0 : HP outside,<br>1 : HP inside |
| | 2 | Swing guide HP sensor | PS44 | 0 : HP outside,<br>1 : HP inside |
| | 1 | Delivery mouth shutter HP sensor | PS19 | 0 : HP outside,<br>1 : HP inside |
| | 0 | Paddle lift HP sensor | PS21 | 0 : HP outside,<br>1 : HP inside |
| P024 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | Not use | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | power supply fan error 2 | – | 0 : normal,1 : error |
| | 5 | CZ fold connect detect | – | 0 : connect,1not connect |
| | 4 | power supply fan error | – | 0 : normal,1 : error |
| | 3 | Saddle delivery sub tray paper sensor | PS112 | 0 : paper 1 : No paper |
| | 2 | – | – | 0 : no paper,1 : paper |
| | 1 | – | – | 0 : no paper,1 : paper |
| | 0 | saddle unit connect detection | – | 0 : connect,1not connect |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P025 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Saddle press front sensor | PS109 | 0 : no paper,1 : paper |
| | 12 | Saddle alignment plate HP sensor | PS106 | 0 : HP outside,1 : HP inside |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | Saddle lead edge stopper HP sensor | PS105 | 0 : HP outside,1 : HP inside |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Saddle lead-in roller HP sensor | PS122 | 0 : HP outside,1 : HP inside |
| | 4 | Saddle trailing edge retainer move HP sensor | PS119 | 0 : HP outside,1 : HP inside |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | Saddle trailing edge retainer HP sensor | PS121 | 0 : HP outside,1 : HP inside |
| P026 | 15 | Saddle press Center Detect | – | 0 : not Center ,1 : Center |
| | 14 | Saddle press HP sensor | PS110 | 0 : HP outside,<br>1 : HP inside |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | saddle roller guide HP sensor | – | 0 : Not through the home position,1 : Through the home position |
| | 9 | – | – | – |
| | 8 | Saddle roller guide HP sensor | PS107 | 0 : HP outside,1 : HP inside |
| | 7 | Saddle vertical path sensor | PS103 | 0 : no paper,1 : paper |
| | 6 | Saddle inlet sensor | PS101 | 0 : no paper,1 : paper |
| | 5 | Saddle paper push-on plate HP sensor | PS108 | 0 : HP outside,<br>1 : HP inside |
| | 4 | – | – | – |
| | 3 | saddle staple detection 2 | – | 0 : no stapl,1 : stapl |
| | 2 | saddle staple detection1 | – | 0 : no stapl,1 : stapl |
| | 1 | Saddle staple HP sensor | – | 0 : HP outside,<br>1 : HP inside |
| | 0 | Saddle paper tapping HP sensor | PS118 | 0 : HP outside,<br>1 : HP inside |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P027 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Saddle sticher motor CCW | M109 | 1 : CCW Active |
| | 10 | Saddle sticher motor CW | M109 | 1 : CW Active |
| | 9 | Saddle paper push-on plate motor CCW | M105 | 0 : CCW Active |
| | 8 | Saddle paper push-on plate motor CW | M105 | 0 : CW Active |
| | 7 | Saddle press motor CCW | M108 | 0 : CCW Active |
| | 6 | Saddle press motor CW | M108 | 0 : CW Active |
| | 5 | Saddle folder / feeder motor CCW | M106 | 0 : CCW Active |
| | 4 | Saddle folder / feeder motor CW | M106 | 0 : CW Active |
| | 3 | Saddle lead-in roller disengage motor CW | M114 | 0 : CW,1 : CCW |
| | 2 | Saddle lead-in roller disengage motor IL | M114 | – |
| | 1 | | – | – |
| | 0 | Saddle alignment roller motor IL | M112 | – |
| P028 | 15 | Saddle alignment guide motor CW | M102 | 0 : CW,1 : CCW |
| | 14 | Saddle alignment guide motor IL | M102 | – |
| | 13 | Saddle lead edge stopper motor CW | M103 | 0 : CW,1 : CCW |
| | 12 | Saddle lead edge stopper motor current IL | M103 | – |
| | 11 | check LED | – | 0 : OFF,1 : ON |
| | 10 | Saddle feed motor CW | M101 | 0 : CW,1 : CCW |
| | 9 | Saddle feed motor current IH | M101 | – |
| | 8 | Saddle feed motor current IL | M101 | – |
| | 7 | Saddle trailing edge moving motor CW | M111 | 0 : CW,1 : CCW |
| | 6 | Saddle trailing edge moving motor IL | M111 | – |
| | 5 | | – | – |
| | 4 | Saddle trailing edge retainer move motor IL | M110 | – |
| | 3 | jam paper display LED4(Front) | – | 0 : OFF,1 : ON |
| | 2 | saddle roller guide motor current IL | M104 | – |
| | 1 | motor standby | – | 1 : standby |
| | 0 | Saddle paper tapping motor current IL | M113 | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P029 | 15 | upper stopper paper sensor | – | 0 : no paper,1 : paper |
| | 14 | hold position sensor | – | 0 : no paper,1 : paper |
| | 13 | disengage timing sensor | – | 0 : no paper,1 : paper |
| | 12 | Slowdown timing sensor | – | 0 : no paper,1 : paper |
| | 11 | paper delivery Start response | – | 0 : OFF,1 : ON |
| | 10 | paper delivery Start Request | – | 0 : ON,1 : OFF |
| | 9 | finisher communication received | – | |
| | 8 | finisher communication Send | – | |
| | 7 | hold position adjust motor rotation Direction | – | 0 : CW,1 : CCW |
| | 6 | hold position adjust motor CLK | – | – |
| | 5 | hold position adjust motor CLK feedback | – | – |
| | 4 | hold feed motor CLK | – | – |
| | 3 | 3 hold stopper solenoid | – | 0 : PWM,1 : PWM |
| | 2 | presser solenoid | – | 0 : PWM,1 : PWM |
| | 1 | disengage solenoid | – | 0 : PWM,1 : PWM |
| | 0 | hold / straight solenoid | – | 0 : PWM,1 : PWM |
| P030 | 15 | – | – | – |
| | 14 | Inlet feed motor CLK | M1 | – |
| | 13 | lower bin document set LED | – | 0 : ON,1 : OFF |
| | 12 | exit motor 1CLK | – | – |
| | 11 | upper bin document set LED | – | 0 : ON,1 : OFF |
| | 10 | exit motor phase switching2 | – | "P31=0, P32=0 : 2phaseExcitation P31=1, P32=0 : 1-2phaseExcitation" |
| | 9 | exit motor phase switching1 | – | – |
| | 8 | exit motor 3CLK | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | upper bin tray document wide detection AD | – | – |
| | 4 | lower bin tray document wide detection AD | – | – |
| | 3 | upper stopper paper sensor AD | – | 0 : no paper,1 : paper |
| | 2 | hold position accuracy sensor AD | – | 0 : no paper,1 : paper |
| | 1 | disengage timing sensor AD | – | 0 : no paper,1 : paper |
| | 0 | Slowdown timing sensor AD | – | 0 : no paper,1 : paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P031 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | reserve solenoid | – | 0 : PWM,1 : PWM |
| | 12 | upper bin registration | – | 0 : no paper,1 : paper |
| | 11 | lower bin registration | – | 0 : no paper,1 : paper |
| | 10 | Inner tray motor solenoid | – | 0 : PWM,1 : PWM |
| | 9 | flash write communication received | – | – |
| | 8 | flash write communication send | – | – |
| | 7 | EEPROM / IO DO signal | – | 0 : data bit 0,1 : data bit 1 |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Saddle lead edge guide hold motor rotation direction | – | 0 : CW,1 : CCW |
| | 3 | – | – | – |
| | 2 | inner 3 hold adjust motor rotation direction | – | 0 : CW,1 : CCW |
| | 1 | – | – | – |
| | 0 | upper stopper motor rotation direction | – | 0 : CW,1 : CCW |
| P032 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | External DAC CS signal | – | 0 : ON,1OFF |
| | 10 | EEPROM CS signal | – | 0 : OFF,1ON |
| | 9 | EEPROM / DA / IO DI signal | – | 0 : data bit 0,1 : data bit 1 |
| | 8 | EEPROM / DA / IO CLK signal | – | – |
| | 7 | PM motor output Enable | – | 0 : OFF,1ON |
| | 6 | upper bin registration clutch | – | 0 : OFF,1ON |
| | 5 | lower bin registration clutch | – | 0 : OFF,1ON |
| | 4 | External I / O Address bus 3 | – | – |
| | 3 | External I / O Address bus 2 | – | – |
| | 2 | External I / O Address bus 1 | – | – |
| | 1 | Reverse unit motor rotation direction | – | 0 : CCW,1CW |
| | 0 | Reverse unit motor phase switching1 | – | 0 : 2phase1 : 1-2phase |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P033 | 15 | hold position adjustment clutch(-) | – | 0 : OFF,1 : ON |
| | 14 | hold position adjustment clutch(+) | – | 0 : OFF,1 : ON |
| | 13 | PM motor chip Enable | – | 0 : OFF,1ON |
| | 12 | exit motor 1Enable | – | 0 : OFF,1ON |
| | 11 | Brushless motor Enable | – | 0 : OFF,1ON |
| | 10 | HB motor Enable | – | 0 : OFF,1ON |
| | 9 | Inlet feed motor phaseswitching2 | M1 | "PH0=0, PH1=0 : 2phase PH0=1, PH1=0 : 1-2phase" |
| | 8 | Inlet motor phaseswitching1 | M1 | – |
| | 7 | paper delivery start response | – | 0 : ON,1OFF |
| | 6 | paper delivery start | – | 0 : ON,1OFF |
| | 5 | drive switching motor rotation direction | – | 0 : CW,1 : CCW |
| | 4 | drive switching motor CLK | – | – |
| | 3 | Tray B lift motor rotation direction | M23 | 0 : CW,1 : CCW |
| | 2 | Tray B lift motor CLK | M23 | – |
| | 1 | Tray A lift motor rotation direction | M22 | 0 : CW,1 : CCW |
| | 0 | Tray A lift motor CLK | M22 | – |
| P034 | 15 | pickup motor rotation direction | – | 0 : CCW,1CW |
| | 14 | Tray A lift motor current | M22 | 0 : PWM,1 : PWM |
| | 13 | Tray B lift motor current | M23 | 0 : PWM,1 : PWM |
| | 12 | drive switching motor current | – | 0 : PWM,1 : PWM |
| | 11 | inner 3 tray motor current | – | 0 : PWM,1 : PWM |
| | 10 | upper stopper motor current | – | 0 : PWM,1 : PWM |
| | 9 | inner 3 hold stopper adjustment motor current | – | 0 : PWM,1 : PWM |
| | 8 | lead edge hold guide motor current | – | 0 : PWM,1 : PWM |
| | 7 | External I / Odata bus6 | – | – |
| | 6 | Reserve unit motorCLK | – | – |
| | 5 | External I / Odata bus5 | – | – |
| | 4 | External I / Odata bus4 | – | – |
| | 3 | External I / Odata bus3 | – | – |
| | 2 | External I / Odata bus2 | – | – |
| | 1 | External I / Odata bus1 | – | – |
| | 0 | pickup motorCLK | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P035 | 15 | lower bin pick sensor | – | 0 : outside pick pisition ,<br>1 : pick pisition |
| | 14 | lower bin tray last paper sensor2 | – | 0 : no paper,1 : paper |
| | 13 | lower bin tray last paper sensor1 | – | 0 : paper,1 : no paper |
| | 12 | lower bin empty sensor | – | 0 : paper,1 : no paper |
| | 11 | upper bin tray Lower position sensor | – | 0 : outside lower position,<br>1 : lower position |
| | 10 | upper bin pick sensor | – | 0 : outside pick position ,<br>1 : pick position |
| | 9 | upper bin last paper sensor sensor1 | – | 0 : paper,1 : no paper |
| | 8 | upper bin empty sensor | – | 0 : paper,1 : no paper |
| | 7 | reserve timing sensor | – | 0 : no paper,1 : paper |
| | 6 | reserve sensor | – | 0 : no paper,1 : paper |
| | 5 | reserve inlet sensor | – | 0 : no paper,1 : paper |
| | 4 | middle feed sensor | – | 0 : no paper,1 : paper |
| | 3 | drive switching sensor | – | 0 : outside HP,<br>1 : inside HP |
| | 2 | unit open / close sensor | – | 0 : close,1 : open |
| | 1 | TOP cover open / close sensor | – | 0 : close,1 : open |
| | 0 | lower bin tray lower position sensor | – | 0 : outside lower position,<br>1 : lower position |
| P036 | 15 | hold unit pickup sensor | – | 0 : close,1 : open |
| | 14 | inner 3 tray paper sensor | – | 0 : no paper,1 : paper |
| | 13 | inner 3 tray full sensor | – | 0 : no paper,1 : paper |
| | 12 | inner 3 tray HP sensor | – | 0 : outside HP,<br>1 : inside HP |
| | 11 | delivery 1 paper sensor | – | 0 : no paper,1 : paper |
| | 10 | upper stopper HP sensor | – | 0 : outside HP,<br>1 : inside HP |
| | 9 | inner 3stopper HP sensor | – | 0 : outside HP,<br>1 : inside HP |
| | 8 | Lead edge hold HP sensor | – | 0 : outside HP,<br>1 : inside HP |
| | 7 | – | – | |
| | 6 | power supply fan lock signal3 | – | 0 : normal,1 : lock |
| | 5 | fan lock signal2 | – | 0 : normal,1 : lock |
| | 4 | fan lock signal1 | – | 0 : normal,1 : lock |
| | 3 | delivery 2 sensor | – | 0 : no paper,1 : paper |
| | 2 | Inlet sensor | PS3 | 0 : no paper,1 : paper |
| | 1 | Front Cover sensor | – | 0 : Closed, 1 : Open |
| | 0 | Brushless motor lock detection signal | – | 0 : normal,1 : lock |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P037 | 15 | DSW8 | DSW8 | 0 : ON,1 : OFF |
| | 14 | DSW7 | DSW7 | 0 : ON,1 : OFF |
| | 13 | DSW6 | DSW6 | 0 : ON,1 : OFF |
| | 12 | DSW5 | DSW5 | 0 : ON,1 : OFF |
| | 11 | DSW4 | DSW4 | 0 : ON,1 : OFF |
| | 10 | DSW3 | DSW3 | 0 : ON,1 : OFF |
| | 9 | DSW2 | DSW2 | 0 : ON,1 : OFF |
| | 8 | DSW1 | DSW1 | 0 : ON,1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Wire-speed sorting Identification signal | – | 0 : low speed machine /<br>1 : high speed machine |
| | 3 | PCB Identification signal2 | – | BIT2=1,BIT3=0 : insetion |
| | 2 | PCB Identification signal1 | – | – |
| | 1 | PSW2 | – | 0 : ON / 1 : OFF |
| | 0 | PSW1 | – | 0 : ON / 1 : OFF |
| P038 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | FAN 2 Enable | – | 0 : OFF,1 : ON |
| | 10 | FAN 1Enable | – | 0 : OFF,1 : ON |
| | 9 | PCB LED2 | – | 0 : ON,1 : OFF |
| | 8 | PCB LED1 | – | 0 : ON,1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P039 | | – | – | – |
| P040 | | – | – | – |
| P041 | | – | – | – |
| P042 | | – | – | – |
| P043 | | – | – | – |
| P044 | | – | – | – |
| P045 | | – | – | – |
| P046 | | – | – | – |
| P047 | | – | – | – |
| P048 | | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P049 | | - | - | |
| P050 | | Horizontal registration sensor 3 | UN24 | |
| P051 | | Horizontal registration sensor 2 | UN24 | |
| P052 | | Horizontal registration sensor 1 | UN24 | |
| P053 | | - | - | - |
| P054 | | - | - | - |
| P055 | | - | - | - |
| P056 | | - | - | - |
| P057 | | - | - | - |
| P058 | | - | - | - |
| P059 | | - | - | - |
| P060 | | - | - | - |
| P061 | | - | - | - |
| P062 | | - | - | - |
| P063 | | - | - | - |
| P064 | | - | - | - |
| P065 | | - | - | - |
| P066 | | - | - | - |
| P067 | | - | - | - |
| P068 | | - | - | - |
| P069 | | - | - | - |
| P070 | | - | - | - |
| P071 | | - | - | - |
| P072 | | - | - | - |
| P073 | | - | - | - |
| P074 | | - | - | - |
| P075 | | - | - | - |

T-8-25

## ■ Staple Finisher - D1 / Booklet Finisher -D1 (SORTER>P001 to P024)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P001 | 15 | Horizontal registration HP sensor | S101 | 1:home position |
| | 14 | Punch 2-/3-hole encoder | - | - |
| | 13 | - | - | - |
| | 12 | - | - | - |
| | 11 | Punch 2-/3-hole sensor | S103 | 1:home position |
| | 10 | Punch position sensor | S102 | 1:home position |
| | 9 | - | - | - |
| | 8 | - | - | - |
| | 7 | Buffer Feed Motor rotation signal | M102 | 0:CCW/1:CW |
| | 6 | Swing Guide Motor clock signal | M110 | - |
| | 5 | Swing Guide Motor rotation signal | M110 | 0:CW/1:CCW |
| | 4 | Inlet Sensor | S101 | 0:paper/1:no paper |
| | 3 | Swing Guide Height Detection Sensor | S118 | 1:detected |
| | 2 | - | - | - |
| | 1 | - | - | - |
| | 0 | Feed Path Senor | S102 | 0:no paper/1:paper |
| P002 | 15 | Inlet Feed Motor | M200 | 0:CW/1:CCW |
| | 14 | Inlet Feed Motor | M200 | - |
| | 13 | Stack Delivery Lower/Shutter Motor rotation | M122 | 0:CW/1:CCW |
| | 12 | Stack Delivery Lower/Shutter Motor clock | M122 | - |
| | 11 | DA converter 1 clock signal | - | - |
| | 10 | DA converter 1 data output signal | - | - |
| | 9 | DA converter 1 chip select signal | - | - |
| | 8 | Buffer Feed Motor clock signal | | |
| | 7 | Stacking Tray Paper Retainer Position Sensor | S149 | 1:home |
| | 6 | Stacking Tray Paper Retainer Rear HP Sensor | S138 | 1:home |
| | 5 | Tray Auxiliary Guide Rear HP Sensor | S136 | 0:home |
| | 4 | Rear Alignment HP Sensor | S109 | 1:home |
| | 3 | Stacking Tray Paper Retainer Front HP Sensor | S139 | 1:home |
| | 2 | Stacking Tray Paper Retainer Front HP Sensor | S137 | 0:home |
| | 1 | Front Alignment HP Sensor | S108 | 1:home |
| | 0 | Staple HP Sensor | S131 | 1:home |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P003 | 15 | | | |
| | 14 | | | |
| | 13 | Tray Auxiliary Guide Motor lock signal | M120 | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | Stacking Tray Paper Retainer Motor clock signal | M114 | |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | | | |
| | 6 | DA converter 2 clock signal | – | – |
| | 5 | | | |
| | 4 | DA converter 2 data output signal | – | – |
| | 3 | – | – | – |
| | 2 | DA converter 2 chip select signal | – | – |
| | 1 | Processing Tray Paper Sensor | S103 | 1:detected |
| | 0 | Stacking Tray Paper Retainer HP Sensor | S114 | 1:home |
| P004 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | EXIO1 chip select | – | – |
| | 10 | Tray Paper Surface Sens ON | PBA600 | 0:light/1:charge |
| | 9 | – | – | – |
| | 8 | DA converter 2 data input signal | – | – |
| | 7 | Staple Alignment Interference Sensor | S128 | 1:detedted |
| | 6 | Staple Edging Sensor | S132 | 1:detected |
| | 5 | Staple Sensor | S133 | 1:detedted |
| | 4 | Staple Cartridge Sensor | S134 | 0:50staples/1:100staples |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P005 | 15 | Tray Paper Surface Sensor 3 | PBA700 | 0:no paper/1:paper |
| | 14 | Tray Paper Surface Sensor 4 | PBA700 | 0:no paper/1:paper |
| | 13 | Tray Paper Surface Sensor 1 | PBA700 | 0:no paper/1:paper |
| | 12 | Tray Paper Surface Sensor 2 | PBA700 | 0:no paper/1:paper |
| | 11 | Gripper Base Rear Sensor | S117 | 1:front |
| | 10 | Gripper Base Front Sensor | S116 | 1:rear |
| | 9 | Gripper Position Sensor | S115 | 0:front/1:rear |
| | 8 | Gripper HP Sensor | S140 | 1:home |
| | 7 | EXIO2 chip select | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Display LED2 | – | 0:ON/1:OFF |
| | 3 | Display LED1 | – | 0:ON/1:OFF |
| | 2 | Saddle Stitcher Motor CCW signal | M209 | (ON,CW,CCW)<br>1,1,0:CW 1,0,1:CCW<br>0,1,1:brake 0,0,0:free |
| | 1 | Saddle Stitcher Motor ON signal | M209 | (ON,CW,CCW)<br>1,1,0:CW 1,0,1:CCW<br>0,1,1:brake 0,0,0:free |
| | 0 | Saddle Stitcher Motor CW signal | M209 | (ON,CW,CCW)<br>1,1,0:CW 1,0,1:CCW<br>0,1,1:brake 0,0,0:free |
| P006 | 15 | Punch E2 data input signal | – | – |
| | 14 | Punch DA data input signal | – | – |
| | 13 | Punch E2 ship select | – | – |
| | 12 | E2 chip select | | – |
| | 11 | Punch DA clock output signal | – | – |
| | 10 | Punch DA data output signal | – | – |
| | 9 | E2 data input signal | | – |
| | 8 | Punch DA chip select | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Front Alignment Motor rotation | – | 0:CW/1:CCW |
| | 3 | Front Alignment Motor CLK | – | |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P007 | 15 | Rear Alignment Motor CLK | M109 | |
| | 14 | Rear Alignment Motor rotation | M109 | 0:CW/1:CCW |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | Gripper Base Motor CLK | M116 | – |
| | 0 | Gripper Base Motor DIR | M116 | 0:CW/1:CCW |
| P008 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | Gripper Motor CLK | M117 | – |
| | 8 | Gripper Motor DIR | M117 | 0:CW/1:CCW |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Tray 2 Shift Motor ENBL | M217 | 0:enable |
| | 2 | Tray 2 Shift Motor CLK | M217 | – |
| | 1 | Tray 2 Shift Motor CW | M217 | 0:CW/1:CCW |
| | 0 | Tray 2 Shift Motor CUR | M217 | 0:OFF/1:ON |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P009 | 15 | Tray 2 Area Sensor 3 | S127 | 0:no paper /1:paper |
| | 14 | Tray 2 Area Sensor 2 | S126 | 0:no paper /1:paper |
| | 13 | Tray 2 Area Sensor 1 | S125 | 0:no paper /1:paper |
| | 12 | Tray 2 Paper Sensor | S105 | 0:no paper /1:paper |
| | 11 | Tray 1 Shift Motor ENBL | M105 | 0:enable |
| | 10 | Tray 1 Shift Motor CLK | M105 | – |
| | 9 | Tray 1 Shift Motor CW | M105 | 0:CW/1:CCW |
| | 8 | Tray 1 Shift Motor CUR | M105 | 0:OFF/1:ON |
| | 7 | Stapler Shift HP Sensor | S107 | 1:home |
| | 6 | Escape Tray Paper Sensor | S130 | 1:detected |
| | 5 | Tray 1 Paper Sensor | S104 | 0:no paper /1:paper |
| | 4 | Tray 1 Area Sensor 1 | S122 | 0:no paper /1:paper |
| | 3 | Tray 1 Area Sensor 2 | S123 | 0:no paper /1:paper |
| | 2 | Tray 1 Area Sensor 3 | S124 | 0:no paper /1:paper |
| | 1 | Tray 1 Shift Motor | M105 | 0:abnormal/1:normal |
| | 0 | Tray 2 Shift Motor alarm | M217 | 0:abnormal/1:normal |
| P010 | 15 | Buffer Flapper HP Sensor | S142 | 1:home |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | Tray 2 Paper Surface Sensor | S143 | 1:detected |
| | 11 | Swing Guide HP Sensor | S110 | 1:home |
| | 10 | Shutter Close Detection Sensor | S148 | |
| | 9 | Shutter HP Sensor | S106 | 0:home |
| | 8 | Paper Trailing Edge Pushing Guide HP Sensor | S113 | 1:home |
| | 7 | Stack Delivery Lower/Shutter Motor | M122 | 0:OFF/1:ON |
| | 6 | Shutter Clutch | CL102 | 0:OFF/1:ON |
| | 5 | Swing Guide Solenoid | SL101 | 0:OFF 1:ON |
| | 4 | – | – | – |
| | 3 | Front Door Sensor | S129 | 0:open/1:close |
| | 2 | Paper Return Guide HP Sensor | S112 | 1:home |
| | 1 | Paper Retainer HP Sensor | S135 | 1:home |
| | 0 | Feed Roller Separation HP Sensor | S111 | 1:home |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P011 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Stapler Shift Motor CLK | M107 | – |
| | 12 | Stapler Shift Motor DIR | M107 | 0:CCW/1:CW |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Paper Trailing Edge Pushing Guide Motor CLK | M113 | |
| | 6 | Paper Trailing Edge Pushing Guide Motor DIR | M113 | 0:CW/1:CCW |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P012 | 15 | Paper Return Guide Roller Motor CLK | M121 | – |
| | 14 | Paper Return Guide Roller Motor DIR | M121 | 0:CW/1:CCW |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Saddle Roller Guide Motor DIR | M204 | – |
| | 4 | Feed Roller Disengage/Buffer Flapper Motor DIR | M119 | 0:CW/1:CCW |
| | 3 | Processing Tray Paper Retainer Motor CLK | M118 | – |
| | 2 | Processing Tray Paper Retainer Motor DIR | M118 | 0:CW/1:CCW |
| | 1 | Paper Return Guide Motor CLK | M112 | – |
| | 0 | Paper Return Guide Motor DIR | M112 | 0:CW/1:CCW |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P013 | 15 | Punch slide motor CW | M101 | 0:CW/1:CCW |
| | 14 | Punch slide motor CLK | M101 | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Inserter connection | – | 0: connected |
| | 6 | IF connection | – | 0:connected |
| | 5 | – | – | – |
| | 4 | Punch connection | – | 0:connectecd |
| | 3 | Punch motor CCW | M102 | 0:CW/1:CCW |
| | 2 | Punch motor CW | M102 | 0:CCW/1:CW |
| | 1 | Punch motor ON | M102 | 0:OFF/1:ON |
| | 0 | – | – | – |
| P014 | 15 | Power Supply Fan ON signal | FAN101 | 0:OFF/1:ON |
| | 14 | – | – | – |
| | 13 | Inserter eject start ack | – | 0:OFF/1:ON |
| | 12 | Inserter entry start | – | 0:OFF/1:ON |
| | 11 | IF unit ejection start ack | – | – |
| | 10 | IF unit entry start | – | – |
| | 9 | Fold eject ack | – | |
| | 8 | Fold entry start | – | |
| | 7 | – | – | – |
| | 6 | Power Supply Fan alarm | FAN101 | 0:OFF/1:ON |
| | 5 | Inserter eject start | – | 0:ON/1:OFF |
| | 4 | Inserter entry start ack | – | 0:ON/1:OFF |
| | 3 | IF unit ejection start | – | – |
| | 2 | IF unit entry start ack | – | – |
| | 1 | Fold eject start | – | – |
| | 0 | Fold entry ack | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P015 | 15 | Saddle connection | – | 0:connected |
| | 14 | – | – | – |
| | 13 | Staple Position Switch | SW103 | 0:close/1:open |
| | 12 | Swing Guide Safety Switch | SW102/ SW104 | 0:close/1:open |
| | 11 | Front Door Switch | SW101 | 0:close/1:open |
| | 10 | 24V1-DETECT | – | 0:ON 1:OFF |
| | 9 | 24V-DETECT | – | 0:ON 1:OFF |
| | 8 | Relay ON signal | – | 0:OFF/1:ON |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Feed Motor/Buffer Feed Motor stepping change | M101/ M102 | 0:2W12phase/1:12phase |
| | 2 | Stack Delivery Upper Motor stepping change | M101/ M102 | 0:2W12phase/1:12phase |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P016 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | Stacking Tray Paper Retainer Motor rotation signal | M114 | 0:CW/1:CCW |
| | 8 | Tray Auxiliary Guide Motor rotation signal | M120 | 0:CCW/1:CW |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Push switch (–) | – | 0:ON/1:OFF |
| | 4 | Push switch (+) | – | 0:ON/1:OFF |
| | 3 | Dip switch 4 | – | 0:ON/1:OFF |
| | 2 | Dip switch 3 | – | 0:ON/1:OFF |
| | 1 | Dip switch 2 | – | 0:ON/1:OFF |
| | 0 | Dip switch 1 | – | 0:ON/1:OFF |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P017 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | Punch slide motor standby signal | – | 0:stanfby/1:ready |
| | 7 | Punch slide motor enable signal | – | 0:enable/1:disenable |
| | 6 | – | – | – |
| | 5 | DipSW input 2 | – | 0:ON 1:OFF |
| | 4 | DipSW input 1 | – | 0:ON 1:OFF |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P018 | 15 | Saddle Delivery Tray Paper Sensor | S228 | 1:paper |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Saddle Trailing Edge Retainer Move HP Sensor | S219 | 1:home |
| | 10 | Saddle Trailing Edge Retainer HP Sensor | S221 | 1:home |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | Saddle Lead Edge Stopper Motor CLK | M203 | |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Saddle Lead Edge Stopper Solenoid | SL205 | |
| | 2 | Saddle Alignment Roller Disengage Solenoid (Upper) | SL203 | 1:ON |
| | 1 | Saddle Alignment Roller Disengage Solenoid (Lower) | SL204 | 1:ON |
| | 0 | Saddle Inlet Flapper Solenoid | SL206 | |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P019 | 15 | Saddle Trailing Edge Moving Motor rotation | M211 | 1:CW/0:CCW |
| | 14 | Saddle Trailing Edge Moving Motor CLK | M211 | – |
| | 13 | Saddle Trailing Edge Retainer Motor rotation | M210 | 1:CW/0:CCW |
| | 12 | Saddle Trailing Edge Retainer Motor CLK | M210 | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | Saddle Alignment Guide Motor rotation | M202 | 0:CW/1:CCW |
| | 8 | Saddle Alignment Guide Motor CLK | M202 | |
| | 7 | Saddle Lead-in Roller HP Sensor | S222 | 1:home |
| | 6 | Saddle Folder HP Sensor | S229 | |
| | 5 | Staple HP Sensor | S131 | 1:home |
| | 4 | Saddle Paper Push-on Plate HP Sensor | S218 | 1:home |
| | 3 | Saddle Vertical Path Sensor | S203 | 1:detected |
| | 2 | Saddle Delivery Sensor 1 | S226 | 1: paper |
| | 1 | Saddle Paper Push-on Plate Motor Sensor | S213 | 0:ON/1:OFF |
| | 0 | Saddle Folder/Feeder Motor Sensor | S214 | |
| P020 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | Saddle Alignment Plate HP Sensor | S206 | 1:home |
| | 11 | Saddle Lead Edge Stopper HP Sensor | S205 | 1:home |
| | 10 | Saddle Paper Push-on Plate motor PWM | M205 | |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | Trimmer connection detection | – | 0:connected |
| | 5 | Saddle Stitcher Staple Sensor 2 | S225 | 1:detedted |
| | 4 | Saddle Stitcher Staple Sensor 1 | S224 | 1:detedted |
| | 3 | Saddle Roller Guide HP Sensor | S207 | 1:home |
| | 2 | Saddle Delivery Sensor 2 | S227 | 1: paper |
| | 1 | Saddle Paper Tapping HP Sensor | S215 | 1:home |
| | 0 | Saddle Inlet Sensor | S201 | 1:paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P021 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Saddle Stitcher Motor CCW signal | M209 | 0:CW/1:CCW |
| | 10 | Saddle Stitcher Motor CW signal | M209 | 0:CCW/1:CW |
| | 9 | Saddle Stitcher Motor ON signal | M209 | 0:OFF/1:ON |
| | 8 | Inserter lock power source detection | – | 0: detected 24V |
| | 7 | Saddle Roller Guide Motor rotation | M204 | 1:CW/0:CCW |
| | 6 | Saddle Roller Guide Motor CLK | M204 | – |
| | 5 | Saddle Paper Tapping HP Sensor rotation | – | 1:CW/0:CCW |
| | 4 | Saddle Paper Tapping HP Sensor CLK | – | – |
| | 3 | Inlet Feed motor standby | – | 0:Standby |
| | 2 | Inlet Feed motor output enable | – | 0:Enable |
| | 1 | Saddle Alignment Roller Motor rotation | M212 | 1:CW/0:CCW |
| | 0 | Saddle Alignment Roller Motor CLK | M212 | |
| P022 | 15 | Inlet Feed motor rotation | – | 1:CW/0:CCW |
| | 14 | Inlet Feed motor clock | – | – |
| | 13 | Saddle Feed Motor rotation | – | 1:CW/0:CCW |
| | 12 | Saddle Feed Motor clock | – | – |
| | 11 | Inlet Feed motor stepping | – | 0:half-step |
| | 10 | Saddle Feed Motor stepping | | 0:half-step |
| | 9 | Saddle Lead-in Roller Disengage Motor rotation | M214 | 1:CW/0:CCW |
| | 8 | Saddle Lead-in Roller Disengage Motor CLK | M214 | – |
| | 7 | Saddle Folder/Feeder Motor CW | M206 | 1:CW |
| | 6 | Saddle Folder/Feeder Motor CCW | M206 | 1:CCW |
| | 5 | Saddle Paper Push-on Plate motor CW | M205 | 1:CW |
| | 4 | Saddle Paper Push-on Plate motor CCW | M205 | 1:CCW |
| | 3 | Chip select for DAC | – | 0:ENABLE |
| | 2 | Data in for DAC | – | – |
| | 1 | Data out for DAC | – | – |
| | 0 | Clock for DAC | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P023 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | LED PCB | – | 1:LED ON |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P024 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Feed motor current value setting D/A output | – | – |
| | 6 | Waste paper full sensor D/A output | – | – |
| | 5 | Waste paper full sensor A/D input | – | – |
| | 4 | Push switch | – | 0:ON/1:OFF |
| | 3 | Press motor HP sensor | S106 | 0:feed position 1:release position |
| | 2 | Inlet sensor | S101 | 1:paper |
| | 1 | – | – | – |
| | 0 | Waste paper box detection sensor | S109 | 1:waste paper |

T-8-26

## ■ Inner Trimmer – A1 (SORTER>P024 to P028)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P024 | 7 | Feed motor current value setting D/A output | M101 | – |
| | 6 | Waste paper full sensor D/A output | S011 | – |
| | 5 | Waste paper full sensor A/D input | S011 | – |
| | 4 | Push switch | S011 | 0:ON/1:OFF |
| | 3 | Press motor HP sensor | S106 | 0:feed position 1:release position |
| | 2 | Inlet sensor | S101 | 1:paper |
| | 1 | – | – | – |
| | 0 | Waste paper box detection sensor | S109 | 1:waste paper |
| P025 | 15 | Rear estrangement motor HP sensor | S104 | 0:release position 1:feed position |
| | 14 | Front estrangement motor HP sensor | S102 | 0:feed position 1:release position |
| | 13 | Paper delivery sensor | – | 1:paper |
| | 12 | – | – | – |
| | 11 | DIPSW-1 | – | 0:ON/1:OFF |
| | 10 | DIPSW-2 | – | 0:ON/1:OFF |
| | 9 | DIPSW-3 | – | 0:ON/1:OFF |
| | 8 | DIPSW-4 | – | 0:ON/1:OFF |
| | 7 | Press motor CW/CCW switching signal | M105 | 0:release/1:touch |
| | 6 | Press motor standby signal | M105 | 0:standby/1:ready |
| | 5 | Press motor output permission signal | M105 | 0:permission/1:prohibition |
| | 4 | Press motor drive clock output | M105 | 0:permission/1:prohibition |
| | 3 | Feed motor CW/CCW switching signal | M101 | 0:entrance/1:delivery |
| | 2 | Feed motor standby signal | M101 | 0:standby/1:ready |
| | 1 | Feed motor output permission signal | M101 | 0:permission/1:prohibition |
| | 0 | Feed motor drive clock signal | M101 | 0:permission/1:prohibition |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P026 | 15 | Registration motor permission signal | M102 | 0:permission/1:prohibition |
| | 14 | Cutter motor encoder lock | M106 | 0:permission/1:prohibition |
| | 13 | Registration motor drive clock output | M102 | – |
| | 12 | Registration motor standby signal | M102 | 0:standby/1:ready |
| | 11 | Registration motor CW/CCW switching signal | M102 | 1:registration completion |
| | 10 | Registration HP sensor | S105 | 1:registration completion |
| | 9 | Registration motor current setting PWM output | M102 | – |
| | 8 | 24V detection signal | – | 0:24V detection |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Rear estrangement motor drive clock output | M104 | – |
| | 4 | Front estrangement motor standby motor | M103 | 0:standby/1:ready |
| | 3 | Front estrangement motor CW/CCW switching signal | M103 | 0:CW/1:CCW |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P027 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | Front estrangement motor current setting PWM output | M103 | – |
| | 11 | Rear estrangement motor current setting PWM output | M104 | – |
| | 10 | Press motor current setting PWM output | M105 | – |
| | 9 | Front estrangement motor output permission signal | M103 | 0:permission/1:prohibition |
| | 8 | Front estrangement motor drive clock output | M103 | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | 5V shutdown signal | – | 1:shutdown |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | Paddle solenoid ON signal | SL102 | 0:ON/1:OFF |
| | 1 | Stopper solenoid ON signal | SL101 | 0:ON/1:OFF |
| | 0 | Rear estrangement motor output permission signal | M104 | 0:permission/1:prohibition |
| P028 | 15 | – | – | – |
| | 14 | LED on PCB | – | 0:ON/1:OFF |
| | 13 | Cutter motor CCW signal | M106 | 0:CW/1:CCW |
| | 12 | Cutter motor CW signal | M106 | 0:CCW/1:CW |
| | 11 | Cutter motor ON/OFF output | M106 | 0:OFF/1:ON |
| | 10 | Rear estrangement motor CW/CCW switching signal | M104 | 0:release/1:touch |
| | 9 | Front estrangement motor standby signal | M103 | 0:standby/1:ready |
| | 8 | Stopper solenoid/paddle solenoid drive PWM output | SL101/SL102 | – |

T-8-27

## ■ Professional Puncher-C1 / Integration Unit-B1 : ARCNET Connection (SORTER > P369 to P380)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P369 | 15 | Low Speed Model Detect | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | Finisher Connect Detect | – | 0 : Finisher Connect |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | Reverse motor FG | M4 | 1 : Low |
| P370 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | Pre-reverse feed motor FG | M3 | 1 : Low |
| | 11 | Lead-in motor FG | M2 | 1 : Low |
| | 10 | – | – | 1 : Low |
| | 9 | Bypass Motor FG | M1 | 1 : Low |
| | 8 | Reverse delivery motor FG | M5 | 1 : Low |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P371 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | SST Connect | – | 1 : SST Connect |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | GA Reset | – | 1 : reset |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P372 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | Download latch Input | – | 1 : ON |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | DL latch Input | – | 1 : ON |
| | 1 | – | – | – |
| | 0 | DL latch Off | – | 1 : ON |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P373 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | GA CS | – | 0 : Active |
| | 10 | RAM CS | – | 0 : Active |
| | 9 | ARCNET CS | – | 0 : Active |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | LED | – | 1 : ON |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P374 | 15 | FinisherEjectStart | – | 0 : ON |
| | 14 | FinisherEntryStartAck | – | 0 : ON |
| | 13 | PunchFinComEnable | – | 0 : ON |
| | 12 | PunchRelayON | – | 1 : ON |
| | 11 | PunchMachineON | – | 0 : ON |
| | 10 | PunchPaperLatch | – | 0 : ON |
| | 9 | PunchPaperEntry | – | 1 : ON |
| | 8 | PunchPaperExitAck | – | 1 : ON |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P375 | 15 | PunchPchComEnable | – | 0 : ON |
| | 14 | PunchStanby | – | 0 : ON |
| | 13 | PunchPunchEnable | – | 0 : ON |
| | 12 | PunchPaperComAck | – | 0 : ON |
| | 11 | PunchPaperExit | – | 0 : ON |
| | 10 | PunchDoorOpen | SW1 | 0 : ON |
| | 9 | PunchAbnormal | – | 0 : ON |
| | 8 | Punch Conect Detection | – | 0 : Detect |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Front Door Open Detection | MSW1 | 1 : close |
| | 4 | – | – | – |
| | 3 | Power-Down Detect | – | 0 : Power-Down |
| | 2 | – | – | – |
| | 1 | FinisherEjectStartAck | – | – |
| | 0 | FinisherEntryStart | – | – |
| P376 | 15 | 7segLED_A | – | 1 : ON |
| | 14 | 7segLED_B | – | 1 : ON |
| | 13 | 7segLED_C | – | 1 : ON |
| | 12 | 7segLED_D | | 1 : ON |
| | 11 | 7segLED_E | – | 1 : ON |
| | 10 | 7segLED_F | – | 1 : ON |
| | 9 | 7segLED_G | – | 1 : ON |
| | 8 | 7segLED_Dot | – | 1 : ON |
| | 7 | – | – | – |
| | 6 | FAN Motor ON | FM1 | 1 : Rotation |
| | 5 | Feed Driver Power Supply ON | – | 1 : ON |
| | 4 | Bypass Motor CW | M1 | 1 : CCW |
| | 3 | Pre-reverse feed motor CW | M3 | 1 : CCW |
| | 2 | Reverse delivery motor CW | M5 | 1 : CCW |
| | 1 | Reverse motor CW | M4 | 1 : CCW |
| | 0 | Lead-in motor CW | M2 | 1 : CCW |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P377 | 15 | Pre-reverse feed motor Motor IL | M3 | – |
| | 14 | Pre-reverse feed motor Motor IH | M3 | – |
| | 13 | Reverse delivery motor CW Motor IL | M5 | – |
| | 12 | Reverse delivery motor CW Motor IH | M5 | – |
| | 11 | Reverse Motor IH | M4 | – |
| | 10 | Reverse Motor IL | M4 | – |
| | 9 | Lead-in Motor IH | M2 | – |
| | 8 | Lead-in Motor IL | M2 | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | Path switching MotorIH | – | – |
| | 2 | Path switching MotorIL | – | – |
| | 1 | Bypass MotorIH | M1 | – |
| | 0 | Bypass MotorIL | M1 | – |
| P378 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | DIPSW_BIT0 | – | 1 : OFF |
| | 6 | DIPSW_BIT1 | – | 1 : OFF |
| | 5 | DIPSW_BIT2 | – | 1 : OFF |
| | 4 | DIPSW_BIT3 | – | 1 : OFF |
| | 3 | DIPSW_BIT4 | – | 1 : OFF |
| | 2 | DIPSW_BIT5 | – | 1 : OFF |
| | 1 | DIPSW_BIT6 | – | 1 : OFF |
| | 0 | DIPSW_BIT7 | – | 1 : OFF |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P379 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | FAN Error Detection | FM1 | 1 : Rotation |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | Delivery Sensor | RS5 | 1 : paper |
| | 4 | Path Switching Motor HP Sensor | PS7 | 1 : paper |
| | 3 | Integration unit reverse path 3 sensor | RS4 | 1 : paper |
| | 2 | Integration unit reverse path 2 sensor | RS3 | 1 : paper |
| | 1 | Integration unit reverse path 1 sensor | RS2 | 1 : paper |
| | 0 | Integration unit bypass 1 sensor | RS1 | 1 : paper |
| P380 | 15 | P-puncher bypass 8 sensor | S8 | 1 : paper |
| | 14 | P-puncher bypass 7 sensor | S7 | 1 : paper |
| | 13 | P-puncher bypass 6 sensor | S6 | 1 : paper |
| | 12 | P-puncher bypass 5 sensor | S5 | 1 : paper |
| | 11 | P-puncher bypass 4 sensor | S4 | 1 : paper |
| | 10 | P-puncher bypass 3 sensor | S3 | 1 : paper |
| | 9 | P-puncher bypass 2 sensor | S2 | 1 : paper |
| | 8 | P-puncher bypass 1 sensor | S1 | 1 : paper |
| | 7 | Puncher die Detect HP Sensor | S16 | 1 : ON |
| | 6 | Puncher die sensor 7 | S15 | 1 : ON |
| | 5 | Puncher die sensor 6 | S14 | 1 : ON |
| | 4 | Puncher die sensor 5 | S13 | 1 : ON |
| | 3 | Puncher die sensor 4 | S12 | 1 : ON |
| | 2 | Puncher die sensor 3 | S11 | 1 : ON |
| | 1 | Puncher die sensor 2 | S10 | 1 : ON |
| | 0 | Puncher die sensor 1 | S9 | 1 : ON |

T-8-28

## ■ Professional Puncher-C1 / Integration Unit-B1 : IPC Connection (SORTER > P047 to P059)

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P047 | 7 | Low Speed Model Detect | – | 1 : Low |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | Finisher Connect Detect | – | 0 : Finisher Connect |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P048 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | Reverse motor FG | M4 | 1 : Low |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | Pre-reverse feed motor FG | M3 | 1 : Low |
| | 3 | Lead-in motor FG | M2 | 1 : Low |
| | 2 | – | – | 1 : Low |
| | 1 | Bypass Motor FG | M1 | 1 : Low |
| | 0 | Reverse delivery motor FG | M5 | 1 : Low |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P049 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | SST Connect | – | 1 : SST Connect |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P050 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | GA Reset | – | 1 : reset |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | Download latch Input | – | 1 : ON |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P051 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | DL latch Input | – | 1 : ON |
| | 9 | – | – | – |
| | 8 | DL latch Off | – | 1 : ON |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | GA CS | – | 0 : Active |
| | 2 | RAM CS | – | 0 : Active |
| | 1 | ARCNET CS | – | 0 : Active |
| | 0 | – | – | – |
| P052 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | LED | – | 1 : ON |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | FinisherEjectStart | – | 0 : ON |
| | 6 | FinisherEntryStartAck | – | 0 : ON |
| | 5 | Punch Fin Com Enable | – | 0 : ON |
| | 4 | Punch Relay ON | – | 1 : ON |
| | 3 | Punch Machine ON | – | 0 : ON |
| | 2 | Punch Paper Latch | – | 0 : ON |
| | 1 | Punch Paper Entry | – | 1 : ON |
| | 0 | Punch Paper Exit Ack | – | 1 : ON |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P053 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | – | – | – |
| | 10 | – | – | – |
| | 9 | – | – | – |
| | 8 | – | – | – |
| | 7 | Punch Pch Com Enable | – | 0 : ON |
| | 6 | Punch Standby | – | 0 : ON |
| | 5 | Punch Punch Enable | – | 0 : ON |
| | 4 | Punch Paper Com Ack | – | 0 : ON |
| | 3 | Punch Paper Exit | – | 0 : ON |
| | 2 | Punch Door Open | SW1 | 0 : ON |
| | 1 | Punch Abnormal | – | 0 : ON |
| | 0 | Punch Connect Detection | – | 0 : Detect |
| P054 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Front Door Open Detection | MSW1 | 1 : close |
| | 12 | – | – | – |
| | 11 | Power-Down Detect | – | 0 : Power-Down |
| | 10 | – | – | – |
| | 9 | FinisherEjectStartAck | – | – |
| | 8 | FinisherEntryStart | – | – |
| | 7 | 7segLED_A | – | 1 : ON |
| | 6 | 7segLED_B | – | 1 : ON |
| | 5 | 7segLED_C | – | 1 : ON |
| | 4 | 7segLED_D | – | 1 : ON |
| | 3 | 7segLED_E | – | 1 : ON |
| | 2 | 7segLED_F | – | 1 : ON |
| | 1 | 7segLED_G | – | 1 : ON |
| | 0 | 7segLED_Dot | – | 1 : ON |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P055 | 15 | – | – | – |
| | 14 | FAN Motor ON | FM1 | 1 : Rotation |
| | 13 | Feed Driver Power Supply ON | – | 1 : ON |
| | 12 | Bypass Motor CW | M1 | 1 : CCW |
| | 11 | Pre-reverse feed motor CW | M3 | 1 : CCW |
| | 10 | Reverse delivery motor CW | M5 | 1 : CCW |
| | 9 | Reverse motor CW | M4 | 1 : CCW |
| | 8 | Lead-in motor CW | M2 | 1 : CCW |
| | 7 | Pre-reverse feed motor IL | M3 | – |
| | 6 | Pre-reverse feed motor IH | M3 | – |
| | 5 | Reverse delivery motor CW Motor IL | M5 | – |
| | 4 | Reverse delivery motor CW Motor IH | M5 | – |
| | 3 | Reverse Motor IH | M4 | – |
| | 2 | Reverse Motor IL | M4 | – |
| | 1 | Lead-in Motor IH | M2 | – |
| | 0 | Lead-in Motor IL | M2 | – |
| P056 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | – | – | – |
| | 12 | – | – | – |
| | 11 | Path switching MotorIH | – | – |
| | 10 | Path switching MotorIL | – | – |
| | 9 | Bypass MotorIH | M1 | – |
| | 8 | Bypass MotorIL | M1 | – |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P057 | 15 | DIPSW_BIT0 | – | 1 : OFF |
| | 14 | DIPSW_BIT1 | – | 1 : OFF |
| | 13 | DIPSW_BIT2 | – | 1 : OFF |
| | 12 | DIPSW_BIT3 | – | 1 : OFF |
| | 11 | DIPSW_BIT4 | – | 1 : OFF |
| | 10 | DIPSW_BIT5 | – | 1 : OFF |
| | 9 | DIPSW_BIT6 | – | 1 : OFF |
| | 8 | DIPSW_BIT7 | – | 1 : OFF |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | FAN Error Detection | FM1 | 1 : Rotation |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |
| P058 | 15 | – | – | – |
| | 14 | – | – | – |
| | 13 | Delivery Sensor | RS5 | 1 : paper |
| | 12 | Path Switching Motor HP Sensor | PS7 | 1 : paper |
| | 11 | Integration unit reverse path 3 sensor | RS4 | 1 : paper |
| | 10 | Integration unit reverse path 2 sensor | RS3 | 1 : paper |
| | 9 | Integration unit reverse path 1 sensor | RS2 | 1 : paper |
| | 8 | Integration unit bypass 1 sensor | RS1 | 1 : paper |
| | 7 | P-puncher bypass 8 sensor | S8 | 1 : paper |
| | 6 | P-puncher bypass 7 sensor | S7 | 1 : paper |
| | 5 | P-puncher bypass 6 sensor | S6 | 1 : paper |
| | 4 | P-puncher bypass 5 sensor | S5 | 1 : paper |
| | 3 | P-puncher bypass 4 sensor | S4 | 1 : paper |
| | 2 | P-puncher bypass 3 sensor | S3 | 1 : paper |
| | 1 | P-puncher bypass 2 sensor | S2 | 1 : paper |
| | 0 | P-puncher bypass 1 sensor | S1 | 1 : paper |

| Address | bit | Name | Symbol | Remarks |
|---|---|---|---|---|
| P059 | 15 | Puncher die Detect HP Sensor | S16 | 1 : ON |
| | 14 | Puncher die sensor 7 | S15 | 1 : ON |
| | 13 | Puncher die sensor 6 | S14 | 1 : ON |
| | 12 | Puncher die sensor 5 | S13 | 1 : ON |
| | 11 | Puncher die sensor 4 | S12 | 1 : ON |
| | 10 | Puncher die sensor 3 | S11 | 1 : ON |
| | 9 | Puncher die sensor 2 | S10 | 1 : ON |
| | 8 | Puncher die sensor 1 | S9 | 1 : ON |
| | 7 | – | – | – |
| | 6 | – | – | – |
| | 5 | – | – | – |
| | 4 | – | – | – |
| | 3 | – | – | – |
| | 2 | – | – | – |
| | 1 | – | – | – |
| | 0 | – | – | – |

T-8-29

# ADJUST

## AE

| COPIER > ADJUST > AE | | |
|---|---|---|
| AE-TBL | | Adj of text density at image density adj |
| Lv.1 | Details | To adjust text density according to the adjusted image density.<br>As the greater value is set, text gets darker. |
| | Use case | When clearing the RAM data of the Reader Controller PCB |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When clearing the RAM data of the Reader Controller PCB, enter the value of service label. |
| | Display/adj/set range | 1 to 9 |
| | Default value | 5 |

T-8-30

## ADJ-XY

| COPIER > ADJUST > ADJ-XY | | |
|---|---|---|
| ADJ-X | | Adj of img pstn in book mode: vert scan |
| Lv.1 | Details | To adjust the image reading start position (image leading edge position) in vertical scanning direction.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>When the non-image width is larger than the standard value, set the smaller value.<br>When out of original area is copied, set the larger value.<br>As the value is incremented by 1, the image position moves to the trailing edge side by 0.1mm. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-Y | | Adj of img pstn in book mode: horz scan |
| Lv.1 | Details | To adjust the image reading start position in horizontal scanning direction.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>When the non-image width is larger than the standard value, set the smaller value.<br>When out of original area is copied, set the larger value.<br>As the value is incremented by 1, the image position moves to the rear side by 0.1mm. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |

| COPIER > ADJUST > ADJ-XY | | |
|---|---|---|
| ADJ-Y-DF | | Adj img pstn in DADF mode:horz scan[Frt] |
| Lv.1 | Details | To adjust the image reading start position in horizontal scanning direction at DADF reading.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the image position moves to the rear side by 0.1mm. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| STRD-POS | | Adj read pstn in DADF mode: front side |
| Lv.1 | Details | To adjust the reading position at DADF reading (front side).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -100 to 100 |
| | Unit | 0.1mm |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> INSTALL> STRD-POS |
| ADJ-X-MG | | Adj img ratio in book mod:vert scan[frt] |
| Lv.1 | Details | To make a fine adjustment of image magnification in vertical scanning direction at copyboard reading.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the image magnification changes by 0.01%.<br>+: Enlarge<br>-: Reduce |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.01% |
| | Default value | 0 |

| COPIER > ADJUST > ADJ-XY | | |
|---|---|---|
| ADJY-DF2 | | Adj img pstn in DADF mode:horz scan[bck] |
| Lv.1 | Details | To adjust the image position of back side in horizontal scanning direction at simultaneous duplex reading.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the image position moves to the rear side by 0.1mm. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-Y-MG | | Fine adj img ratio:book, horz scan [frt] |
| Lv.1 | Details | To make a fine adjustment of image magnification ratio in horizontal scanning direction at copyboard reading.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the image magnification ratio changes by 0.1%.<br>+: Enlarge<br>-: Reduce |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 0.1% |
| | Default value | 0 |

T-8-31

## CCD

| COPIER > ADJUST > CCD | | |
|---|---|---|
| W-PLT-X | | White level data(X) entry of white plate |
| Lv.1 | Details | When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 7500 to 9999 |
| | Default value | 8271 |
| | Related service mode | COPIER> ADJUST> CCD> W-PLT-Y, W-PLT-Z |
| W-PLT-Y | | White level data(Y) entry of white plate |
| Lv.1 | Details | When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 7500 to 9999 |
| | Default value | 8735 |
| | Related service mode | COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Z |
| W-PLT-Z | | White level data(Z) entry of white plate |
| Lv.1 | Details | When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 7500 to 9999 |
| | Default value | 9418 |
| | Related service mode | COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| SH-TRGT | | Shading target value (B&W) [Copyboard] |
| Lv.1 | Details | To set the B&W shading target value in copyboard reading mode. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Scanner Unit |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1126 |
| 100-RG | | Img Sensr RG color displace crrct VL:Frt |
| Lv.1 | Details | To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper front).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -256 to 256 |
| | Unit | 0.001line |
| | Default value | 0 |
| 100-GB | | Img Sensr GB color displace crrct VL:Frt |
| Lv.1 | Details | To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper front).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -256 to 256 |
| | Unit | 0.001line |
| | Default value | 0 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFTAR-R | | Shading target value (R) [Front side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass/Scanner Unit (paper front) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1159 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |
| DFTAR-G | | Shading target value (G) [Front side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass/Scanner Unit (paper front) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1189 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |
| DFTAR-B | | Shading target value (B) [Front side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass/Scanner Unit (paper front) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1209 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF2-M1 | | MTF value 1 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M2 | | MTF value 2 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M3 | | MTF value 3 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M4 | | MTF value 4 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M5 | | MTF value 5 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF2-M6 | | MTF value 6 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M7 | | MTF value 7 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M8 | | MTF value 8 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M9 | | MTF value 9 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S1 | | MTF value 1 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF2-S2 | | MTF value 2 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S3 | | MTF value 3 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S4 | | MTF value 4 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S5 | | MTF value 5 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S6 | | MTF value 6 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF2-S7 | | MTF value 7 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S8 | | MTF value 8 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S9 | | MTF value 9 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| 100DF2GB | | Img Sensr GB color displace crrct VL:bck |
| Lv.1 | Details | To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper back).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -256 to 256 |
| | Unit | 0.001line |
| | Default value | 0 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| 100DF2RG | | Img Sensr RG color displace crrct VL:bck |
| Lv.1 | Details | To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper back).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -256 to 256 |
| | Unit | 0.001line |
| | Default value | 0 |
| DFCH2R2 | | Complex chart No.2 data (R) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Red data (for paper front) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| DFCH2R10 | | Complex chart No.10 data(R) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Red data (for paper front) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| DFCH2B2 | | Complex chart No.2 data (B) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Blue data (for paper front) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFCH2B10 | | Complex chart No.10 data(B) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Blue data (for paper front) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| DFCH2G2 | | Complex chart No.2 data (G) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Green data (for paper front) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| DFCH2G10 | | Complex chart No.10 data(G) [Front side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Green data (for paper front) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| CCD-CHNG | | Scanner Unit(ppr frt) rplce flag setting |
| Lv.1 | Details | To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper front).<br>When replacing the Scanner Unit (paper front), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | • When replacing the Scanner Unit (paper front)<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Data at factory shipment is used.<br>1: Data at factory shipment is not used. (Scanner Unit (paper front) is already replaced.) |
| | Default value | 0 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF-M1 | | MTF value 1 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M2 | | MTF value 2 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M3 | | MTF value 3 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M4 | | MTF value 4 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M5 | | MTF value 5 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF-M6 | | MTF value 6 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M7 | | MTF value 7 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M8 | | MTF value 8 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M9 | | MTF value 9 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S1 | | MTF value 1 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF-S2 | | MTF value 2 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S3 | | MTF value 3 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S4 | | MTF value 4 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S5 | | MTF value 5 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S6 | | MTF value 6 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF-S7 | | MTF value 7 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S8 | | MTF value 8 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S9 | | MTF value 9 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| DFCH-R2 | | Complex chart No.2 data (R) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Red data (for paper back) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFCH-R10 | | Complex chart No.10 data (R) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Red data (for paper back) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |
| DFCH-B2 | | Complex chart No.2 data (B) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Blue data (for paper back) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |
| DFCH-B10 | | Complex chart No.10 data (B) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Blue data (for paper back) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFCH-G2 | | Complex chart No.2 data (G) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Green data (for paper back) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |
| DFCH-G10 | | Complex chart No.10 data (G) [Back side] |
| Lv.1 | Details | To derive the front/back side linearity, set the Green data (for paper back) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10<br>COPIER> FUNCTION> CCD> DF-LNR |
| MTF2-M10 | | MTF value 10 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-M11 | | MTF value 11 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF2-M12 | | MTF value 12 setting: horz scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S10 | | MTF value 10 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S11 | | MTF value 11 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF2-S12 | | MTF value 12 setting: vert scan [Front] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M10 | | MTF value 10 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| MTF-M11 | | MTF value 11 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-M12 | | MTF value 12 setting: horz scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S10 | | MTF value 10 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S11 | | MTF value 11 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |
| MTF-S12 | | MTF value 12 setting: vert scan [Back] |
| Lv.1 | Details | Setting value for MTF filter coefficient calculation.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 20 to 85 |
| | Default value | 50 |
| | Related service mode | COPIER> FUNCTION> CCD> MTF-CLC |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFCH2K2 | | Complex chart No.2 data (B&W) [Front] |
| Lv.1 | Details | To derive the front/back side linearity, set the B&W data (for paper front) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| DFCH2K10 | | Complex chart No.10 data (B&W) [Front] |
| Lv.1 | Details | To derive the front/back side linearity, set the B&W data (for paper front) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| DFCH-K2 | | Complex chart No.2 data (B&W) [Back] |
| Lv.1 | Details | To derive the front/back side linearity, set the B&W data (for paper back) of No.2 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 2550 |
| | Default value | 2000 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K10<br>COPIER> FUNCTION> CCD> DF-LNR |
| DFCH-K10 | | Complex chart No.10 data (B&W) [Back] |
| Lv.1 | Details | To derive the front/back side linearity, set the B&W data (for paper back) of No.10 image in DADF complex chart.<br>Enter the value of service label on the Reader. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2550 |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K2<br>COPIER> FUNCTION> CCD> DF-LNR |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFTAR-BW | | Shading target value (B&W) [Front side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass/Scanner Unit (paper front) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1209 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 |
| DFTBK-G | | Shading target value (G) [Back side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Scanner Unit (paper back) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1136 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |
| DFTBK-B | | Shading target value (B) [Back side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Scanner Unit (paper back) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1126 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |

| COPIER > ADJUST > CCD | | |
|---|---|---|
| DFTBK-R | | Shading target value (R) [Back side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Scanner Unit (paper back) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1156 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 |
| CCD-CHG2 | | Scanner Unit(paper back) rplce flag set |
| Lv.1 | Details | To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper back).<br>When replacing the Scanner Unit (paper back), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | • When replacing the Scanner Unit (paper back)<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Data at factory shipment is used.<br>1: Data at factory shipment is not used. (Scanner Unit (paper back) is already replaced.) |
| | Default value | 0 |
| DFTBK-BW | | Shading target value (B&W) [Back side] |
| Lv.1 | Details | When replacing the Reader Controller PCB, enter the value of service label.<br>When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label. |
| | Use case | • When replacing the Reader Controller PCB/clearing RAM data<br>• When replacing the Copyboard Glass/Scanner Unit (paper back) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 700 to 1400 |
| | Default value | 1126 |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 |

T-8-32

## LASER

| COPIER > ADJUST > LASER | | |
|---|---|---|
| PVE-OFST | | Adj of write start position of laser |
| Lv.1 | Details | To adjust the image position by changing the laser emitting position.<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the image moves by 0.1mm.<br>+: Toward rear<br>-: Toward front |
| | Use case | When adjusting image position |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Use this only when replacing the DC Controller PCB/Laser Scanner Unit. When adjusting the image write start position, use COPIER> ADJUST> FEED-ADJ> ADJ-C1/C2/C3/C4/MF/DK. If it is not sufficient enough, execute mechanical adjustment. |
| | Display/adj/set range | -300 to 300 |
| | Unit | 0.1mm |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> FEED-ADJ> ADJ-C1, ADJ-C2, ADJ-C3, ADJ-C4, ADJ-MF, ADJ-DK |
| POWER | | Adj laser power at no potential control |
| Lv.1 | Details | To adjust the laser power when the potential control is not performed. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> FNC-SW> PO-CNT<br>COPIER> OPTION> TEMPO> F-POT-SW |

T-8-33

## IMG-REG

| COPIER > ADJUST > IMG-REG | | |
|---|---|---|
| MAG-H-K | | Fine adj of magnification: horz scan |
| Lv.1 | Details | To make a fine adjustment of image magnification in horizontal scanning direction by adjusting the rotation speed of the Polygon Mirror/modulating clock.<br>Convert the magnification measurement line length of PG for image position adjustment into a percentage, and enter the amount of change in percentage.<br>As the value is incremented by 1, the image magnification changes by 0.01%.<br>+: Enlarge<br>-: Reduce |
| | Use case | • When checking image at initial installation<br>• At check operation when replacing the Laser Scanner Unit<br>• When adjustment is requested by a user |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -100 to 100 |
| | Unit | 0.01% |
| | Default value | 0 |
| MAG-V | | Fine adj of magnification: vertical scan |
| Lv.1 | Details | To make a fine adjustment of image magnification in vertical scanning direction by adjusting the rotation speed of the Polygon Mirror/modulating clock.<br>Convert the magnification measurement line length of PG for image position adjustment into a percentage, and enter the amount of change in percentage.<br>As the value is incremented by 1, the image magnification changes by 0.01%.<br>+: Enlarge<br>-: Reduce<br>The setting value is reflected to the rotation speed of the Polygon Mirror set to the DC Controller at the time of shipment. |
| | Use case | • When checking image at initial installation<br>• At check operation when replacing the Laser Scanner Unit<br>• When adjustment is requested by a user |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -100 to 100 |
| | Unit | 0.01% |
| | Default value | 0 |

T-8-34

## DEVELOP

| COPIER > ADJUST > DEVELOP | | |
|---|---|---|
| BIAS | | Adjustment of developing bias |
| Lv.1 | Details | To adjust the developing bias when the potential control is not performed. |
| | Use case | When potential control is not performed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 600 |
| | Default value | 180 |
| TSPLYADJ | | [Not used] |

T-8-35

## DENS

| COPIER > ADJUST > DENS | | |
|---|---|---|
| DENS-ADJ | | Density correction of copy image |
| Lv.1 | Details | To correct the density of copy image by changing the F-value table.<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.<br>Blurring is alleviated when the value is increased, and fogging is alleviated when the value is decreased. |
| | Use case | When fogging or blurring at high density area occurs with a copy image |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Density of printer output image cannot be corrected. |
| | Display/adj/set range | 1 to 9 |
| | Default value | 5 |
| | Supplement/memo | F-value table: shows the relationship between original density and image density. |
| P-OFFSET | | Display/adj of patch detection offset VL |
| Lv.1 | Details | To display/adjust the patch detection offset value used by the Patch Sensor. |
| | Use case | • When density of solid area is out of the specified range although there is no failure at high voltage or the Developing Assembly<br>• When density of solid area is out of the specified range at Sensor replacement or after a long use |
| | Adj/set/operate method | 1) Check whether density varies due to the Patch Sensor (high voltage, etc.)<br>2) Enter the setting value, and then press OK key.<br>3) Execute D-max control manually.<br>4) Check density on solid area with 17 gradations. |
| | Display/adj/set range | 0 to 255 |
| | Default value | 64 |
| | Related service mode | COPIER> FUNCTION> MISC-P> DMAX-N |
| | Supplement/memo | 0 |

| COPIER > ADJUST > DENS | | |
|---|---|---|
| P-DHALF | | Fine adj D-half lmnce dens convs table |
| Lv.1 | Details | To make a fine adjustment of the luminance density conversion table used for D-half control (display/adjustment). |
| | Use case | • When halftone density of solid area is out of the specified range although there is no failure at high voltage or the Developing Assembly<br>• When density of solid area is within the specified range but halftone density of solid area is out of the specified range at sensor replacement or after a long use |
| | Adj/set/operate method | 1) Check whether halftone density varies due to the Patch Sensor (high voltage, etc.)<br>2) Check that the density of solid area is within the specified range.<br>3) Enter the setting value, and then press OK key.<br>4) Execute D-half control.<br>5) Check the halftone density with the chart pointed out by the user. |
| | Caution | D-half control is enabled only for COPY/AdobePS&PDF/EFI. |
| | Display/adj/set range | -16 to 16 |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-P> DHALF |
| P-B-TGT | | Fine adj LED intnsty tgt VL:D-max/D-half |
| Lv.2 | Details | To make a fine adjustment of the target value for the LED light intensity adjustment used for D-max control and D-half control (display/adjustment).<br>Decrease the value if the intensity of LED is too strong, and increase the value if the intensity is too weak. |
| | Use case | When continuing to use on a temporary basis regardless unevenness of the ITB, soiled sensor, life of sensor, etc. |
| | Adj/set/operate method | 1) Check whether density varies due to the Patch Sensor (high voltage, etc.)<br>2) Check that the result of LED light intensity correction is out of the specified range.<br>3) Enter the setting value, and then press OK key.<br>4) Execute D-max control manually.<br>5) Check density on solid area with 17 gradations. |
| | Display/adj/set range | 0 to 1023 |
| | Default value | 796 |
| | Related service mode | COPIER> DISPLAY> DENS> P-LED, P-B-AVE |
| | Supplement/memo | 0 |

| COPIER > ADJUST > DENS | | |
|---|---|---|
| DMAX-N-T | | Fine adj dens tgt VL:D-max, uncoated ppr |
| Lv.2 | Details | To make a fine adjustment of density target value used for D-max control of uncoated paper group. (display/adjustment). |
| | Use case | When adjusting the density for uncoated paper group only (In principle, density is adjusted with DUPDWN/P-OFFSE value). |
| | Adj/set/operate method | 1) Check whether density varies due to the Patch Sensor (high voltage, etc.)<br>2) Check whether the density adjustment is needed only for uncoated paper group.<br>3) Enter the setting value, and then press OK key.<br>4) Execute D-max control manually.<br>5) Check density on solid area with 17 gradations. |
| | Display/adj/set range | 0 to 1023 |
| | Default value | 895 |
| | Related service mode | COPIER> FUNCTION> MISC-P> DMAX-N<br>COPIER> DISPLAY> DENS> DMAX-N<br>COPIER> ADJUST> DENS> P-OFFSET |

T-8-36

## BLANK

| COPIER > ADJUST > BLANK | | |
|---|---|---|
| BLANK-T | | Adjustment of leading edge margin |
| Lv.1 | Details | To adjust the margin on the leading edge of paper.<br>As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0212 mm). |
| | Use case | • When reducing the margin upon user's request<br>• When enlarging the margin for transfer separation/fixing separation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 0 to 1000 |
| | Unit | 1pixel |
| | Default value | 118 |
| BLANK-L | | Adjustment of left edge margin |
| Lv.1 | Details | To adjust the margin on the left edge of paper.<br>As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0212 mm). |
| | Use case | • When reducing the margin upon user's request<br>• When enlarging the margin for transfer separation/fixing separation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1000 |
| | Unit | 1pixel |
| | Default value | 118 |
| BLANK-R | | Adjustment of right edge margin |
| Lv.1 | Details | To adjust the margin on the right edge of paper.<br>As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0212 mm). |
| | Use case | • When reducing the margin upon user's request<br>• When enlarging the margin for transfer separation/fixing separation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1000 |
| | Unit | 1pixel |
| | Default value | 118 |
| BLANK-B | | Adjustment of trailing edge margin |
| Lv.1 | Details | To adjust the margin on the trailing edge of paper.<br>As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0212 mm). |
| | Use case | • When reducing the margin upon user's request<br>• When enlarging the margin for transfer separation/fixing separation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1000 |
| | Unit | 1pixel |
| | Default value | 118 |

T-8-37

## V-CONT

| COPIER > ADJUST > V-CONT | | |
|---|---|---|
| EPOTOFST | | Manual entry of Potential Sensor offset |
| Lv.1 | Details | To set the offset auto adjustment value of Potential Sensor manually.<br>As the value is incremented by 1, the offset value changes by 1V.<br>+: Identified as the lower potential than the detected one<br>-: Identified as the higher potential than the detected one |
| | Use case | When an error is displayed by executing OFST (auto offset adjustment) at the replacement of Potential Sensor (When the value out of specified range is set due to Potential Sensor disconnection/connection failure/installation failure), restore to the factory setting values.<br>1) To stop the error, set 0 (V) in EPOTOFST.<br>2) Check around the Potential Sensor.<br>If there is an error, address it and if not, go to the step 3).<br>3) Enter the value of service label.<br>4) If image fogging or the like occurs, increase the value by 10V increment. |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 0 to 255 |
| | Unit | 1V |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> DPC> OFST |
| VL-OFST | | Bright area tgt potential ofst VL entry |
| Lv.1 | Details | To set the offset auto adjustment value of bright area target potential VL manually.<br>As the value is incremented by 1, the offset value changes by 1V.<br>+: Increase<br>-: Decrease |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -30 to 30 |
| | Unit | 1V |
| | Default value | 0 |

| COPIER > ADJUST > V-CONT | | |
|---|---|---|
| VD-OFST | | Dark area tgt potential ofst VL entry |
| Lv.1 | Details | To set the offset auto adjustment value of dark area target potential VL manually.<br>As the value is incremented by 1, the offset value changes by 1V.<br>+: Increase<br>-: Decrease |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -30 to 30 |
| | Unit | 1V |
| | Default value | 0 |
| DE-OFST | | Copy image Vdc offset value entry |
| Lv.1 | Details | To set the Vdc offset auto adjustment value for potential control of copy image manually.<br>As the value is incremented by 1, the offset value changes by 1V.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 1V |
| | Default value | 0 |
| VCONT-1 | | Dev contrast crrct potntl:first time/day |
| Lv.1 | Details | To make a fine adjustment of correction potential of developing contrast target potential Vcont for the first time of the day. |
| | Use case | When image density for the first time of the day is low |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10 |
| | Unit | 1V |
| | Default value | 0 |
| VL-OF-L | | Bright area target potential:thin |
| Lv.2 | Details | To make a fine adjustment of bright area target potential VL with thin paper. |
| | Use case | When an image density failure occurs with thin paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -200 to 200 |
| | Unit | 1V |
| | Default value | 20 |
| VL-OF-H1 | | Fine adj bright area target potntl:hvy 1 |
| Lv.2 | Details | To make a fine adjustment of bright area target potential VL with heavy paper 1. |
| | Use case | When an image density failure occurs with heavy paper 1 |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -200 to 200 |
| | Unit | 1V |
| | Default value | 20 |

| COPIER > ADJUST > V-CONT | | |
|---|---|---|
| VL-OF-H2 | | Fine adj bright area target potntl:hvy 2 |
| Lv.2 | Details | To make a fine adjustment of bright area target potential VL with heavy paper 2. |
| | Use case | When an image density failure occurs with heavy paper 2 |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -200 to 200 |
| | Unit | 1V |
| | Default value | 20 |
| SMR-IPRV | | Smeared image control batch settings |
| Lv.2 | Details | To set the service modes necessary for smeared image control (toner scattering) collectively.<br>When 1 is set, offset value of each service mode is set, so that adjustment cannot be made individually.<br>• COPIER> ADJUST> HV-TR> P-TR-OF1 (Environment: 4, feed mode: 7, offset value of pre-transfer charging current: -10)<br>• COPIER> ADJUST> V-CONT> VL-OFST (Offset value of bright area target potential: 30)<br>• COPIER> ADJUST> V-CONT> VD-OFST (Offset value of dark area target potential: -30)<br>When 0 is set, each offset value returns to 0 (default), so that adjustment can be made individually. |
| | Use case | When a smeared image occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch.<br>3) Execute auto gradation adjustment. |
| | Caution | When 1 is set, the following service modes cannot be adjusted individually.<br>COPIER> ADJUST> HV-TR> P-TR-OF1<br>COPIER> ADJUST> V-CONT> VL-OFST, VD-OFST |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1<br>COPIER> ADJUST> V-CONT> VL-OFST, VD-OFST |

T-8-38

## PASCAL

| COPIER > ADJUST > PASCAL | | |
|---|---|---|
| OFST-P-K | | Bk density adj at test print reading |
| Lv.1 | Details | To adjust the offset of Bk color test print reading signal at Auto Adjust Gradation (Full Adjust).<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the greater value is set, the image after adjustment gets darker. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | -128 to 128 |
| | Default value | According to the adjustment value of the Reader at factory shipment |

T-8-39

## HV-PRI

| COPIER > ADJUST > HV-PRI | | |
|---|---|---|
| PRIMARY | | Adjustment of primary charging current |
| Lv.1 | Details | To adjust the primary charging current flows to the Primary Charging Assembly when potential control is OFF.<br>When potential control is turned OFF, the specified primary charging current is output. |
| | Use case | • When outputting image while potential control is OFF<br>• When changing the primary charging current and then checking the high voltage output |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 0 to 1600 |
| | Unit | 1uA |
| | Default value | 1000 |
| | Related service mode | COPIER> OPTION> FNC-SW> PO-CNT |
| PRI-GRID | | Adjustment of Pry Chg Ass'y grid bias |
| Lv.1 | Details | To adjust the grid voltage of the Primary Charging Assembly at potential control.<br>Adjust the offset value for the voltage table that changes according to the durability.<br>When an image failure occurs due to the soiled Primary Charging Wire, set a negative value.<br>If the value in COPIER> DISPLAY> DPOT> PRIM-C is 1550 (micro A) or higher when E061-0101 (potential control error) occurs, set a positive value. |
| | Use case | • When an image failure occurs due to the soiled Primary Charging Wire<br>• When E061-0101 occurs |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 220 |
| | Unit | 1V |
| | Default value | 0 |
| | Related service mode | COPIER> DISPLAY> DPOT> PRIM-C |

T-8-40

## HV-TR

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS1 | | Adj transfer target current offset:Plain |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for plain paper.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS2 -> 6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS2 | | Adj transfer tgt current offset:Heavy 1 |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for heavy paper 1.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS1, 3 - 8 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS3 | | Adj transfer tgt current offset:Heavy 2 |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for heavy paper 2.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS1, 2, 4 - 6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS4 | | Adj transfer tgt current offset: Thin |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for thin paper.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS1 - 3, 5 - 6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS5 | | Adj transfer tgt current offset:Special1 |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for special paper 1.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the environment and feed speed set in this item and the paper type (special paper 1) set in TR-SP1, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS1 - 4, 6, TR-SP1 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-OFS6 | | Adj transfer tgt current offset:Special2 |
| Lv.2 | Details | To adjust the offset value of the target current of the Transfer Roller for special paper 2.<br>Set the environment (temperature and humidity), feed mode, and Transfer Roller target current offset value in the order from left.<br>When the actual usage status matches to the environment and feed speed set in this item and the paper type (special paper 2) set in TR-SP2, the specified offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Transfer Roller target current offset value: -10 to 10 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS1-5, TR-SP2 |
| TR-L-OF1 | | Adj lead edge trns tgt crrnt ofst:Plain |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for plain paper. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF2 - 6 |
| | Supplement/memo | 1 mm |
| TR-L-OF2 | | Adj lead edge trns tgt crrnt ofst:Heavy1 |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for heavy paper 1. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF1, 3-6 |
| | Supplement/memo | 1 mm |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-L-OF3 | | Adj lead edge trns tgt crrnt ofst:Heavy2 |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for heavy paper 2. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF1, 2, 4-6 |
| | Supplement/memo | 1 mm |
| TR-L-OF4 | | Adj lead edge trns tgt crrnt ofst: Thin |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for thin paper. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF1-3, 5-6 |
| | Supplement/memo | 1 mm |
| TR-L-OF5 | | Adj lead edge trns tgt crrnt ofst:Spcl 1 |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for special paper 1.<br>When the paper type is the one (special paper 1) set in the TR-L-SP1, the specified offset value is added to the leading edge transfer target current and the leading edge transfer bias output timing. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF1-4, 6, TR-L-SP1 |
| | Supplement/memo | 1 mm |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-L-OF6 | | Adj lead edge trns tgt crrnt ofst:Spcl 2 |
| Lv.2 | Details | To adjust the leading edge transfer target current and the offset value of leading edge transfer bias output timing for special paper 2.<br>When the paper type is the one (special paper 2) set in the TR-L-SP2, the specified offset value is added to the leading edge transfer target current and the leading edge transfer bias output timing. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Leading edge transfer target current offset value: -2 to 10<br>Offset value of leading edge transfer bias output timing: 0 to 20 |
| | Unit | 5uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF1-5, TR-L-SP2 |
| | Supplement/memo | 1 mm |
| P-TR-OF1 | | Adj of pre-trn charge crrnt ofst: Plain |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for plain paper.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF2-6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-OF2 | | Adj of pre-trn charge crrnt ofst:Heavy1 |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for heavy paper 1.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1, 3-6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-OF3 | | Adj of pre-trn charge crrnt ofst:Heavy2 |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for heavy paper 2.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1, 2, 4-6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-OF4 | | Adj of pre-trn charge crrnt ofst: Thin |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for thin paper.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the specified environment and feed mode, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1-3, 5-6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-OF5 | | Adj pre-trn charge crrnt ofst: Special 1 |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for special paper 1.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the environment and feed speed set in this item and the paper type (special paper 1) set in P-TR-SP1, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1-4, 6, P-TR-SP1 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-OF6 | | Adj pre-trn charge crrnt ofst: Special 2 |
| Lv.2 | Details | To adjust the offset value of the pre-transfer charging current for special paper 2.<br>Set the environment (temperature and humidity), feed mode, and pre-transfer charging current offset value in the order from left.<br>When the actual usage status matches to the environment and feed speed set in this item and the paper type (special paper 2) set in P-TR-SP2, the specified offset value is added to the pre-transfer charging target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | Environment: 0 to 4<br>0: No specification, 1: Environment 1and 2, 2: Environment 3 to 5, 3: Environment 6 and 7, 4: All environments<br><br>Feed mode: 0 to 7<br>0: No specification, 1: Cassette/3.5K deck 1-sided, 2: Cassette/3.5K deck 2-sided, 3: Multi-purpose Tray 1-sided, 4: Multi-purpose Tray 2-sided, 5: Large deck 1-sided (only POD Deck Lite), 6: Large deck 2-sided (only POD Deck Lite), 7: All modes<br><br>Pre-transfer charging current offset value: -10 to 10 |
| | Unit | 10uA |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF1-5, P-TR-SP2 |
| TR-SP1 | | Set trns tgt crrnt adj: special paper 1 |
| Lv.2 | Details | To set the paper type of special paper 1 which the offset value of the target current of the Transfer Roller is adjusted.<br>When the actual usage status matches to the paper type set in this item and the environment and feed mode set in TR-OFS5, the offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS5 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| TR-SP2 | | Set trns tgt crrnt adj: special paper 2 |
| Lv.2 | Details | To set the paper type of special paper 2 which the offset value of the target current of the Transfer Roller is adjusted.<br>When the actual usage status matches to the paper type set in this item and the environment and feed mode set in TR-OFS6, the offset value is added to the Transfer Roller target current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-OFS6 |
| TR-L-SP1 | | Set lead edge trns tgt crrnt adj: Spcl 1 |
| Lv.2 | Details | To set the paper type of special paper 1 which the offset value of the target current of the Transfer Roller is adjusted.<br>When the paper type is the specified one , the offset value set in TR-L-OF5 is added to the leading edge transfer target current and the leading edge transfer bias output timing. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF5 |
| TR-L-SP2 | | Set lead edge trns tgt crrnt adj: Spcl 2 |
| Lv.2 | Details | To set the paper type of special paper 2 which the offset value of the target current of the Transfer Roller is adjusted.<br>When the paper type is the specified one , the offset value set in TR-L-OF6 is added to the leading edge transfer target current and the leading edge transfer bias output timing. |
| | Use case | When a drum separation failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> TR-L-OF6 |

| COPIER > ADJUST > HV-TR | | |
|---|---|---|
| P-TR-SP1 | | Set pre-trns charging crrnt adj: Spcl 1 |
| Lv.2 | Details | To set the paper type of special paper 1 which the offset value of the pre-transfer charging current is adjusted.<br>When the actual usage status matches to the paper type set in this item and the environment and feed mode set in P-TR-OF5, the offset value is added to the pre-transfer charging current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF5 |
| P-TR-SP2 | | Set pre-trns charging crrnt adj: Spcl 2 |
| Lv.2 | Details | To set the paper type of special paper 2 which the offset value of the pre-transfer charging current is adjusted.<br>When the actual usage status matches to the paper type set in this item and the environment and feed mode set in P-TR-OF6, the offset value is added to the pre-transfer charging current. |
| | Use case | When transfer failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 10<br>0: No specification, 1: Transparency, 2: Postcard, 3: Tracing paper, 4: Bond paper, 5: Labels, 6: Recycled paper, 7: Color paper, 8: Punched paper, 9: Tab paper, 10: Letterhead |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> HV-TR> P-TR-OF6 |

T-8-41

## FEED-ADJ

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| REGIST | | Adj of registration start timing: Plain |
| Lv.1 | Details | To adjust the timing to turn ON the Registration Motor in the case of plain paper.<br>As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-C1 | | Right Deck write start pstn in horz scan |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Right Deck.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| ADJ-C2 | | Left Deck write start pstn in horz scan |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Left Deck.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-C3 | | Cassette 3 write start pstn in horz scan |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 3.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| ADJ-C4 | | Cassette 4 write start pstn in horz scan |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 4.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-MF | | Write start pstn in horz scan: MP tray |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi-purpose Tray.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| ADJ-DK | | Write start pstn in horz scan:Deck/POD D |
| Lv.1 | Details | To adjust the image write start position in the horizontal scanning direction when feeding paper from the Paper Deck/ POD Deck Lite.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | If write start position cannot be adjusted in service mode, execute mechanical adjustment. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ADJ-REFE | | Write start pstn in horz scan: 2nd side |
| Lv.1 | Details | To adjust the image write start position on the second side in the horizontal scanning direction.<br>The image write start position is set in the relative amount against the first side regardless of the paper pickup cassette/tray/deck.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Left margin becomes larger. (An image moves to the right.)<br>-: Left margin becomes smaller. (An image moves to the left.)<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. |
| | Use case | When replacing the DC Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| RG-MF | | Rgst start timing adj: MP Tray, Plain |
| Lv.1 | Details | To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding plain paper from the Multi-purpose Tray.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.) |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | -20 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| REG-THCK | | Rgst start timing adj: Heavy, 1/2 speed |
| Lv.1 | Details | To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.) |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | -20 |
| REG-OHT | | Rgst start timing adj: Transp, 1/2 speed |
| Lv.1 | Details | To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding transparency.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.) |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | -20 |
| REG-DUP1 | | Rgst start timing adj: Plain, 2nd side |
| Lv.1 | Details | To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of plain paper.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.) |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | -10 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| REG-DUP2 | | Rgst start timing adj: Heavy, 2nd side |
| Lv.1 | Details | To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of heavy paper.<br>As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm.<br>+: Top margin becomes smaller. (An image moves upward.)<br>-: Top margin becomes larger. (An image moves downward.) |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | -10 |
| LP-FEED1 | | Cassette pre-rgst arch amount: Plain |
| Lv.1 | Details | To adjust the arch amount before registration when feeding plain paper from the cassette.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |
| LP-FEED2 | | Casstt pre-rgst arch amount:Heavy/Transp |
| Lv.1 | Details | To adjust the arch amount before registration when feeding heavy paper/transparency from the cassette.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| LP-MULT1 | | MP Tray pre-rgst arch amount: Plain |
| Lv.1 | Details | To adjust the arch amount before registration when feeding plain paper from the Multi-purpose Tray.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |
| LP-MULT2 | | MP Tray pre-rgst arch amount:Heavy/Trans |
| Lv.1 | Details | To adjust the arch amount before registration when feeding heavy paper/transparency from the Multi-purpose Tray.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |
| LP-DUP1 | | Duplex pre-rgst arch amount: Plain |
| Lv.1 | Details | To adjust the arch amount before registration when feeding plain paper in duplex mode.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |

| COPIER > ADJUST > FEED-ADJ | | |
|---|---|---|
| LP-DUP2 | | Duplex pre-rgst arch amount:Hvy/Transp |
| Lv.1 | Details | To adjust the arch amount before registration when feeding heavy paper/transparency in duplex mode.<br>As the value is incremented by 1, the pre-registration arch amount changes by 0.5 mm.<br>+: Increase<br>-: Decrease |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.5mm |
| | Default value | 0 |
| REG-SPD | | Speed adj Registration Motor:1/1 speed |
| Lv.1 | Details | To adjust 1/1 speed of the Registration Motor.<br>+: The speed is increased.<br>-: The speed is decreased. |
| | Use case | • At occurrence of an image failure<br>• When the leading edge margin becomes larger due to wear of the Registration Roller |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -10 to 10 |
| | Default value | 0 |
| TBLT-SPD | | Fine adjustment of ETB speed |
| Lv.1 | Details | To make a fine adjustment of the ETB speed.<br>+: The speed is increased.<br>-: The speed is decreased.<br>When the speed is changed, image magnification in the vertical scanning direction is changed. |
| | Use case | When image magnification is changed due to replacement of ETB, etc. |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -200 to 200 |
| | Unit | 0.1mm |
| | Default value | 0 |

T-8-42

## ■ CST-ADJ

| COPIER > ADJUST > CST-ADJ | | |
|---|---|---|
| MF-A4R | | Adj of MP Tray A4R paper width |
| Lv.1 | Details | To adjust the width of A4R paper in the Multi-purpose Tray.<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.<br>When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4R. |
| | Use case | • When replacing the DC Controller PCB/clearing RAM data<br>• When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> FUNCTION> CST> A4R |
| MF-A6R | | Adj of MP Tray A6R paper width |
| Lv.1 | Details | To adjust the width of A6R paper in the Multi-purpose Tray.<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.<br>When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A6R. |
| | Use case | • When replacing the DC Controller PCB/clearing RAM data<br>• When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> FUNCTION> CST> A6R |

| COPIER > ADJUST > CST-ADJ | | |
|---|---|---|
| MF-A4 | | Adj of MP Tray A4 paper width |
| Lv.1 | Details | To adjust the width of A4 paper in the Multi-purpose Tray.<br>When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.<br>When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4. |
| | Use case | • When replacing the DC Controller PCB/clearing RAM data<br>• When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After the setting value is changed, write the changed value in the service label. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> FUNCTION> CST> A4 |

T-8-43

## ■ MISC

| COPIER > ADJUST > MISC | | |
|---|---|---|
| SEG-ADJ | | Set criteria for text/photo: front side |
| Lv.1 | Details | To set the judgment level of text/photo original in Text/Photo/Map mode.<br>As the value is increased, the original tends to be detected as a photo document, and as the value is decreased, the original tends to be detected as a text document. |
| | Use case | When adjusting the classification level of text and photo in Text/Photo/Map mode |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | -4 to 4 |
| | Default value | 0 |
| K-ADJ | | Set criteria for black text: front side |
| Lv.1 | Details | To set the judgment level of black characters at text processing.<br>As the value is increased, the text tends to be detected as black. |
| | Use case | When preferring the text to be judged as black |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -3 to 3 |
| | Default value | 0 |
| ACS-ADJ | | Set criteria for B&W/color in ACS:front |
| Lv.1 | Details | To set the judgment level of B&W/color original in ACS mode.<br>As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document. |
| | Use case | When adjusting the color detection level in ACS mode |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -3 to 3 |
| | Default value | 0 |
| ACS-EN | | Set judgment area in ACS mode:front side |
| Lv.2 | Details | To set the judgment area in ACS mode.<br>As the greater value is set, the judgment area is widened. |
| | Use case | When adjusting the judgment area in ACS mode |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 1 |

| COPIER > ADJUST > MISC | | |
|---|---|---|
| ACS-CNT | | Set jdgmt pixel count area in ACS:front |
| Lv.2 | Details | To set the area which counts the pixel to judge the color presence in ACS mode.<br>As the greater value is set, the judgment area is widened. |
| | Use case | When adjusting the area which counts the pixel to judge the color presence in ACS mode |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 0 |
| ACS-EN2 | | Set ACS mode jdgmt area in DADF mode |
| Lv.2 | Details | To set the judgment area in ACS mode at DADF reading.<br>As the greater value is set, the judgment area is widened. |
| | Use case | When adjusting the judgment area in ACS mode at DADF reading |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 1 |
| ACS-CNT2 | | Set ACS jdgmt pixel count area in DADF |
| Lv.2 | Details | To set the area which counts the pixel to judge the color presence in ACS mode at DADF reading.<br>As the greater value is set, the judgment area is widened. |
| | Use case | When adjusting the area which counts the pixel to judge the color presence in ACS mode at DADF reading |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 0 |

| COPIER > ADJUST > MISC | | |
|---|---|---|
| WT-FL-LM | | Set of waste toner full dspl timing |
| Lv.1 | Details | If the user sets the darker/lighter copy density than the normal density, the toner level to be consumed is increased/decreased. As a result, the number of images to be printed until the Waste Toner Container becomes full varies.<br>According to the usage of the user, set the number of images (calculation with A4 and 5% image duty) until the full toner message is displayed.<br>Set -2 if the setting is dark, but set -1 according to circumstances.<br>Set 2 if the setting is light, but set 1 according to circumstances. |
| | Use case | When adjusting the full toner display timing according to the usage of the user |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2<br>-2: 300,000 (A4, 5% image duty), -1: 400,000, 0: 500,000, 1: 600,000, 2: 700,000 |
| | Default value | 0 |
| SEG-ADJ3 | | Set text/photo jdgmt stdrd: back side |
| Lv.1 | Details | To set the judgment level of text/photo original in Text/Photo/Map mode (back side at duplex reading with 1 path).<br>As the value is increased, the original tends to be detected as a photo document, and as the value is decreased, the original tends to be detected as a text document. |
| | Use case | When adjusting the classification level of text and photo in Text/Photo/Map mode (back side at duplex reading with 1 path) |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -4 to 4 |
| | Default value | 0 |
| K-ADJ3 | | Set Bk text jdgmt stdrd: back side |
| Lv.1 | Details | To set the judgment level of black characters at text processing (back side at duplex reading with 1 path).<br>As the value is increased, the text tends to be detected as black. |
| | Use case | When preferring the text to be judged as black (back side at duplex reading with 1 path) |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -3 to 3 |
| | Default value | 0 |

| COPIER > ADJUST > MISC | | |
|---|---|---|
| ACS-ADJ3 | | Set ACS B&W/color jdgmt stdrd:back side |
| Lv.1 | Details | To set the judgment level of B&W/color original in ACS mode (back side at duplex reading with 1 path).<br>As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document. |
| | Use case | When adjusting the color detection level in ACS mode (back side at duplex reading with 1 path) |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -3 to 3 |
| | Default value | 0 |
| ACS-EN3 | | Set of ACS mode jdgmt area: back side |
| Lv.2 | Details | To set the judgment area in ACS mode (back side at duplex reading with 1 path).<br>As the greater value is set, the judgment area is widened. |
| | Use case | When adjusting the judgment area in ACS mode (back side at duplex reading with 1 path) |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 1 |
| ACS-CNT3 | | ACS mode jdgmt pixel count area: back |
| Lv.2 | Details | To set the area which counts the pixel to judge the color presence in ACS mode (back side at duplex reading with 1 path).<br>As the greater value is set, the judgment area is widen. |
| | Use case | When adjusting the area which counts the pixel to judge the color presence in ACS mode (back side at duplex reading with 1 path) |
| | Adj/set/operate method | 1) Enter the setting value (switch negative/positive by -/+ key) and press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 0 |

| COPIER > ADJUST > MISC | | |
|---|---|---|
| TBSIS-WB | | Setting of blank band ejection time |
| Lv.2 | Details | To set the blank band ejection time.<br>As the value is incremented by 1, the ejection time changes by 0.1 second.<br>+: Increase<br>-: Decrease |
| | Use case | When an image failure (streaks of uneven density) occurs |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | When a positive value is set, the ejection time increases. |
| | Display/adj/set range | -2 to 2 |
| | Unit | 0.1sec |
| | Default value | 0 |
| DCON-V | | Fine adj DC Controller reference voltage |
| Lv.2 | Details | To make a fine adjustment of the reference voltage of CPU drive voltage (3.3V) on the DC Controller PCB. |
| | Use case | When the reference voltage is deviated from the center value (3.41 V) significantly |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Because it affects the scanning values of the Potential Sensor and Patch Sensor, image density may vary. |
| | Display/adj/set range | -14 to 14 |
| | Unit | 0.01V |
| | Default value | 0 |
| HP-OFST | | Setting of 2D shading drum HP offset |
| Lv.1 | Details | To set the home position of Photosensitive Drum in the vertical scanning direction at 2D shading.<br>As the value is incremented by 1, the home position moves by 10 mm. |
| | Use case | When adjusting the home position of the Photosensitive Drum at the replacement of the drum |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Display/adj/set range | -5 to 5 |
| | Unit | 10mm |
| | Default value | 0 |

T-8-44

## EXP-LED

| COPIER > ADJUST > EXP-LED | | |
|---|---|---|
| PR-EXP | | Setting of Pre-exposure LED current |
| Lv.2 | Details | To set the current of the Cleaning Pre-exposure LED.<br>Increase the value when taking a measure for drum ghost.<br>Decrease the value when potential is not applied well. |
| | Use case | • When drum ghost is significant (drum pitch is not correct)<br>• When potential is not applied well |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 110 to 233 |
| | Unit | 0.4mA |
| | Default value | 181 |

T-8-45

# FUNCTION

## INSTALL

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| TONER-S | | Toner supply to Developing Assembly |
| Lv.1 | Details | To execute a series of operation necessary for supplying toner to the Developing Assembly/Toner Supply area (drive the Developing Cylinder, Toner Stirring/Feed Member, Photosensitive Drum and ETB, and output developing bias) as a whole.<br>After counting down from 600 seconds., it is stopped automatically. |
| | Use case | • At installation<br>• When replacing the Developing Assembly<br>• When replacing toner in the Developing Assembly |
| | Adj/set/operate method | 1) Select the items.<br>”Check the Developer” is displayed.<br>2) Check connection, and then press OK key.<br>It automatically stops after 10 minutes. |
| | Caution | • Although “Check the Developer” is displayed when selecting the item, be sure to check the connection between the Developing Assembly and connector.<br>• The operation can stop manually with OK key when a failure occurs. |
| | Display/adj/set range | During operation: xxx second (remaining time), When operation finished normally: END |
| | Default value | 600 |
| | Required time | 13 min |
| STRD-POS | | Scan position auto adj in DADF mode |
| Lv.1 | Details | To adjust the DADF scanning position automatically. |
| | Use case | At DADF installation/uninstallation |
| | Adj/set/operate method | 1) Set a paper for stream reading position adjustment, and then close the DADF.<br>2) Select the item, and then press OK key.<br>The operation automatically stops after the adjustment.<br>3) Write the value displayed by COPIER>ADJUST>ADJ-XY>STRD-POS in the service label. |
| | Caution | Write the adjusted value in the service label. |
| | Display/adj/set range | At normal termination: OK, At abnormal termination: NG |
| | Required time | 10 sec |
| | Related service mode | COPIER> ADJUST> ADJ-XY> STRD-POS |
| | Supplement/memo | For the details of paper for stream reading position adjustment, refer to the Service Manual. |

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| CARD | | Card number setting |
| Lv.1 | Details | To set the card number to be used for Card Reader.<br>A series of numbers from the entered number to the number of cards specified by CARD-RNG can be used. |
| | Use case | • At installation of the Card Reader<br>• After replacement of the HDD |
| | Adj/set/operate method | 1) Enter the number, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The card management information (department ID and password) is initialized. |
| | Display/adj/set range | 1 to 2001 |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> FNC-SW> CARD-RNG |
| E-RDS | | Set use/no use of Embedded-RDS function |
| Lv.1 | Details | To set whether to use the Embedded-RDS function. |
| | Use case | When using Embedded-RDS |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set. |
| | Display/adj/set range | 0 to 1<br>0: Not used, 1: Used (All the counter information is sent.) |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> INSTALL> RGW-PORT, COM-TEST, COM-LOG, RGW-ADR |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company’s server via SOAP protocol |
| RGW-PORT | | Set port number of Sales Co’s server |
| Lv.1 | Details | To set the port number of the sales company’s server to be used for Embedded-RDS. |
| | Use case | When using Embedded-RDS |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set. |
| | Display/adj/set range | 1 to 65535 |
| | Default value | 443 |
| | Related service mode | COPIER> FUNCTION> INSTALL> E-RDS, COM-TEST, COM-LOG, RGW-ADR |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company’s server via SOAP protocol |

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| COM-TEST | | Dspl connect result w/ Sales Co's server |
| Lv.1 | Details | To display the result of the connection test with the sales company's server. |
| | Use case | When using Embedded-RDS |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set. |
| | Display/adj/set range | During operation: ACTIVE, When connection is completed: OK, When connection is failed: NG |
| | Related service mode | COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-LOG, RGW-ADR |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol |
| COM-LOG | | Dspl connect error w/ Sales Co's server |
| Lv.1 | Details | To display error information when the connection with the sales company's server failed. |
| | Use case | When using Embedded-RDS |
| | Adj/set/operate method | Display only |
| | Caution | Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set. |
| | Display/adj/set range | Year, date, time, error code, error detail information (maximum 128 characters) |
| | Related service mode | COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, RGW-ADR |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol |
| RGW-ADR | | URL setting of Sales Company's server |
| Lv.1 | Details | To set the URL of the sales company's server to be used for Embedded-RDS. |
| | Use case | When using Embedded-RDS |
| | Adj/set/operate method | 1) Select the URL.<br>2) Enter the URL, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use Shift-JIS character strings.<br>• Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set. |
| | Display/adj/set range | URL |
| | Default value | https://a01.ugwdevice.net/ugw/agentif010 |
| | Related service mode | COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, COM-LOG |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol |

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| CNT-DATE | | Set counter send start date to SC server |
| Lv.1 | Details | To set the year, month, date, hour and minute to send counter information to the sales company's server.<br>This is displayed only when the Embedded-RDS third-party extended function is available. |
| | Use case | When the Embedded-RDS third-party expanded function is available |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | YYYYMMDDHHMM (12 digits)<br>YYYY: Year, MM: Month, DD: Date, HH: Hour, MM: Minute |
| | Default value | 000000000000 |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol |
| CNT-INTV | | Set counter send interval to SC server |
| Lv.1 | Details | To set the interval of sending counter information to the sales company's server in a unit of one hour.<br>This is displayed only when the Embedded-RDS third-party extended function is available. |
| | Use case | • When restarting potential control after execution of COPIER> OPTION> IMG-FIX> PO-CNT<br>• When the D-max control condition is changed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 168 (=1 week) |
| | Default value | 24 |
| | Supplement/memo | Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol |

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| BRWS-ACT | | ON/OFF of service browser |
| Lv.1 | Details | To set ON/OFF of service browser.<br>ON/OFF of service browser switches whenever the main power switch is turned OFF/ON after execution.<br>If connection with the UGW server is successful, “OK!” is displayed. If “NG!” is displayed, execute a communication test using COM-TEST.<br>The setting is enabled after reboot. Whether the service browser is ON or OFF can be checked in COPIER> DISPLAY> USER> BRWS-STS (1: ON, 2: OFF). |
| | Use case | • When using the service browser<br>• At operation check |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | After execution, turn OFF/ON the main power switch. After reboot, be sure to check the usage status in COPIER> DISPLAY> USER> BRWS-STS. |
| | Display/adj/set range | At normal termination: OK!, At abnormal termination: NG! |
| | Related service mode | COPIER> FUNCTION> INSTALL> COM-TEST<br>COPIER> DISPLAY> USER> BRWS-STS |
| CDS-CTL | | Set country/area when using CDS |
| Lv.1 | Details | To set country/area to enable CDS. |
| | Use case | When enabling CDS |
| | Display/adj/set range | Country/area set in COPIER> OPTION> FNC-SW> CONFIG, CA (Canada), LA (Latin America) and HK (Hong Kong) |
| | Default value | It differs according to the location. |
| | Related service mode | COPIER> OPTION> FNC-SW> CONFIG |
| | Supplement/memo | CDS: Contents Delivery System |
| DRM-INIT | | Initialization of Photosensitive Drum |
| Lv.1 | Details | To initialize Photosensitive Drum.<br>Clear drum counter (PT-DRM), Drum Lot number, and checksum stored in the DC Controller. |
| | Use case | After replacement of the Photosensitive Drum |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Related service mode | COPIER> COUNTER> LF> K-DRM-LF |
| HD-CRYP | | Initial install of HDD Encryption Board |
| Lv.1 | Details | To execute operation necessary for initial installation of the HDD Encryption Board.<br>After executing the necessary operation and then turning OFF the main power switch, install the HDD Encryption Board. |
| | Use case | At installation of the HDD Encryption Board |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to execute this item before installing the HDD Encryption Board. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |

| COPIER > FUNCTION > INSTALL | | |
|---|---|---|
| BIT-SVC | | OFF/ON of Web service of E-RDS |
| Lv.1 | Details | To set ON/OFF of Web service function of E-RDS.<br>When OFF is selected, authentication information cannot be obtained from E-RDS. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |

T-8-46

## CCD

| COPIER > FUNCTION > CCD | | |
|---|---|---|
| DF-WLVL1 | | White level adj in book mode: color |
| Lv.1 | Details | To adjust the white level for copyboard scanning automatically by setting the paper which is usually used by the user on the Copyboard Glass. |
| | Use case | • When replacing the Copyboard Glass<br>• When replacing the Scanner Unit<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Set paper on the Copyboard Glass.<br>2) Select the item, and then press OK key. |
| | Caution | Be sure to execute DF-WLVL2 in a row. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL2<br>COPIER> ADJUST> CCD> DFTBK-R, DFTBK-G, DFTBK-B |
| DF-WLVL2 | | White level adj in DADF mode: color |
| Lv.1 | Details | To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF. |
| | Use case | • When replacing the Copyboard Glass<br>• When replacing the Scanner Unit<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Set paper on the DADF.<br>2) Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after DF-WLVL1. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> FUNCTION> CCD> DF-WLVL1<br>COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTAR2-R, DFTAR2-G, DFTAR2-B, DFTAR-BW, DFTAR2BW, DFTBK-R, DFTBK-G, DFTBK-B |
| DF-LNR | | Deriving of DADF front/back linearity |
| Lv.1 | Details | To derive the front/back side linearity characteristics in the use of DADF based on the scanning data of the DADF complex chart (No. 2, No. 10). |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD)<br>DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10<br>2) Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10 |

| COPIER > FUNCTION > CCD | | |
|---|---|---|
| MTF-CLC | | Deriving of MTF filter coefficient |
| Lv.1 | Details | To derive the MTF filter coefficient to be set for ASIC based on the MTF value of the DADF complex chart. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF-M1 - M12, MTF-S1 - S12, MTF2-M1 - M12, MTF2-S1 - S12 |
| | Supplement/memo | The scanning data of the DADF complex chart is indicated in the label of the Scanner Unit (DADF/Reader). |
| DF-WLVL3 | | White level adj in book mode (B&W) |
| Lv.1 | Details | To adjust the white level for copyboard scanning automatically by setting the paper which is usually used by the user on the Copyboard Glass. |
| | Use case | • When replacing the Copyboard Glass<br>• When replacing the Scanner Unit<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Set paper on the Copyboard Glass.<br>2) Select the item, and then press OK key. |
| | Caution | Be sure to execute DF-WLVL4 in a row. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> DFTBK-BW |
| DF-WLVL4 | | White level adj in DADF mode (B&W) |
| Lv.1 | Details | To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF. |
| | Use case | • When replacing the Copyboard Glass<br>• When replacing the Scanner Unit<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Set paper on the DADF.<br>2) Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after DF-WLVL3. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTAR2-R, DFTAR2-G, DFTAR2-B, DFTBK-BW |
| BW-TGT | | Set of B&W shading target value |
| Lv.1 | Details | After the white level data (X/Y/Z) for the Standard White Plate is set, read the Standard White Plate and set the black and white shading target value. |
| | Use case | When replacing the Copyboard Glass/Scanner Unit |
| | Caution | Be sure to execute this item after execution of COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z |

T-8-47

## DENS

| COPIER > FUNCTION > DENS | | |
|---|---|---|
| DEV-AGG | | Exe of dev unevenness elimination mode |
| Lv.1 | Details | To stir toner when uneven developing occurs, execute image formation with solid white without feeding.<br>Because the Drum Cleaning Blade is flipped when only solid white images are formed, form solid black images periodically.<br>Although the operation takes approx. 10 minutes in the initial settings, the duration of execution (number of times) can be changed with AGG-SW. |
| | Use case | When unevenness occurs right after executing TONER-S |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | If using frequently, the Drum Cleaning Blade might be flipped. |
| | Related service mode | COPIER> FUNCTION> INSTALL> TONER-S<br>COPIER> FUNCTION> DENS> AGG-SW |
| AGG-SW | | Set dev unevenness elimination mod times |
| Lv.1 | Details | To set the number of times to execute the developing unevenness elimination mode.<br>As the value is incremented by 1, the duration of execution is increased by approx. 5 minutes.<br>+: Increase (When eliminating developing unevenness surely)<br>-: Decrease (When shortening the duration of execution)<br>Although the operation is executed successively for the specified numbers, unevenness can be resolved by executing it approx. 4 times (approx. 20 minutes). |
| | Use case | When changing the number of times to execute the developing unevenness elimination mode |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 1 to 5 |
| | Default value | 2 |
| | Related service mode | COPIER> FUNCTION> DENS> DEV-AGG |

T-8-48

## DPC

| COPIER > FUNCTION > DPC | | |
|---|---|---|
| DPC | | Execution of potential control |
| Lv.1 | Details | To execute potential control for the Photosensitive Drum manually. (It is usually executed automatically.) |
| | Use case | When checking potential control operation |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Required time | 10 sec |
| OFST | | Potential adjustment of Potential Sensor |
| Lv.1 | Details | To adjust the detection potential offset value of the Potential Sensor automatically. |
| | Use case | • When replacing the Potential Sensor<br>• At diagnosis for a failure of the Potential Sensor |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | An error is displayed when disconnection/connection failure/ installation failure occurs to the Potential Sensor at the time of replacement. In this case, manually set the value to 0 by EPOTOFST and then make an adjustment. |
| | Required time | 4 sec |
| | Related service mode | COPIER> ADJUST> V-CONT> EPOTOFST |

T-8-49

## CST

| COPIER > FUNCTION > CST | | |
|---|---|---|
| C3-STMTR | | Reg Cassette 3 STMTR stdrd width |
| Lv.1 | Details | To register the standard value of STMTR paper width (139.5mm) on the Cassette 3.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> C3-STMTR. |
| | Adj/set/operate method | 1) Set STMTR paper on the Cassette 3, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> C3-STMTR, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> C3-STMTR |
| C3-A4R | | Reg Cassette 3 A4R stdrd width |
| Lv.1 | Details | To register the standard value of A4R paper width (210 mm) on the Cassette 3.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> C3-A4R. |
| | Adj/set/operate method | 1) Set A4R paper on the Cassette 3, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> C3-A4R, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> C3-A4R |
| C4-STMTR | | Reg Cassette 4 STMTR stdrd width |
| Lv.1 | Details | To register the standard value of STMTR paper width (139.5 mm) on the Cassette 4.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> C4-STMTR. |
| | Adj/set/operate method | 1) Set STMTR paper on the Cassette 4, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> C4-STMTR, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> C4-STMTR |

| COPIER > FUNCTION > CST | | |
|---|---|---|
| C4-A4R | | Reg Cassette 4 A4R stdrd width |
| Lv.1 | Details | To register the standard value of A4R paper width (210 mm) on the Cassette 4.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> C4-A4R. |
| | Adj/set/operate method | 1) Set A4R paper on the Cassette 4, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> C4-A4R, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> C4-A4R |
| MF-A4R | | Reg Multi-purpose Tray A4R stdrd width |
| Lv.1 | Details | To register the standard value of A4R paper width (210mm) on the Multi-purpose Tray.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4R. |
| | Adj/set/operate method | 1) Set A4R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A4R, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> MF-A4R |
| MF-A6R | | Reg Multi-purpose Tray A6R stdrd width |
| Lv.1 | Details | To register the standard value of A6R paper width (105 mm) on the Multi-purpose Tray.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A6R. |
| | Adj/set/operate method | 1) Set A6R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A6R, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> MF-A6R |
| MF-A4 | | Reg Multi-purpose Tray A4 standard width |
| Lv.1 | Details | To register the standard value of A4 paper width (297 mm) on the Multi-purpose Tray.<br>Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4. |
| | Adj/set/operate method | 1) Set A4 paper on the Multi-purpose Tray, and set the guide so that it fits the paper width.<br>2) Select the item, and then press OK key.<br>The value is registered after automatic adjustment. |
| | Caution | After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A4, and write it down on the service label. |
| | Related service mode | COPIER> ADJUST> CST-ADJ> MF-A4 |

T-8-50

## CLEANING

| COPIER > FUNCTION > CLEANING | | |
|---|---|---|
| TBLT-CLN | | ETB cleaning |
| Lv.1 | Details | To execute three idle rotations of the ETB and clean the ETB.<br>Disengage the Photosensitive Drum and Transfer Roller from the ETB. |
| | Use case | When ETB cleaning failure/stain on the back of paper occurs |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| WIRE-CLN | | Cleaning of all Charging Wires |
| Lv.1 | Details | To clean the Charging Wires of Primary Charging Assembly and Pre-transfer Charging Assembly simultaneously (5-reciprocation).<br>Polish new Charging Wires to remove foreign matters or protrusions. |
| | Use case | • When replacing the Primary Charging Assembly/Pre-transfer Charging Assembly<br>• When replacing the Charging Wire<br>• When vertical lines occur on an image |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| WIRE-EX | | Check cleaning operation of all Chg Wir |
| Lv.1 | Details | To clean the Charging Wires of Primary Charging Assembly and Pre-transfer Charging Assembly simultaneously (1-reciprocation).<br>Check the reciprocation operation of the Wire Cleaner. |
| | Use case | When checking operation of the Primary Charging Wire Cleaning Motor after removing, and then installing the Primary Charging Assembly at working around the Process area |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 30 sec |

T-8-51

## FIXING

| COPIER > FUNCTION > FIXING | | |
|---|---|---|
| NIP-CHK | | Check of fixing nip width |
| Lv.1 | Details | To check whether the fixing nip width is appropriate by printing.<br>If it is not appropriate, a fixing failure may occur. |
| | Use case | • When replacing the fixing-related parts (Fixing Roller, Pressure Roller)<br>• When a fixing failure occurs |
| | Adj/set/operate method | 1) Print approx. 20 sheets of A4 size paper.<br>2) Set A4 size plain paper/recycled paper on the Multi-purpose Tray.<br>3) Select the item, and then press OK key.<br>A sheet is stopped once in a state held by the Fixing Nip area, and is delivered approx. 20 seconds later.<br>4) Measure the nip width of delivered sheet.<br>If the nip widths are as follow it is judged as normal: 7.0 to 8.0 mm at the center, and difference between front and rear is within 0.5mm. If there is an error, execute step 5.<br>5) Check the Fixing Roller, Pressure Roller, and Fixing Lower Unit, and replace damaged part. |
| | Related service mode | COPIER> TEST> PG> TYPE |

T-8-52

## PANEL

| COPIER > FUNCTION > PANEL | | |
|---|---|---|
| LCD-CHK | | Check of LCD Panel dot missing |
| Lv.1 | Details | To check whether there is a missing dot on the LCD Panel of the Control Panel. |
| | Use case | When replacing the LCD Panel |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Check that the LCD Panel lights up in the order of white, black, red, green and blue.<br>3) Press STOP key to terminate checking. |
| LED-CHK | | Check of Control Panel LED |
| Lv.1 | Details | To check whether the LED on the Control Panel lights up. |
| | Use case | When replacing the LCD Panel |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Check that the LED lights up in the order.<br>3) Use LED-OFF to terminate checking. |
| | Related service mode | COPIER> FUNCTION> PANEL> LED-OFF |
| LED-OFF | | End check of Control Panel LED |
| Lv.1 | Details | To terminate the check of LED on the Control Panel. |
| | Use case | During execution of LED-CHK |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> FUNCTION> PANEL> LED-CHK |
| KEY-CHK | | Check of key entry |
| Lv.1 | Details | To check the key input on the Control Panel. |
| | Use case | When replacing the LCD Panel |
| | Adj/set/operate method | 1) Select the item and press the key on the Control Panel.<br>2) Check that the input value is displayed.<br>3) Cancel the selection to terminate checking. |
| TOUCHCHK | | Adj of coordinate pstn of Touch Panel |
| Lv.1 | Details | To adjust the coordinate position on the Touch Panel of the Control Panel. |
| | Use case | When replacing the LCD Panel |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Press the nine “+” keys in sequence. |

T-8-53

## PART-CHK

| COPIER > FUNCTION > PART-CHK | | |
|---|---|---|
| CL | | Specification of operation Clutch |
| Lv.1 | Details | To specify the Clutch to operate. |
| | Use case | When replacing the Clutch/checking the operation |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 1 to 6<br>1: Developing Clutch (CL1)<br>2: Magnet Roller Clutch (CL5)<br>3 to 6: Not used |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> PART-CHK> CL-ON |
| CL-ON | | Operation check of Clutch |
| Lv.1 | Details | To start operation check of the Clutch specified by CL.<br>The operation stops after “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec”. |
| | Use case | When replacing the Clutch/checking the operation |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Default value | 0 |
| | Required time | 22 sec |
| | Related service mode | COPIER> FUNCTION> PART-CHK> CL |
| MTR | | Specification of operation Motor |
| Lv.1 | Details | To specify the Motor to operate. |
| | Use case | When replacing the Motor/checking the operation |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Caution | Be sure to remove the Toner Container before Toner Supply Motor (M10) is activated. If it remains to be installed, toner is supplied. |
| | Display/adj/set range | 1 to 16<br>1: Toner Supply Motor (M10)<br>2: Toner Feed Motor (M28)<br>3: Delivery Motor (M13)<br>4: Reverse Motor (M14)<br>5: Side Registration Motor (M16)<br>6: Duplex Feed Right Motor (M18)<br>7: Duplex Feed Left Motor (M19)<br>8: Vertical Path Upper Motor (M26)<br>9: Vertical Path Lower Motor (M27)<br>10: Vertical Path Middle Motor (M31)<br>11: Duplex Feed Merging Motor (M32)<br>12: Multi-purposeTray Registration Front Motor (M33)<br>13: Registration Motor (M34)<br>14: ETB Motor (M43)<br>15 to 16: Not used |
| | Default value | 1 |
| | Related service mode | COPIER> FUNCTION> PART-CHK> MTR-ON |

| COPIER > FUNCTION > PART-CHK | | |
|---|---|---|
| MTR-ON | | Operation check of Motor |
| Lv.1 | Details | To start operation check of the Motor specified by MTR.<br>The operation automatically stops after operation of 20 seconds. |
| | Use case | When replacing the Motor/checking the operation |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to remove the Toner Container before Toner Supply Motor (M10) is activated. If it remains to be installed, toner is supplied. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 1 min |
| | Related service mode | COPIER> FUNCTION> PART-CHK> MTR |
| SL | | Specification of operation Solenoid |
| Lv.1 | Details | To specify the Solenoid to operate. |
| | Use case | When replacing the Solenoid/checking the operation |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 1 to 10<br>1: Multi Middle Plate Release Solenoid (SL2)<br>2: Cassette 3 Pickup Solenoid (SL3)<br>3: Cassette 4 Pickup Solenoid (SL4)<br>4: Reverse Upper Flapper Solenoid (SL5)<br>5: Right Deck Pickup Solenoid (SL6)<br>6: Not used<br>7: Left Deck Merging Solenoid (SL11)<br>8: Fixing Cleaning Web Drive Solenoid (SL9)<br>9: Patch Sensor Shutter Solenoid (SL10)<br>10: Reverse Detachment Solenoid (SL12) |
| | Default value | 1 |
| | Related service mode | COPIER> FUNCTION> PART-CHK> SL-ON |
| SL-ON | | Operation check of Solenoid |
| Lv.1 | Details | To start operation check for the Solenoid specified by SL.<br>The operation stops after “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec”. |
| | Use case | When replacing the Solenoid/checking the operation |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 1 min |
| | Related service mode | COPIER> FUNCTION> PART-CHK> SL |

T-8-54

## ■ CLEAR

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| ERR | | Clear of error code |
| Lv.1 | Details | To clear error codes (E000, E001, E002, E003, E717, E719).<br>E000, E001, E002, and E003 are fixing-related errors.<br>E004 (IH Power Supply) and E005 (Web absence) do not need to be cleared. |
| | Use case | At error occurrence |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| DC-CON | | RAM clear of DC Controller PCB |
| Lv.1 | Details | To clear the RAM data of the DC Controller PCB. |
| | Use case | When clearing the RAM data of the DC Controller PCB |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting values.<br>• The RAM data is cleared after the main power switch is turned OFF/ON. |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| R-CON | | RAM clear of Reader Controller PCB |
| Lv.1 | Details | To clear the RAM data of the Reader Controller PCB. |
| | Use case | When clearing the RAM data of the Reader Controller PCB |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting values.<br>• The RAM data is cleared after the main power switch is turned OFF/ON. |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| JAM-HIST | | Clear of jam history |
| Lv.1 | Details | To clear the jam history. |
| | Use case | When clearing the jam history |
| | Adj/set/operate method | Select the item, and then press OK key. |
| ERR-HIST | | Clear of error code history |
| Lv.1 | Details | To clear the error code history. |
| | Use case | When clearing the error code history |
| | Adj/set/operate method | Select the item, and then press OK key. |
| PWD-CLR | | Clear of system administrator password |
| Lv.1 | Details | To clear the password of the system administrator set in the user mode. |
| | Use case | When clearing the password of the system administrator |
| | Adj/set/operate method | Select the item, and then press OK key. |

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| ADRS-BK | | Clear of address book |
| Lv.1 | Details | To clear the address book data. |
| | Use case | When clearing the address book data |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The address book data is cleared after the main power switch is turned OFF/ON. |
| CNT-MCON | | Clear of Main Controller service counter |
| Lv.1 | Details | To clear the service counter counted by the Main Controller PCB. |
| | Use case | When clearing the service counter counted by the Main Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> COUNTER |
| | Supplement/memo | See COUNTER for the target counter. |
| CNT-DCON | | Clear of DC Controller service counter |
| Lv.1 | Details | To clear the service counter (FIN-STPR, FIN-PDDL, SADDLE, STPL) counted by the DC Controller PCB. |
| | Use case | When clearing the service counter counted by the DC Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> COUNTER> DRBL-2> FIN-STPR, FIN-PDDL, SADDLE, STPL |
| OPTION | | Clear of service mode setting VL(OPTION) |
| Lv.1 | Details | To return the value specified in service mode (OPTION) to the default value (value at the time of RAM clear). |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | • Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting values.<br>• This item is executed for the data on the Main Controller PCB, DC Controller PCB and Reader Controller PCB. |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| MMI | | Clear of user mode setting value |
| Lv.1 | Details | To clear the user mode setting values (excluding values for Control Panel, common settings, and FAX).<br>• Common Settings<br>• Timer Settings<br>• Adjustment/Cleaning<br>• Report Settings<br>• System Settings<br>• Copy Settings<br>• Communications Settings<br>• Printer Settings |
| | Use case | When clearing various setting values of user mode |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The setting value is cleared after the main power switch is turned OFF/ON. |

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| MN-CON | | RAM clear of MNCON PCB SRAM Board |
| Lv.1 | Details | To clear the RAM data of the Main Controller PCB SRAM Board.<br>All data on the SRAM Board is initialized. |
| | Use case | When clearing the RAM data of the Main Controller PCB SRAM Board |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>The machine is automatically rebooted.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Inform the user that all images in Inbox will be deleted and get approval for it.<br>• Since the file management information is initialized, images on the HDD cannot be read.<br>• Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting values.<br>• The RAM data is cleared after the main power switch is turned OFF/ON. |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| CARD | | Clear of card ID-related data |
| Lv.1 | Details | To clear the data related to the card ID (department). |
| | Use case | When clearing the data related to the card ID |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The value is cleared after the main power switch is turned OFF/ON. |
| ALARM | | Clear of alarm log |
| Lv.1 | Details | To clear alarm log. |
| | Use case | When clearing alarm log |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The alarm log is cleared after the main power switch is turned OFF/ON. |

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| CA-KEY | | Deletion of CA certificate and key pair |
| Lv.2 | Details | To simultaneously delete the CA certificate and key pair which are additionally registered by the user. |
| | Use case | When a service person replaces/discards the device |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Check that OK is displayed.<br>3) Turn OFF/ON the main power switch. |
| | Caution | • Unless this item is executed at the time of replacement/discard of the device, the CA certificate and key pair which are additionally registered by the user remain in the HDD, which is a problem in terms of security.<br>• Do not execute this item carelessly because the CA certificate and key pair which are additionally registered are deleted when it is executed. If they are deleted mistakenly, they need to be again registered by the user. If no CA certificate and key pair are additionally registered, the machine condition becomes the same as the one at the time of factory shipment.<br>• When NG is displayed in 2), there is a possibility that deletion was not executed. In this case, surely execute the deletion by initializing the HDD, etc. |
| | Display/adj/set range | At normal termination: OK, At abnormal termination: NG |
| | Supplement/memo | • The CA certificate is used in the MEAP application with E-RDS and SSL client connection, and the key pair is used in the SSL function of IPP, RUI and MEAP.<br>• When the main power switch is turned OFF/ON, the CA certificate and key pair which were registered at the time of factory shipment are decompressed from the archive (/BOOTDEV/KCMNG), and become available in the E-RDS/SSL function. |
| ERDS-DAT | | Initialization of E-RDS SRAM data |
| Lv.1 | Details | To initialize the SCM value of the Embedded-RDS stored in the SRAM.<br>SCM values are ON/OFF of E-RDS, server's port number, server's SOAP URL, and communication schedule with the server (how often the data is acquired), etc.<br>The value set by COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG is cleared. |
| | Use case | When upgrading the Bootable in the E-RDS environment |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The method of using the SRAM in E-RDS differs depending on the Bootable version. Therefore, unless the SRAM data is cleared at the time of version upgrade, data inconsistency occurs. |
| | Display/adj/set range | At normal termination: OK, At abnormal termination: NG |
| | Related service mode | COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG |

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| KEY-CLR | | Encrypt key clear of HDD Encrypt Board |
| Lv.2 | Details | To clear the encryption key of the HDD Encryption Board (Security Kit) for replacement.<br>Processing is executed at the time of replacement of the Encryption Board, and a new encryption key is generated. |
| | Use case | When replacing the encryption key for the HDD Encryption Board |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Check that OK is displayed.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Since all data in the HDD becomes unavailable when executing this item, be sure to initialize the HDD after turning OFF/ON the main power switch. |
| | Display/adj/set range | At normal termination: OK, At abnormal termination: NG |
| USBM-CLR | | Initialize USB MEAP priority rgst info |
| Lv.1 | Details | To initialize the registered ID data retained in the OS field by calling the API provided by the OS. |
| | Use case | When a failure occurs in USB MEAP priority registration |
| JV-CACHE | | Cache clear of JAVA application |
| Lv.1 | Details | To clear the cache information used by JAVA application. |
| | Use case | When initializing the JAVA application |
| | Adj/set/operate method | Select the item, and then press OK key. |
| FXTX-CLR | | Clearing fax job information |
| Lv.1 | Details | To clear fax job information stored on SRAM.<br>Use this mode to restore from E611-0001. |
| | Use case | When E611-0001 occurs |
| | Adj/set/operate method | Select the item, and then press OK key. |
| TR-BLT | | Clearing Transfer Belt parts counter |
| Lv.1 | Details | To clear ETB parts counter when replacing to a new Transfer Belt (ETB). |
| | Use case | When replacing to a new ETB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> COUNTER> DRBL-1> TR-BLT |
| GRD-CRNT | | Init of Primary Charging Wire current VL |
| Lv.1 | Details | To initialize the current value of the Primary Charging Wire by initializing the voltage value of the grid wire.<br>The current value of the Primary Charging Wire is linked with the usage status; thus, execute initialization at the time of replacement. |
| | Use case | When replacing the Primary Charging Wire |
| | Adj/set/operate method | Select the item, and then press OK key. |

| COPIER > FUNCTION > CLEAR | | |
|---|---|---|
| LANG-CLR | | Uninstallation of language files |
| Lv.2 | Details | To uninstall the language files other than Japanese and English files. After execution, the machine automatically enters the download mode. |
| | Use case | When installing a new language file while there are 7 installed language files |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Reboot the machine. |
| | Caution | The language files are not uninstalled if a language file is not installed by SST after the execution of this service mode. |
| | Supplement/memo | Screen is displayed in English after the execution, so switch the language. |
| FIN-MCON | | Clearing Finisher delvry destination set |
| Lv.1 | Details | To clear the setting of Delivery Tray of the Finisher specified in user mode (Settings/Registration> Function Settings> Common> Paper Output Settings> Output Tray Settings).<br>Since the delivery destination settings are stored in the DC Controller PCB in the machine, malfunction occurs when replacing the Finisher with a different model without clearing the settings.<br>If the model of the Finishers is the same, there is no need to clear the settings. |
| | Use case | When the Finisher is replaced with a different model in the field |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related UI menu | Settings/Registration> Function Settings> Common> Paper Output Settings> Output Tray Settings |

T-8-55

## MISC-R

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| SCANLAMP | | Light-up check of LED |
| Lv.1 | Details | To light up the LED for 3 seconds. |
| | Use case | When replacing the LED |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 3 sec |
| CLM-PLTN | | Sampling of color copyboard read MTF VL |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When color copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Set the MTF chart on the Copyboard Glass.<br>2) Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |
| BWM-PLTN | | Sampling of B&W copyboard read MTF value |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When B&W copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Set the MTF chart on the Copyboard Glass.<br>2) Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLM-DF1 | | Sampling of clr front stream read MTF VL |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When color front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Set the MTF chart on the ADF.<br>2) Select the item, and then press OK key.<br>3) Perform color front side stream reading with the MTF chart set on the ADF. (CLM-DF1) |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |
| BWM-DF1 | | Sampling of B&W front stream read MTF VL |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When B&W front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Set the MTF chart on the ADF.<br>2) Select the item, and then press OK key.<br>3) Perform B&W front side stream reading with the MTF chart set on the ADF. (BWM-DF1) |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLM-DF2 | | Sampling color back stream read MTF VL |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When color back side stream reading is performed, the controller performs sampling of the MTF value. The MTF value is set in MTF-Mx, MTF-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Perform color back side stream reading with the MTF chart set on the ADF. (CLM-DF2)<br>2) Set the MTF chart on the ADF.<br>3) Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF-M1-12, MTF-S1-12 |
| BWM-DF2 | | Sampling B&W back stream read MTF value |
| Lv.1 | Details | The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation.<br>When B&W back side stream reading is performed, the controller performs sampling of the MTF value. The MTF value is set in MTF-Mx, MTF-Sx. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Perform B&W back side stream reading with the MTF chart set on the ADF. (BWM-DF2)<br>2) Set the MTF chart on the ADF.<br>3) Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Related service mode | COPIER> ADJUST> CCD> MTF-M1-12, MTF-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLPLT-EN | | Color copyboard read MTF VL initial set |
| Lv.1 | Details | To return the MTF value for color copyboard reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When CLM-PLTN is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with CLM-PLTN becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-PLTN. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> CLM-PLTN, CLM-TGT<br>COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |
| BWPLT-EN | | B&W copyboard read MTF value initial set |
| Lv.1 | Details | To return the MTF value for B&W copyboard reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When BWM-PLTN is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with BWM-PLTN becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-PLTN. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> BWM-PLTN, BWM-TGT<br>COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLDF1-EN | | Clr front stream read MTF VL initial set |
| Lv.1 | Details | To return the MTF value for color front side stream reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When CLM-DF1 is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with CLM-DF1 becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-DF1. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> CLM-DF1, CLM-TGT<br>COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |
| BWDF1-EN | | B&W front stream read MTF VL initial set |
| Lv.1 | Details | To return the MTF value for B&W front side stream reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When BWM-DF1 is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with BWM-DF1 becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-DF1. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> BWM-DF1, BWM-TGT<br>COPIER> ADJUST> CCD> MTF2-M1-12, MTF2-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLDF2-EN | | Clr back stream read MTF VL initial set |
| Lv.1 | Details | To return the MTF value for color back side stream reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When CLM-DF2 is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with CLM-DF2 becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the back side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-DF2. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> CLM-DF2, CLM-TGT<br>COPIER> ADJUST> CCD> MTF-M1-12, MTF-S1-12 |
| BWDF2-EN | | B&W back stream read MTF VL initial set |
| Lv.1 | Details | To return the MTF value for B&W back side stream reading to the factory setting value.<br>Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled.<br>When BWM-DF2 is executed, the value is automatically set to 1.<br>When the value is set to 0, the value adjusted with BWM-DF2 becomes disabled and returned to the factory setting value. |
| | Use case | When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the back side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-DF2. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | The MTF value obtained by reading the MTF chart becomes disabled. |
| | Display/adj/set range | 0 to 1<br>0: Factory setting value, 1: Adjustment value at installation |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-R> BWM-DF2, BWM-TGT<br>COPIER> ADJUST> CCD> MTF-M1-12, MTF-S1-12 |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| CLM-TGT | | Fine adjustment of color MTF value |
| Lv.1 | Details | To perform the filter processing inside of the Reader Controller so that the MTF value measured by CLM-PLTN/CLM-DF1/CLM-DF2 becomes 55% or lower of the value.<br>When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backup MTF filter correction coefficient is updated. |
| | Use case | When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: 55%<br>1: 50% (The image becomes foggy.) |
| | Default value | 0 |
| | Required time | 2 min |
| | Supplement/memo | The MTF value is set to 65% at the time of shipment. |
| BWM-TGT | | Fine adjustment of B&W MTF value |
| Lv.1 | Details | To perform the filter processing inside of the Reader Controller so that the MTF value measured by BWM-PLTN/BWM-DF1/BWM-DF2 becomes 55% or lower of the value.<br>When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backup MTF filter correction coefficient is updated. |
| | Use case | When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: 55%<br>1: 50% (The image becomes foggy.) |
| | Default value | 0 |
| | Required time | 2 min |
| | Supplement/memo | The MTF value is set to 65% at the time of shipment. |
| SCANLMP2 | | Light-up check of LED Lamp Unit: back |
| Lv.1 | Details | To light up the LED Lamp Unit for back side, which is placed in the ADF, and check whether there is a missing block or no lighting in LED. |
| | Use case | When replacing the LED Lamp Unit for back side |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 5 sec |

| COPIER > FUNCTION > MISC-R | | |
|---|---|---|
| RD-SHPOS | | Moving to Reader Scanner Unit fix pstn |
| Lv.2 | Details | To move the Reader Scanner Unit to the position where it is fixed when moving.<br>When moving the Reader after installation, the Reader Scanner Unit may move and get damage. By moving the Scanner Unit to the specified position and securing it in place with a screw before moving, damage can be prevented. |
| | Use case | When moving the Reader after installation |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to move the Scanner Unit to the fixing position and secure it in place with a screw when moving the Reader after installation. Otherwise, the Scanner Unit may get damage. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |

T-8-56

## MISC-P

| COPIER > FUNCTION > MISC-P | | |
|---|---|---|
| P-PRINT | | Output of service mode setting value |
| Lv.1 | Details | To print the service mode setting value. |
| | Use case | Before executing the CLEAR service mode, etc. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Supplement/memo | It takes approximately 15 seconds before printing starts. |
| KEY-HIST | | Output of Ctrl Panel key input log |
| Lv.1 | Details | To print the key input log on the Control Panel. |
| | Use case | When printing the key input log on the Control Panel |
| | Adj/set/operate method | Select the item, and then press OK key. |
| HIST-PRT | | Output of jam and error history |
| Lv.1 | Details | To print the jam history and error history. |
| | Use case | When printing the jam/error history |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Required time | 30 sec |
| TRS-DATA | | Moving memory reception data to Inbox |
| Lv.2 | Details | To move the data received in memory to Inbox. |
| | Use case | When moving the data received in memory to Inbox |
| | Adj/set/operate method | Select the item, and then press OK key. |
| USER-PRT | | Output of user mode list |
| Lv.1 | Details | To print the user mode list. |
| | Use case | When printing the user mode list |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Required time | 35 sec |
| | Supplement/memo | It takes approximately 3 seconds before printing starts. |
| LBL-PRNT | | Output of service label |
| Lv.1 | Details | To print the service label. |
| | Use case | When printing the service label |
| | Adj/set/operate method | 1) Place A4/LTR paper in Cassette 1.<br>2) Select the item, and then press OK key. |
| | Required time | 55 sec |
| | Supplement/memo | It takes approximately 15 seconds before printing starts. |
| PRE-EXP | | Light-up of Pre-exposure LED |
| Lv.1 | Details | To light up the Cleaning Pre-exposure LED.<br>Open the Front Cover, and check that the LEDs light up visually.<br>It automatically stops after all light up. |
| | Use case | When checking that the Pre-exposure LEDs light up |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Drum memory may occur, so be sure not to execute this item frequently. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 30 sec |

| COPIER > FUNCTION > MISC-P | | |
|---|---|---|
| ENV-PRT | | Temp&hmdy/surface temp of Fix Roll log |
| Lv.1 | Details | To output data of the temperature and humidity inside the machine/ surface temperature of the Fixing Roller as a log. |
| | Use case | When figuring out the past temperature inside the machine/fixing temperature information at trouble analysis |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK! |
| | Required time | 30 sec |
| PJH-P-1 | | Detail info of print job history:100 job |
| Lv.1 | Details | To print the print job history for the latest 100 jobs with detailed information.<br>In the case of less than 100 jobs, the history of all print jobs is printed. |
| | Use case | When printing the print job history with detailed information |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Supplement/memo | Output the print job history with detailed information which is not displayed/printed in the job history screen under “System Monitor>Print>Log>Printer” and in the report of the print job history. |
| PJH-P-2 | | Detail info of print job history:all job |
| Lv.1 | Details | To print the history of all print jobs stored in the machine with detailed information (for maximum 5000 jobs).<br>The difference between PJH-P-1 and this item is only the number of jobs printed. |
| | Use case | When printing the print job history with detailed information |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Supplement/memo | Output the print job history with detailed information which is not displayed/printed in the job history screen under “System Monitor>Print>Log>Printer” and in the report of the print job history. |
| WB | | Reverse toner forcible eject: blank band |
| Lv.2 | Details | To eject the reverse toner forcibly.<br>After execution, it automatically stops. |
| | Use case | When operating in a high duty and low humidity environment for a long time (executed by administrator) |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | In processing: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Required time | 60 sec |

| COPIER > FUNCTION > MISC-P | | |
|---|---|---|
| BB | | Toner forcible eject (black band) |
| Lv.1 | Details | Forcibly discharge low-charge toner, and send it to the drum cleaner unit.<br>The operation automatically stops after execution. |
| | Use case | When operating the machine in low-duty and high-humidity environment for a long period of time (implemented by the administrator) |
| | Adj/set/operate method | Select the item and press the OK key. |
| | Display/adj/set range | During operation: ACTIVE, When operation finished normally: OK, When operation failed: NG |
| | Required time | 60 sec |
| DMAX-N | | Execute plain paper group D-max control |
| Lv.1 | Details | To execute D-max control for plain paper group manually. (It is usually executed automatically.)<br>The result is displayed in COPIER> DISPLAY> DENS> DMAX-N. |
| | Use case | When checking single-part operation at replacement or cleaning of the Patch Sensor |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after P-LED and P-BASE. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Required time | 4 sec |
| | Related service mode | COPIER> DISPLAY> DENS> DMAX-N |
| P-BASE | | Detection of background by Patch Sensor |
| Lv.2 | Details | To detect the ETB background by the Patch Sensor. (It is usually executed automatically.)<br>The result is displayed in COPIER> DISPLAY> DENS> P-B-AVE, P-B-MAX, P-B-MIN. |
| | Use case | When checking single-part operation at replacement or cleaning of the Patch Sensor/ETB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after P-LED. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Required time | 2 sec |
| | Related service mode | COPIER> DISPLAY> DENS> P-B-AVE, P-B-MAX, P-B-MIN |

| COPIER > FUNCTION > MISC-P | | |
|---|---|---|
| P-LED | | Adj of Patch Sensor light intensity |
| Lv.2 | Details | To adjust light intensity of the Patch Sensor. (It is usually executed automatically.)<br>The result is displayed in COPIER> DISPLAY> DENS> P-LED. |
| | Use case | When checking single-part operation at replacement or cleaning of the Patch Sensor |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Required time | 2 sec |
| | Related service mode | COPIER> DISPLAY> DENS> P-LED |
| USBH-PRT | | Output of USB device information report |
| Lv.1 | Details | To output information of the connected USB device in the form of a report. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| DV-RT | | Idle rotation of Developing Assembly |
| Lv.1 | Details | To execute idle rotation of the Developing Assembly.<br>Duration can be set by COPIER> OPTION> IMG-DEV>DV-RT-LG. |
| | Use case | When small vertical lines occurs on an image |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | If using frequently, deterioration of developer or toner scattering might occur. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Related service mode | COPIER> OPTION> IMG-DEV>DV-RT-LG |
| RPT-FILE | | Output of report print file |
| Lv.1 | Details | To save various service reports in HDD as a file.<br>The files can be obtained using PC to which SST has been installed or USB memory device after starting the machine in download mode. |
| | Use case | When obtaining the service report as a file instead of printing the report out |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Supplement/memo | File size: Approx. 1 MB at a maximum |

T-8-57

## SENS-ADJ

| COPIER > FUNCTION > SENS-ADJ | | |
|---|---|---|
| STCK-LMT | | Adj of Shift Tray Full Sensor position |
| Lv.2 | Details | To adjust position of the Shift Tray Full Sensor (front)/(rear).<br>”ON” is displayed at detection of full, and “OFF” is displayed at other times. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | At detection of full: ON, At other times: OFF |

T-8-58

## SYSTEM

| COPIER > FUNCTION > SYSTEM | | |
|---|---|---|
| DOWNLOAD | | Shift to download mode |
| Lv.1 | Details | To make the machine enter the download mode and wait for a command.<br>Perform downloading by SST. |
| | Use case | At upgrade |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Perform downloading by SST. |
| | Caution | Do not turn OFF the power before HOLD is displayed. |
| | Supplement/memo | SST: Service Support Tool |
| CHK-TYPE | | HD-CLEAR/HD-CHECK exe partition No. |
| Lv.1 | Details | To specify the partition number of the HDD to execute HD-CLEAR/HD-CHECK. |
| | Use case | When executing HD-CLEAR/HD-CHECK |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 65535<br>0: Entire HDD<br>1, 2, 3, 4: Image data storage area<br>5: Universal file storage area<br>6, 7, 8: Universal file storage area (temporary file)<br>9: PDL file storage area<br>10: Program file storage area<br>11: MEAP application<br>12: Address book/transfer setting<br>13: MEAP stored data<br>14: System log storage area<br>15: Advanced Box area<br>16: Delivery server area |
| | Related service mode | COPIER> FUNCTION> SYSTEM> HD-CLEAR, HD-CHECK |
| | Supplement/memo | Universal file: Management information of user setting data, various log data, PDL spool data, and image data, etc. |
| HD-CHECK | | Entire HDD check and recovery |
| Lv.1 | Details | To check the entire HDD and execute recovery processing. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after CHK-TYPE. |
| | Display/adj/set range | During operation: Progress ratio (%), When operation finished normally: OK! |
| | Related service mode | COPIER> FUNCTION> SYSTEM> CHK-TYPE |

| COPIER > FUNCTION > SYSTEM | | |
|---|---|---|
| HD-CLEAR | | Initialization of specified partition |
| Lv.1 | Details | To initialize the HDD partition specified by CHK-TYPE. |
| | Use case | When initializing the HDD partition |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Be sure to execute this item after CHK-TYPE. |
| | Display/adj/set range | Top 2 digits: Progress ratio (%, Returns to “00” at termination)<br>Last 2 digits: Result at termination (00: Normally finished, Others: Abnormally finished) |
| | Related service mode | COPIER> FUNCTION> SYSTEM> CHK-TYPE |
| DEBUG-1 | | Setting of log type and save timing |
| Lv.2 | Details | To set the types of logs to be stored and the timing to store logs in the HDD.<br>Logs are used to analyze the cause of a trouble. |
| | Use case | When analyzing the cause of a problem |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Caution | Do not use this at the normal service. Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 0 to 3<br>0: Save PLOG at detection of Reboot/Exception<br>1: Save PLOG at detection of Reboot/Exception/Encode<br>2: Save SUBLOG at detection of Reboot/Exception/Encode<br>3: Save SUBLOG in overwrite mode at detection of Reboot/Exception/Encode |
| | Default value | 3 |
| DSRAMBUP | | Backup of DC Controller PCB SRAM |
| Lv.2 | Details | To back up the setting data in SRAM of the DC Controller PCB. |
| | Use case | When replacing the DC Controller PCB for troubleshooting at the time of trouble occurrence |
| | Caution | During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted. |
| | Related service mode | COPIER> FUNCTION> SYSTEM> DSRAMRES |
| DSRAMRES | | Restore of DC Controller PCB SRAM |
| Lv.2 | Details | To restore the setting data which has been backed up in SRAM of the DC Controller PCB. |
| | Use case | When replacing the DC Controller PCB for troubleshooting at the time of trouble occurrence |
| | Caution | During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted. |
| | Related service mode | COPIER> FUNCTION> SYSTEM> DSRAMBUP |

| COPIER > FUNCTION > SYSTEM | | |
|---|---|---|
| RSRAMBUP | | Backup of Reader Controller PCB SRAM |
| Lv.2 | Details | To back up the setting data in SRAM of the Reader Controller PCB. |
| | Use case | When replacing the Reader Controller PCB for troubleshooting at the time of trouble occurrence |
| | Caution | During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted. |
| | Related service mode | COPIER> FUNCTION> SYSTEM> RSRAMRES |
| RSRAMRES | | Restore of Reader Controller PCB SRAM |
| Lv.2 | Details | To restore the setting data which has been backed up in SRAM of the Reader Controller PCB. |
| | Use case | When replacing the Reader Controller PCB for troubleshooting at the time of trouble occurrence |
| | Caution | During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted. |
| | Related service mode | COPIER> FUNCTION> SYSTEM> RSRAMBUP |
| R-REBOOT | | Reboot of host machine (Remote) |
| Lv.1 | Details | To reboot the host machine. |
| | Use case | When rebooting the host machine by remote control |
| | Adj/set/operate method | Select the item, and then press OK key. |

T-8-59

## 2D-SHADE

| COPIER > FUNCTION > 2D-SHADE | | |
|---|---|---|
| M-LINE1 | | 2D shading horizontal scan 1 correction |
| Lv.2 | Details | To set the correction value of the horizontal scanning direction 1 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> M-LINE2 |
| M-LINE2 | | 2D shading horizontal scan 2 correction |
| Lv.2 | Details | To set the correction value of the horizontal scanning direction 2 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> M-LINE1 |
| S-LINE1 | | 2D shading vertical scan 1 correction |
| Lv.2 | Details | To set the correction value of the vertical scanning direction 1 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> S-LINE2, S-LINE3, S-LINE4 |
| S-LINE2 | | 2D shading vertical scan 2 correction |
| Lv.2 | Details | To set the correction value of the vertical scanning direction 2 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> S-LINE1, S-LINE3, S-LINE4 |
| S-LINE3 | | 2D shading vertical scan 3 correction |
| Lv.2 | Details | To set the correction value of the vertical scanning direction 3 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> S-LINE1, S-LINE2, S-LINE4 |
| S-LINE4 | | 2D shading vertical scan 4 correction |
| Lv.2 | Details | To set the correction value of the vertical scanning direction 4 at 2D shading. |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 255 |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> S-LINE1, S-LINE2, S-LINE3 |

| COPIER > FUNCTION > 2D-SHADE | | |
|---|---|---|
| SHD-P1 | | 2D shading pattern 1 output |
| Lv.1 | Details | To output pattern 1 for 2D shading. |
| | Use case | When checking 2D shading profile visually and entering manually |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> SHD-P2, SHD-P3 |
| SHD-P2 | | 2D shading pattern 2 output |
| Lv.1 | Details | To output pattern 2 for 2D shading. |
| | Use case | When checking 3D shading profile visually and entering manually |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> SHD-P1, SHD-P3 |
| SHD-P3 | | 2D shading pattern 3 output |
| Lv.1 | Details | To output pattern 3 for 2D shading. |
| | Use case | When checking 4D shading profile visually and entering manually |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> OPTION> IMG-LSR> 2D-SHADE<br>COPIER> FUNCTION> 2D-SHADE> SHD-P1, SHD-P2 |
| 2D-READ | | Read 2D shading ROM |
| Lv.1 | Details | To read 2D shading ROM data.<br>To check ROM for 2D shading, compare the calculated checksum and checksum of ROM.<br>When they are matched, the checksum and Drum Lot number are stored in the DC Controller. When they are not matched, it is judged as an alarm. |
| | Use case | After executing initialization of Drum at Drum replacement |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During execution: ACTIVE, At normal termination: OK!, At abnormal termination: NG! |
| | Related service mode | COPIER> DISPLAY> 2D-SHADE> 2D-STS<br>COPIER> OPTION> IMG-LSR> 2D-SHADE |

T-8-60

# OPTION

## CLEANING

| COPIER > OPTION > CLEANING | | |
|---|---|---|
| W-CLN-P | | Set last rotn Prmry Charge Wir cln intvl |
| Lv.2 | Details | To set the offset value of the paper interval for automatic cleaning of the Primary Charging Wire.<br>Default is 2000 sheets, and the paper interval can be changed within the range between 1000 and 5000 sheets. |
| | Use case | Upon user's request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -1000 to 3000 |
| | Default value | 0 (2000 sheets) |
| CLN-SW | | ON/OFF of cleaning black band sequence |
| Lv.1 | Details | To set ON/OFF of black band sequence for cleaning.<br>When printing a low duty image while toner ejection operation at low duty image is set to OFF, amount of toner supply to the Cleaning Blade is decreased extremely. Toner is supplied to the edge of Cleaning Blade if the sequence is executed.<br>The execution of sequence is synchronized with the Primary Charging Wire cleaning timing.<br>When setting CLN-SW to 2 and setting CLN-ADJ to 0, the setting value "7" of environment control for each process speed is executed.<br>When setting CLN-SW to 2 and setting CLN-ADJ to other than 0, operation is accorded with the setting value of CLN-ADJ.<br>When setting CLN-SW to 0, operation is not executed regardless of the CLN-ADJ setting. |
| | Use case | When amount of toner supply to the Cleaning Blade is decreased extremely |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 2<br>0: OFF, 1: Based on environment control, 2: ON |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> CLEANING> CLN-ADJ |

| COPIER > OPTION > CLEANING | | |
|---|---|---|
| CLN-ADJ | | Set black band length for cleaning |
| Lv.1 | Details | To set black band length for cleaning.<br>When setting CLN-SW to 2 and setting CLN-ADJ to 0, the setting value "7" of environment control for each process speed is executed.<br>When setting CLN-SW to 2 and setting CLN-ADJ to other than 0, operation is accorded with the setting value of CLN-ADJ.<br>When setting CLN-SW to 0, operation is not executed regardless of the CLN-ADJ setting.<br>However, with imageRUNNER ADVANCE 8205/8295/8285, black band sequence is not executed although the setting value of environment control is "7". Set CLN-ADJ to other than 0 to execute the operation. |
| | Use case | When amount of toner supply to the Cleaning Blade is decreased extremely |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 4<br>0: Based on environment control, 1: 1000 mm, 2: 2098 mm, 3: 3548 mm, 4: 5000 mm |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> CLEANING> CLN-SW |

T-8-61

## CUSTOM

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| TEMP-TBL | | Set fixing control temp table: Plain |
| Lv.1 | Details | To set the control temperature table of the Fixing Roller for 64 to 90g/m2 size paper. |
| | Use case | When alleviating the curl |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 2<br>-5 to -1: -5 degC, 0 to 2: 0 degC |
| | Default value | 0 |
| CCD-TYPE | | Setting of CCD Unit type |
| Lv.2 | Details | To set the CCD Unit type installed in the Reader to the backup area in the controller.<br>Controller switches the image processing table according to the setting value. |
| | Use case | When changing the CCD Unit type |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Initial type, 1: Improved type |
| | Default value | 0 |
| | Supplement/memo | If the CCD Unit is changed after factory shipment, the Reader cannot identify the type. |
| SC-L-CNT | | Set large paper jdgmt reference at scan |
| Lv.1 | Details | To set the judgment reference of the scan counter as to which to use B4 or LTR to determine large size.<br>The threshold is determined by the combination with the setting of B4-L-CNT.<br>SC-L-CNT=0, B4-L-CNT=0: paper exceeding B4 is determined as large size, paper with B4 or smaller is determined as small size.<br>SC-L-CNT=0, B4-L-CNT=1: paper with B4 or larger is determined as large size, paper smaller than B4 is determined as small size. |
| | Use case | As needed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: B4 size, 1: LTR size |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> USER> B4-L-CNT |
| FACT-DEF | | Set batch chng of factory setting values |
| Lv.2 | Details | To set the batch change of factory setting values for customization. |
| | Display/adj/set range | 0 to 1 |
| | Default value | 0 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| MAILYEAR | | Set auto add to e-mail Subject/File name |
| Lv.2 | Details | To set whether to add date, time and split number automatically to the end of a character string of e-mail Subject/File name. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Following the current setting, 1: Adding |
| | Default value | 0 |
| BOX-BKUP | | Set to allow Inbox backup data restore |
| Lv.1 | Details | To set whether to permit restoration of Inbox backup data.<br>Machine subject to restoration can be selected from either the same model or the next model.<br>When restoration is completed normally, the setting value is returned to 0. |
| | Use case | At replacement, permit to restore backup data of other model (some models). |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Permit restoration only from own device to own device (same model only)<br>1: Permit restoration only from old device to new device (next model only) |
| | Default value | 0 |
| SCANTYPE | | Switch of ADF + Reader |
| Lv.1 | Details | To switch to a different type ADF + Reader Unit. |
| | Use case | At installation |
| | Display/adj/set range | 0 to 1<br>0: Reverse Duplex ADF + Reader, 1: 1-Path Duplex ADF + Reader |
| | Default value | 0 |
| PDLEVCT1 | | Set event skipping at continuous PDL job |
| Lv.2 | Details | To set event skipping at continuous PDL job.<br>During continuous operation, processing performance may be decreased due to other events generated by the event in operation.<br>In this case, decrease of processing performance can be prevented by skipping the amount of event.<br>Processing performance: No event skipping < Subject of skipping 1 |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: No event skipping, 1: Subject of skipping 1 |
| | Default value | 1 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| ABK-TOOL | | Allow access from address book mntc tool |
| Lv.1 | Details | To set whether to accept import from the address book maintenance tool. |
| | Use case | When executing import from the address book maintenance tool |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| | Supplement/memo | Address book maintenance tool: Tool provided from CMJ. |
| DEV-SP1 | | Device special settings 1 |
| Lv.2 | Details | To execute the device special settings 1. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP2 | | Device special settings 2 |
| Lv.2 | Details | To execute the device special settings 2. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP3 | | Device special settings 3 |
| Lv.2 | Details | To execute the device special settings 3. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP4 | | Device special settings 4 |
| Lv.2 | Details | To execute the device special settings 4. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| DEV-SP5 | | Device special settings 5 |
| Lv.2 | Details | To execute the device special settings 5. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP6 | | Device special settings 6 |
| Lv.2 | Details | To execute the device special settings 6. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP7 | | Device special settings 7 |
| Lv.2 | Details | To execute the device special settings 7. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| DEV-SP8 | | Device special settings 8 |
| Lv.2 | Details | To execute the device special settings 8. |
| | Use case | When specific instructions are given from the Quality Support Division |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Change the setting value in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| AC-FREQ | | Setting of frequency of AC power |
| Lv.2 | Details | Although power frequency is judged for power control with the machine, it might be judged incorrectly depending on power circumstance at the installation location.<br>At left side column, the power frequency (50 Hz/60 Hz) which the DC Controller judged at power-on is displayed.<br>In the case that the power frequency is not matched with the one at the installation location, set the AC power frequency at right side column. |
| | Use case | When the breaker is frequently tripped during operation |
| | Adj/set/operate method | 1) Select the right side column.<br>2) Enter the setting value, and then press OK key. |
| | Display/adj/set range | Left side: 0 to 1<br>0: 50 Hz, 1: 60 Hz<br>Right side: 0 to 2<br>0: Judged frequency is used, 1: 50 Hz, 2: 60 Hz |
| | Default value | 0 |
| EXT-TBOX | | Set Wst Tonr Cntner preparation warn tmg |
| Lv.1 | Details | To set the number of images (calculation with A4 and 5% image ratio) until the Waste Toner Container preparation warning message is displayed.<br>As the value is incremented by 1, the number of images is increased by approx. 10,000.<br>+: Timing is delayed<br>-: Timing becomes earlier |
| | Use case | When adjusting the Waste Toner Container preparation warning timing according to the usage of the user |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | • Depending on the image ratio or use environment (temperature and humidity), the message may be displayed before reaching the specified number of sheets.<br>• Toner leak may occur when changing the value drastically. |
| | Display/adj/set range | -10 to 9<br>-10: -100,000 images, ..., -1: -10,000 images, 0: 0 sheet, 1: +10,000 images, ..., 9: +90,000 images (calculation with A4 and 5% image ratio) |
| | Default value | 0 |
| DFEJCLED | | ON/OFF of DADF delivery LED |
| Lv.1 | Details | To set whether to light up the delivery LED of DADF during a job. |
| | Use case | Upon user's request (The delivery LED is too bright.) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: ON, 1: OFF |
| | Default value | 0 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| RDEV-SP1 | | RCON device special settings 1 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| RDEV-SP2 | | RCON device special settings 2 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| RDEV-SP4 | | RCON device special settings 4 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| RDEV-SP5 | | RCON device special settings 5 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| RDEV-SP6 | | RCON device special settings 6 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |

| COPIER > OPTION > CUSTOM | | |
|---|---|---|
| RDEV-SP7 | | RCON device special settings 7 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| RDEV-SP8 | | RCON device special settings 8 |
| Lv.2 | Details | To execute the device special setting. |
| | Use case | For customization, etc. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Use this mode only when specific instructions are given. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |

T-8-62

## DSPLY-SW

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| UI-COPY | | Display/hide of copy screen |
| Lv.2 | Details | To set whether to display or hide the copy function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| UI-BOX | | Display/hide of Inbox screen |
| Lv.2 | Details | To set whether to display or hide the Inbox function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: No Inbox function (Storing is not available even with PDL to Inbox.)<br>1: Inbox function is active<br>2: Inbox function is active (with limitation; Storing is available with PDL to Inbox despite no display on the Control Panel/remote UI) |
| | Default value | 1 |
| | Related UI menu | Preferences> Display Settings> Store Location Display Settings> Mail Box<br>The setting value is changed to 2 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on.<br>As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed. |
| UI-SEND | | Display/hide of send screen |
| Lv.2 | Details | To set whether to display or hide the SEND function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| UI-FAX | | Display/hide of FAX screen |
| Lv.2 | Details | To set whether to display or hide the FAX function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| T-LW-LVL | | [Not used] |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| NWERR-SW | | OFF/ON of network-related error display |
| Lv.2 | Details | To set OFF/ON of network-related error message display.<br>When setting “0: OFF” while the machine is not connected to network, the error message “Check the network connection.” is not displayed. |
| | Use case | When using the machine as a copy machine |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | Printer model: 1, Copier model: 0 |
| ANIM-SW | | Screen switch set from MEAP to warning |
| Lv.2 | Details | To set to enable/disable switching from MEAP screen to the error/jam screen.<br>If disabling this mode, the screen will not be switched to the warning screen in the case of an error/jam/alarm, and a message is appeared on the MEAP screen indicating to contact the service person. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Enabled, 1: Disabled (No display of warning screen) |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> DSPLY-SW> MEAP-DSP |
| | Supplement/memo | If just disabling the switch with MEAP-DSP, the screen is switched to the standard screen in the case of an error/jam/alarm. If disabling the switch with ANIM-SW, the screen will not be switched to the standard screen and a warning is appeared on MEAP screen. |
| UI-PRINT | | Display/hide of print job screen |
| Lv.2 | Details | To set whether to display or hide the print job screen. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| IMGC-ADJ | | Dspl/hide of img adj item in user mode |
| Lv.1 | Details | To set whether to display or hide the item relating to image adjustment in user mode.<br>When selecting display setting, detailed image adjustment procedure will be displayed only for the duplicated paper specified with the following settings: Preferences> Paper Settings> Set Paper Type Management. |
| | Use case | As needed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related UI menu | Preferences> Paper Settings> Set Paper Type Management |
| UI-RSCAN | | Display/hide of remote scan screen |
| Lv.2 | Details | To set whether to display or hide the remote scan screen on the Control Panel. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| UI-EPRNT | | Display/hide of extended print screen |
| Lv.2 | Details | To set whether to display or hide the extended print screen (print screen for print server). |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| UI-WEB | | Display/hide of Web browser screen |
| Lv.2 | Details | To set whether to display or hide the Web browser screen. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| UI-HOLD | | Display/hide of hold job screen |
| Lv.2 | Details | To set whether to display the hold job screen on the Control Panel. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: Hide (when POD function is OFF and JAL is OFF)<br>1: Display (when POD function is ON and JAL is OFF)<br>2: Hide (when POD function is OFF and JAL is ON)<br>3: Hide (when POD function is ON and JAL is ON) |
| | Default value | 1 |
| | Supplement/memo | POD function: JDF + HOLD functions<br>JAL function: A function to save the print result as a thumbnail. |
| OPEMANT | | ON/OFF of operator maintenance mode |
| Lv.2 | Details | To set ON/OFF of operator maintenance mode.<br>When setting to ON, "Operator Maintenance Mode" is displayed on the Settings/Registration screen. |
| | Use case | When starting operator maintenance |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related UI menu | Settings/Registration > Operator Maintenance Mode |
| OPLOG-SW | | Dspl/hide of error log in operator mntc |
| Lv.2 | Details | To set whether to display or hide error/jam/alarm-2 log in operator maintenance mode. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| OP-ALMT | | Set warning mssg timing in operator mntc |
| Lv.2 | Details | To set the timing to display warning message of parts replacement/cleaning counter in operator maintenance mode.<br>With this setting, warning message is displayed once before reaching the specified life of parts or number of sheets for cleaning. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: At 100%, 1: At 90% and 100% |
| | Default value | 0 |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| RMT-CNSL | | ON/OFF of MEAP console screen |
| Lv.1 | Details | Selecting "1: ON" enables to obtain log for Function Composer on console screen. |
| | Use case | When obtaining log for Function Composer |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| UI-SBOX | | ON/OFF of Advanced Box screen display |
| Lv.2 | Details | To set ON/OFF of the Advanced Box screen on the Control Panel. |
| | Use case | When not displaying the Advanced Box screen on the Control Panel |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | JP:1, USA:1, EUR:0, AU:1, CN:1, KR:1, TW:1, ASIA:1 |
| | Supplement/memo | Preferences> Display Settings> Store Location Display Settings> Advanced Box / Network<br>The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on.<br>As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed. |
| UI-MEM | | ON/OFF of memory media screen display |
| Lv.2 | Details | To set ON/OFF of the memory media screen display on the Control Panel. |
| | Use case | When not displaying the memory media screen on the Control Panel |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Supplement/memo | Preferences> Display Settings> Store Location Display Settings> Memory Media<br>The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on.<br>As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed. |
| UI-NAVI | | Display/hide of useful feat intro |
| Lv.2 | Details | To set whether to display or hide "Introduction to Useful Features" in the main menu. |
| | Use case | Upon user's request |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| UI-MOBP | | [Not used] |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| UI-CUSTM | | ON/OFF of custom menu screen display |
| Lv.2 | Details | To set ON/OFF of the custom menu screen display on the Control Panel. |
| | Use case | When not displaying the custom menu screen on the Control Panel |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| SCT-BTN | | Set No. of shortcut buttons upper limit |
| Lv.1 | Details | To set an upper limit on the number of shortcut buttons that appear at the top of the Control Panel screen. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When 1 is set, the number of shortcut buttons that can be set increases from 2 to 4. However, the buttons become smalled in width, and the number of characters that can be displayed decreases. Depending on the MEAP application allocated to the shortcut button, the character strings displayed may not be fully displayed. Since the character strings displayed on the shortcut button are specified by the MEAP application, they cannot be changed. Therefore, if the number of characters are too many, foregoing symptom occurs. To prevent the symptom, a measure such as decreasing the number of characters on the MEAP application side needs to be taken. |
| | Display/adj/set range | 0 to 1<br>0: 2 buttons, 1: 4 buttons |
| | Default value | 0 |
| USER-DSP | | Display/hide of login user name |
| Lv.1 | Details | To set whether to display the name of the user who logs in to the machine on the screen of the Control Panel (upper left area). |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Hide, 1: Display the user name, 2: Display the display name |
| | Default value | 0 |

| COPIER > OPTION > DSPLY-SW | | |
|---|---|---|
| SDTM-DSP | | Display/hide of auto shutdown time |
| Lv.1 | Details | To set whether to display "Auto Shutdown Time" in user mode. |
| | Use case | Upon user's request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | When "Hide" is set, auto shutdown time is reset. (Auto shutdown is not performed.) |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Related UI menu | Settings/Registration> Preferences> Time/Energy Settings> Auto Shutdown Time |
| WT-WARN | | Dspl/hide of Wst Tonr Cntner prep mssg |
| Lv.1 | Details | To set whether to display the preparation warning message of the Waste Toner Container on the status area of LUI. |
| | Use case | When there is no need to notify the preparation timing of the Waste Toner Container to the user |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| LCRY-DSP | | Dspl/hide high vol stack mode: user mode |
| Lv.1 | Details | To set whether to display or hide the large volume stack mode in user mode.<br>When 1 is set, the large volume stack mode is displayed in user mode (Settings/Registration> Function Settings> Common> Paper Output Settings). |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| | Related UI menu | Settings/Registration> Function Settings> Common> Paper Output Settings> Large Volume Stack Mode |

T-8-63

## ENV-SET

| COPIER > OPTION > ENV-SET | | |
|---|---|---|
| ENVP-INT | | Temp, humid/Fix Roll temp log get cycle |
| Lv.1 | Details | To set the cycle to obtain log of the temperature and humidity inside the machine or the surface temperature of the Fixing Roller.<br>As the value is incremented by 1, the cycle is increased by 1 minute.<br>Obtained log can be displayed by selecting the following: COPIER > DISPLAY > ENVRNT |
| | Use case | At trouble analysis |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 480 |
| | Default value | 60 |
| | Related service mode | COPIER> DISPLAY> ENVRNT |
| DRY-CISU | | ON/OFF of condensation prevention mode |
| Lv.1 | Details | To set ON/OFF of condensation mode.<br>When droplets are appeared on the Scanner Unit due to condensation and image failure or E225 occurs, set “1: ON”.<br>By selecting 1, the Scanner Unit (paper front) stops the fan for 15 seconds and the Scanner Unit (paper back) lights LED for 30 seconds from the next startup. |
| | Use case | When droplets are appeared on the Scanner Unit due to condensation and image failure or E225 occurs |
| | Display/adj/set range | 0 to 1<br>0: OFF (Normal mode), 1: ON (Anti-condensation mode) |

T-8-64

## FEED-SW

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| TRY-CHG | | Set of Delivery Tray switch at tray full |
| Lv.2 | Details | To set the Delivery Tray switching control when the Delivery Tray of the Finisher reaches to the full level.<br>If Tray A/B is selected as a delivery tray, tray is switched to the Tray A when the Tray B reaches to the full level. At this time, after removing papers on the Tray B, paper is delivered to the Priority Tray when 0 is set. When 1 is set, paper is output followed by the previous job. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Deliver to the Priority Tray, 1: Deliver followed by the previous job |
| | Default value | 0 |
| REG-SPD | | Speed adj of Rgst Roller: plain paper |
| Lv.2 | Details | To adjust the Registration Roller speed when 1/1 speed is set for plain paper, etc.<br>Increase the value if the image at the leading edge of paper shrinks in the feeding direction, and decrease the value if it expands.<br>Decrease the value if wavy-line image occurs.<br>If these symptoms are not alleviated after adjustment is made, replace the Registration Roller. |
| | Display/adj/set range | -50 to 50 |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> REG-SPD2, REG-SPD3 |
| INSRT-SW | | [Not used] |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK2-TURN | | ON/OFF of L-Deck Pckup Rol little rotn |
| Lv.1 | Details | To set whether to rotate the Left Deck Pickup Roller a little after completion of job or at the time of warm-up rotation.<br>If the Pickup Deck has not been used for a long time, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. When 1 is set, the Pickup Roller rotates 75mm after completion of job so that wear of the Separation Roller can be reduced.<br>As the usage is extended or at the operation performed first time for the day in a low temperature environment, the Separation Roller is not rotated in response to rotation of the Pickup Roller. As a result of that, jam may occur. When 2 is set, the Pickup Roller rotates 75mm at warm-up rotation. |
| | Use case | When pickup jam occurs with the following conditions<br>• Pickup Deck has not been used for a long time<br>• The usage is extended<br>• At the operation performed first time for the day in a low temperature environment |
| | Caution | When ON is set, papers sticking out of the Receptacle may get stuck at the time of opening and closing the deck. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: ON after a job, 2: ON at warm-up rotation, 3: ON after a job and at warm-up rotation |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> DK1-TURN, DK3-TURN, DK4-TURN, DK5-TURN |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK3-TURN | | ON/OFF of Casstt3 Pckup Rol little rotn |
| Lv.1 | Details | To set whether to rotate the Cassette 3 Pickup Roller a little after completion of job or at the time of warm-up rotation.<br>If the Pickup Cassette has not been used for a long time, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. When 1 is set, the Pickup Roller rotates 75mm after completion of job so that wear of the Separation Roller can be reduced.<br>As the usage is extended or at the operation performed first time for the day in a low temperature environment, the Separation Roller is not rotated in response to rotation of the Pickup Roller. As a result of that, jam may occur. When 2 is set, the Pickup Roller rotates 75mm at warm-up rotation. |
| | Use case | When pickup jam occurs with the following conditions<br>• Pickup Cassette has not been used for a long time<br>• The usage is extended<br>• At the operation performed first time for the day in a low temperature environment |
| | Caution | When ON is set, papers sticking out of the Receptacle may get stuck at the time of opening and closing the Cassette. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: ON after a job, 2: ON at warm-up rotation, 3: ON after a job and at warm-up rotation |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK4-TURN, DK5-TURN |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK4-TURN | | ON/OFF of Casstt4 Pckup Rol little rotn |
| Lv.1 | Details | To set whether to rotate the Cassette 4 Pickup Roller a little after completion of job or at the time of warm-up rotation.<br>If the Pickup Cassette has not been used for a long time, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. When 1 is set, the Pickup Roller rotates 75mm after completion of job so that wear of the Separation Roller can be reduced.<br>As the usage is extended or at the operation performed first time for the day in a low temperature environment, the Separation Roller is not rotated in response to rotation of the Pickup Roller. As a result of that, jam may occur. When 2 is set, the Pickup Roller rotates 75mm at warm-up rotation. |
| | Use case | When pickup jam occurs with the following conditions<br>• Pickup Cassette has not been used for a long time<br>• The usage is extended<br>• At the operation performed first time for the day in a low temperature environment |
| | Caution | When ON is set, papers sticking out of the Receptacle may get stuck at the time of opening and closing the Cassette. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: ON after a job, 2: ON at warm-up rotation, 3: ON after a job and at warm-up rotation |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK5-TURN |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK1-TURN | | ON/OFF of R-Deck Pckup Rol little rotn |
| Lv.1 | Details | To set whether to rotate the Right Deck Pickup Roller a little after completion of job or at the time of warm-up rotation.<br>If the Pickup Deck has not been used for a long time, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. When 1 is set, the Pickup Roller rotates 75mm after completion of job so that wear of the Separation Roller can be reduced.<br>As the usage is extended or at the operation performed first time for the day in a low temperature environment, the Separation Roller is not rotated in response to rotation of the Pickup Roller. As a result of that, jam may occur. When 2 is set, the Pickup Roller rotates 75mm at warm-up rotation. |
| | Use case | When pickup jam occurs with the following conditions<br>• Pickup Deck has not been used for a long time<br>• The usage is extended<br>• At the operation performed first time for the day in a low temperature environment |
| | Caution | When ON is set, papers sticking out of the Receptacle may get stuck at the time of opening and closing the deck. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: ON after a job, 2: ON at warm-up rotation, 3: ON after a job and at warm-up rotation |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> DK2-TURN, DK3-TURN, DK4-TURN, DK5-TURN |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK5-TURN | | ON/OFF of OP-Deck Pckup Rol little rotn |
| Lv.1 | Details | To set whether to rotate the Option Deck Pickup Roller a little after completion of job or at the time of warm-up rotation.<br>If the Pickup Deck has not been used for a long time, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. When 1 is set, the Pickup Roller rotates 75mm after completion of job so that wear of the Separation Roller can be reduced.<br>As the usage is extended or at the operation performed first time for the day in a low temperature environment, the Separation Roller is not rotated in response to rotation of the Pickup Roller. As a result of that, jam may occur. When 2 is set, the Pickup Roller rotates 75mm at warm-up rotation. |
| | Use case | When pickup jam occurs with the following conditions<br>• Pickup Deck has not been used for a long time<br>• The usage is extended<br>• At the operation performed first time for the day in a low temperature environment |
| | Caution | When ON is set, papers sticking out of the Receptacle may get stuck at the time of opening and closing the deck. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: ON after a job, 2: ON at warm-up rotation, 3: ON after a job and at warm-up rotation |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK4-TURN |
| YP-ROT | | ON/OFF of image rotation in PDL print |
| Lv.2 | Details | In PDL print, the image is not rotated at printing even through the image and the paper orientation does not match in case that the user definition size paper is used. (In case of standard size, the image is rotated in line with the paper feed direction.)<br>When “1: ON” is set, the image is rotated in line with the paper feed direction and printed. |
| | Use case | When the image failure of different image direction occurs in case that the user definition size paper is used in PDL print |
| | Adj/set/operate method | Enter the setting value and press the OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |

| COPIER > OPTION > FEED-SW | | |
|---|---|---|
| DK1-AIR | | ON/OFF of PDF Deck Lite air assist |
| Lv.1 | Details | To set ON/OFF of the POD Deck Lite air assist.<br>In the initial settings, the air assist is OFF for plain paper, and ON for coated paper and heavy paper.<br>When a jam or double feed error frequently occurs with plain paper, etc., set the value to 1. When the transfer failure occurs with coated paper, heavy paper, etc., set the value to 2. |
| | Use case | • When a jam or double feed error frequently occurs with plain paper<br>• When transfer failure occurs with coated paper and heavy paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 2<br>0: Initial setting, 1: ON, 2: OFF |
| | Default value | 0 |
| TFL-RTC | | Set delvry dest at rcvry after tray full |
| Lv.1 | Details | To select the delivery destination for a job with multiple pages after recovering the Delivery Tray that reaches the full level.<br>When 0 (default) is set, a job is output from the delivery destination again from which the last job was delivered.<br>When 1 is set, a job is output from the delivery destination which priority is set as high at “Output Tray Settings” in user mode. |
| | Use case | When changing the delivery tray |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Output from the tray from which the last job was output.<br>1: Output from the delivery destination which priority is high among the delivery trays. |
| | Default value | 0 |
| | Related UI menu | Function Settings> Common> Paper Output Settings> Output Tray Settings |

T-8-65

## FNC-SW

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| PO-CNT | | ON/OFF of potential control function |
| Lv.1 | Details | To set ON/OFF of potential control function. |
| | Use case | When replacing the Potential Sensor |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to set the value back to 1 (ON) after servicing. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| PO-CNTMD | | Set potential control execution timing |
| Lv.2 | Details | To set the combination of timing to execute the potential control. |
| | Use case | When productivity decreases at execution of potential control |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 2<br>0:<br>• At warm-up rotation performed first time for the day in an HH environment<br>• At last rotation in the case that a job right after startup first time for the day takes 10 minutes or longer<br>• At last rotation after 1500 sheets since the last potential control<br>• At last rotation of the first job after 90 minutes since the last potential control<br>• At warm-up rotation of the fist job after 10 minutes since the startup first time for the day (30 seconds)<br><br>1:<br>• At warm-up rotation performed first time for the day in an HH environment<br>• At last rotation in the case that a job right after startup first time for the day takes 10 minutes or longer<br>• At last rotation after 1500 sheets since the last potential control<br>• At warm-up rotation of the fist job after 10 minutes since the startup first time for the day (30 seconds)<br><br>2:<br>• At warm-up rotation performed first time for the day in an HH environment<br>• At last rotation after 1500 sheets since the last potential control |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| MODEL-SZ | | Fixed magnifictn & DADF orgnl dtct size |
| Lv.1 | Details | To set the fixed magnification ratio display and the original detection size with DADF.<br>It is set automatically at the time of installation of the Reader according to the location. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: AB configuration (6R5E) for Japan, 1: Inch configuration (5R4E) for North/Middle/South America, 2: A configuration (3R3E) for Europe, 3: AB/Inch configuration (6R5E) for Asia, Oceania, South America |
| | Default value | It differs according to the location. |
| SCANSLCT | | ON/OFF of scan area calculate function |
| Lv.2 | Details | To set ON/OFF of the function to calculate scanning area from the specified paper size.<br>When the paper size is larger than the original size, selecting ON reduces productivity because the scanning area gets larger. |
| | Use case | When matching the scanning area with the paper size |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF (calculated from the detected original size)<br>1: ON (calculated from the specified paper size) |
| | Default value | 0 |
| DH-SW | | ON/OFF of D-half control for pln group |
| Lv.2 | Details | To set ON/OFF of D-half control for plain paper group.<br>When 1 to 3 is set, the control is executed at last rotation/first startup for the day.<br>When 0 is set, it is controlled only with EPC using environment Vcont and Vback. (Conventional B&W machine control) |
| | Use case | • When D-half-related failure occurs/when identifying the cause of D-half-related failure<br>• Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to set the value back to 1 (ON) after servicing. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: At last rotation, 2: At first startup for the day, 3: At last rotation + At first startup for the day |
| | Default value | 1 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| SENS-CNF | | Setting of original detection size |
| Lv.2 | Details | To set original detection size according to AB configuration/Inch configuration/A configuration.<br>Select 1 (Inch configuration) for Inch configuration/A configuration machine. |
| | Use case | When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: AB configuration, 1: Inch configuration |
| | Default value | 0 |
| CONFIG | | Set country/area/lang/location/ppr size |
| Lv.1 | Details | To set the country/region, language, location, paper size configuration for multiple system software in HDD. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Select the setting item.<br>2) Switch with +/- key, and then press OK key.<br>3) Turn OFF/ON the main power switch. |
| | Display/adj/set range | XX YY.ZZ.AA<br>XX: Country/region<br>JP: Japan, US: United States, GB: England, FR: France, DE: Germany, IT: Italia, AU: Australia, SG: Singapore, NL: Netherlands, KR: Korea, CN: China, TW: Taiwan, ES: Spain, SE: Sweden, PT: Portugal, NO: Norway, DK: Denmark, FI: Finland, PL: Poland, HU: Hungary, CZ: Czech, SI: Slovenia, GR: Greek, EE: Estonia, RU: Russia, AD: Andorra, AL: Albania, AM: Armenia, AR: Argentine, AT: Austria, BA: Bosnia Herzegovina, BE: Belgium, BG: Bulgaria, BO: Bolivia, BR: Brazil, CA: Canada, CH: Switzerland, CL: Chile, CY: Cyprus, HR: Croatia, ID: Indonesia, IE: Ireland, IL: Israel, IN: India, IS: Iseland, LU: Luxembourg, LV: Latvia, MX: Mexico, MY: Malaysia, NZ: New Zealand, PE: Peru, PH: Philippine, PY: Paraguay, RO: Romania, SK: Slovakia, TH: Thailand, TR: Turkey, UA: Ukraine, UY: Uruguay, VE: Venezuela, VN: Vietnam<br>YY: Language (Fixed; e.g. ja: Japanese)<br>ZZ: Location (Fixed; e.g. 00: CANON)<br>AA: Paper size configuration (00: AB configuration, 01: Inch configuration, 02: A configuration, 03: Inch/AB configuration) |
| | Related service mode | COPIER> OPTION> FNC-SW> MODEL-SZ |
| W/SCNR | | Setting of Reader Unit installation |
| Lv.1 | Details | To set installation of the Reader Unit.<br>1 (Installed) is automatically selected once the Reader Unit is detected at the start of the machine. |
| | Use case | When installing/removing the Reader Unit |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not installed, 1: Installed |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| ORG-LGL | | Special paper size set in DADF mode: LGL |
| Lv.2 | Details | To set the size of special paper (LGL configuration) that cannot be recognized in DADF stream reading mode. |
| | Use case | • Upon user's request<br>• When picking up special paper size original from DADF |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 10<br>0: LEGAL-R, 1: FOOLSCAP-R, 2: OFICIO-R, 3: FOLIO-R, 4: Australian FOOLSCAP-R, 5: Ecuador OFICIO-R, 6: Bolivia OFICIO-R, 7: Argentine OFICIO-R, 8: Argentine LEGAL-R, 9: Government LEGAL-R, 10: Mexico OFICIO-R |
| | Default value | 0 |
| ORG-LTR | | Special paper size set in DADF mode: LTR |
| Lv.2 | Details | To set the size of special paper (LTR configuration) that cannot be recognized in DADF stream reading mode. |
| | Use case | • Upon user's request<br>• When picking up special paper size original from DADF |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: LETTER, 1: EXECUTIVE, 2: Argentine LETTER, 3: Government LETTER |
| | Default value | 0 |
| ORG-B5 | | Special paper size set in DADF mode: B5 |
| Lv.2 | Details | To set the size of special paper (B5) that cannot be recognized in DADF stream reading mode. |
| | Use case | • Upon user's request<br>• When picking up special paper size original from DADF |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: B5, 1: Korean government office paper |
| | Default value | 0 |
| INTROT-1 | | Set last rotation auto adj exe interval |
| Lv.1 | Details | To set the paper interval to execute D-max/D-half control at last rotation.<br>As the value is incremented by 1, the interval is increased by 500 sheets. |
| | Use case | When matching the use environment of the user |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Increasing the number of sheets (widening the interval) causes higher frequency of image failure. |
| | Display/adj/set range | 1 to 255 |
| | Default value | 12 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| DMAX-SW | | ON/OFF of D-max control for pln group |
| Lv.1 | Details | To set ON/OFF of D-max control for plain paper group.<br>When 1 to 4 is set, the control is executed at last rotation/first startup for the day.<br>When 3 or 4 is set, it is also executed at last rotation for every 200 sheets up to 1200 sheets after replacement of the Developing Assembly. When the number of sheets exceeds 1200, it is executed for every 6000 sheets as usual.<br>When 0 is set, it is controlled only with EPC using environment Vcont and Vback. (Conventional B&W machine control) |
| | Use case | When D-max-related failure occurs/when identifying the cause of D-max-related failure |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 4<br>0: OFF, 1: At last rotation, 2: At first startup for the day, 3: At last rotation + At first startup for the day + At last rotation for every 200 sheets up to 1200 sheets after replacement of the Developing Assembly, 4: At last rotation + At last rotation for every 200 sheets up to 1200 sheets after replacement of the Developing Assembly |
| | Default value | 1 |
| MODELSZ2 | | Ppr size dtct global support in bookmode |
| Lv.2 | Details | To set ON/OFF for global support of document size detection in copyboard reading mode. |
| | Use case | Upon user's request (mixed media original with AB/Inch configuration) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use this at the normal service.<br>• The Document Size Sensor (Photo Sensor) is additionally required to correctly detect the document size when the original consists of mixed media (AB/Inch configuration). |
| | Display/adj/set range | 0 to 1<br>0: Detected with detection size according to location, 1: Detected with AB/Inch mixed media. |
| | Default value | 0 |
| SVMD-ENT | | Setting of entry method to service mode |
| Lv.2 | Details | To set the way to get in service mode to prevent information leak. |
| | Use case | As needed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: [Settings/Registration] - Pressing [2] and [8] at the same time - [Settings/Registration]<br>1: [Settings/Registration] - Pressing [4] and [9] at the same time - [Settings/Registration] |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| BASE-SW | | Model switch set from MEAP-Full to Base |
| Lv.1 | Details | To switch from the MEAP-Full model to the Base model.<br>Switch this mode in the case of restricting the operation of MEAP application for trouble analysis. |
| | Use case | When trouble that caused by MEAP application occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Switching from the Base model to the MEAP-Full model is not available. |
| | Display/adj/set range | 0 to 1<br>0: OFF (Base model), 1: ON (Full model) |
| | Default value | Depending on the setting of option bit (MeapModelBIT). |
| KSIZE-SW | | Set of Chinese paper (K-size) support |
| Lv.2 | Details | To set to detect/display the Chinese paper (K size paper: 8K, 16K). |
| | Use case | When using K size paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Go through the following: COPIER > OPTION > FNC-SW > MODEL-SZ; and if MODEL-SZ is "0: AB configuration", this mode is enabled. |
| | Display/adj/set range | 0 to 1<br>0: Not supported, 1: Supported |
| | Default value | JP:0, USA:0, EUR:0, AU:0, CN:1, KR:0, TW:0, ASIA:0 |
| | Related service mode | COPIER> OPTION> FNC-SW> MODEL-SZ |
| | Supplement/memo | 8K paper: 270 x 390 mm, 16K paper: 270 x 195 mm |
| PDF-RDCT | | PDF reduction set at forwarding |
| Lv.2 | Details | To set whether to reduce the image for transmission when converting the image received by IFAX into PDF for e-mail/file transmission. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Following the current setting, 1: Image reduction |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| REBOOTSW | | Restart setting at E240 error occurrence |
| Lv.2 | Details | To set whether to reboot in the case of E240 error.<br>In the case of E240 error, the machine is automatically rebooted due to the possibility of continuous operation of the drive system while the spooled print job is cleared.<br>Print job can be obtained if selecting the setting not to reboot. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use this at the normal service.<br>• Be sure to get approval from the user by telling the possibility of continuous operation of the drive system in the case of E240 error. |
| | Display/adj/set range | 0 to 1<br>0: Rebooted, 1: Not rebooted |
| | Default value | 0 |
| | Supplement/memo | E240 error: Communication error between the Main Controller and the DC Controller. |
| SJB-UNW | | Reserve upper limit of secured print job |
| Lv.2 | Details | To set the upper limit for the number of reserved jobs in secured print job. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: 50 jobs, 1: 90 jobs, 2: No limit |
| | Default value | 0 |
| CARD-RNG | | Card number setting (department number) |
| Lv.2 | Details | To set the number of cards (departments) that can be used with the Card Reader. |
| | Use case | When setting the number of cards (departments) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 1000 |
| | Default value | 1000 |
| SJOB-CL | | Set of scan job canceling by logout |
| Lv.1 | Details | To set whether to cancel the scan job in operation by logout of the user. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | The job with scanning completed cannot be canceled. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| | Supplement/memo | Scan job: A job after the scanning operation is completed. |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| USB-RCNT | | Auto connect set at USB device disconnct |
| Lv.2 | Details | To set to enable/disable automatic connection when the USB device is disconnected.<br>With the setting to disable automatic connection, USB device cannot be used if disconnecting and then connecting the USB device. To enable connection again, the power needs to be turned OFF/ON.<br>With the setting to enable automatic connection, reconnection is made after disconnecting, and then connecting the USB device. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | With the setting to enable automatic connection, disconnecting of 1 area makes automatic connection of all USB devices if there is USB hub. |
| | Display/adj/set range | 0 to 1<br>0: No automatic connection, 1: Automatic connection |
| | Default value | 0 |
| UNLMTBND | | Over 400 binders print job support set |
| Lv.1 | Details | To set whether to support print job that exceeds 400 binders.<br>With the setting to support, the machine makes prints by sharing binders according to job attribution.<br>Select "1: Not supported" if the user does not print job* with large quantity of binders. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Automatic setting (When the print server is not connected: not supported; When the print server is connected: supported)<br>1: Not supported |
| | Default value | 0 |
| | Supplement/memo | * : A job that requires finishing (such as stapling) in one job. Does not apply in the case of executing finishing with multiple sets of output. |
| MIBCOUNT | | Scope range set of Charge Counter MIB |
| Lv.2 | Details | To set the range of counter information that can be obtained as MIB (Management Information Base). |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: All charge counters are obtained, 1: Only displayed counter* is obtained, 2: All charge counters are not obtained<br>* : Counter specified by the following: COPIER > OPTION > USER > COUNTER 1 to 6 |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> USER> COUNTER1-6 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| MEAP-PRI | | Setting of MEAP task priority |
| Lv.2 | Details | Selecting “1: ON” increases MEAP task priority. |
| | Use case | When improving processing performance of MEAP |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| CNTR-SW | | Init of parts counter replacement timing |
| Lv.1 | Details | To return the estimated life of parts counter to the initial value. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter 0, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0: Returned to the initial value |
| | Default value | 0 |
| ILSZ-JAM | | ON/OFF of size difference jam detection |
| Lv.2 | Details | To set ON/OFF of size difference jam detection. |
| | Display/adj/set range | 0 to 1<br>0: ON, 1: OFF |
| | Default value | 0 |
| W/RAID | | Setting of HDD Mirroring Kit installation |
| Lv.1 | Details | To set installation condition of HDD Mirroring Kit.<br>Select “1: Installed” when installing the HDD Mirroring Kit. Select “0: Not installed” when removing the HDD Mirroring Kit. |
| | Use case | When installing/removing HDD Mirroring Kit |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not installed, 1: Installed |
| | Default value | 0 |
| PSWD-SW | | Password type set to enter service mode |
| Lv.1 | Details | To set the type of password that is required to enter when getting into service mode.<br>2 types are available: one for “service technician” and the other for “system administrator + service technician”.<br>When selecting the type for “system administrator + service technician”, enter the password for service technician after the password entry by the user’s system administrator. |
| | Use case | Upon request from the user who concerns security |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: No password, 1: Service technician, 2: System administrator + service technician |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| SM-PSWD | | Password setting for service technician |
| Lv.2 | Details | To set password for service technician that is used when getting into service mode. |
| | Use case | When password is required to get into service mode |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to select 1 or 2 with PSWD-SW in advance. |
| | Display/adj/set range | 1 to 99999999 |
| | Default value | 11111111 |
| | Related service mode | COPIER> OPTION> FNC-SW> PSWD-SW |
| CE/SCNR | | Dspl/set scan connector disconnect times |
| Lv.1 | Details | To display/change the number of Scanner connector disconnection detection.<br>To count up every time when connector disconnection is detected.<br>When 0 is set, the number of detection can be reset. |
| | Use case | When checking/clearing the number of connector disconnection |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 5 |
| | Default value | 0 |
| | Supplement/memo | When the connector is disconnected, “Check the connector” is displayed on the Control Panel.<br>After detecting certain times, an error code (E732-000) is displayed. |
| RPT2SIDE | | Set of report 1-sided/2-sided output |
| Lv.1 | Details | To set whether to use 1-sided or 2-sided for report output of service mode. |
| | Use case | When making 2-sided report output to reduce the number of output pages |
| | Display/adj/set range | 0 to 1<br>0: 1-sided, 1: 2-sided |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| BRWS-FAV | | Set of service browser favorite register |
| Lv.2 | Details | To set whether to allow registration of favorites in the browser for service.<br>When 1 is set, favorites in the browser for service can be edited, and any URLs can be accessed. |
| | Use case | When service engineers edit favorites in the browser for service |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| STND-PNL | | Set Upright Control Panel installation |
| Lv.2 | Details | To set whether the Upright Control Panel is installed.<br>When the Upright Control Panel is installed, set 1. |
| | Use case | At installation of the Upright Control Panel |
| | Display/adj/set range | 0 to 1<br>0: Not installed, 1: Installed |
| | Default value | iR-ADV8285 JP/USA: 0, Others: 1 |
| INVALPDL | | Disable of PDL license |
| Lv.1 | Details | To disable the registered PDL license.<br>When “1: Disabled” is set, PDL is disabled even if a PDL license is registered. This is set to the machines installed at convenience stores, which do not allow PDL to be used. |
| | Use case | When prohibiting the use of PDL |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Registered PDL license is enabled, 1: Disabled |
| | Default value | 0 |
| CDS-FIRM | | Set to allow firmware update by admin |
| Lv.1 | Details | To set whether to permit update of the firmware by user (administrator).<br>When “1: Enabled” is set, Updater can be activated from the user mode. |
| | Use case | When allowing the administrator to update the firmware |
| | Caution | Do not use it for purposes other than collecting log files. In Japan, the firmware cannot be updated by user. Be sure to return the value to 0 after use. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Supplement/memo | CDS: Content Delivery System |
| CDS-MEAP | | Set to allow MEAP installation by admin |
| Lv.1 | Details | To set whether to permit the user (administrator) to install MEAP applications and enable iR options from CDS.<br>When “1: Enabled” is set, Updater can be activated from the user mode. |
| | Use case | When allowing the administrator to install MEAP applications and enable iR options from CDS |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 1 |
| | Supplement/memo | CDS: Content Delivery System |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| CDS-UGW | | Set to allow firmware update from UGW |
| Lv.1 | Details | To set whether to permit update of the firmware from the UGW server.<br>When “1: Enabled” is set, Updater accepts the operation from the UGW server in cooperation with CDS. |
| | Use case | When allowing update of the firmware from the UGW server |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| | Supplement/memo | CDS: Content Delivery System |
| LOCLFIRM | | Set to allow firmware update by file |
| Lv.1 | Details | To set whether to permit the user (administrator) to update the firmware from the remote UI using a local file.<br>This update is executed as a measure for vulnerability in emergency situations. |
| | Use case | When allowing the administrator to update the firmware using a file |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 1 |
| T-RUN-LV | | No.of keep print at Toner Cntner rplce |
| Lv.1 | Details | To set the number of prints to be kept from the indication of Toner Container replacement until job is interrupted.<br>The time to keep printing varies depending on image ratio and productivity. |
| | Use case | When preferring to shorten the time from replacement of the Toner Container to the recovery |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Approx. 900 sheets, 1: Approx. 140 sheets (A4, 5% image ratio) |
| | Default value | 0 |
| BXNUPLOG | | ON/OFF of Nup log at Inbox print |
| Lv.2 | Details | To set whether to keep Nup log at Inbox print. |
| | Use case | When keeping Nup log at Inbox print |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | At normal service: 0, At customization: 1 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| SDLMTWRN | | Cpcty warn dspl ON/OFF: E-mail/I-Fax TX |
| Lv.1 | Details | To set whether to display the warning message when sending data that exceeds the upper limit value for the transmission data size via E-mail/I-Fax. |
| | Use case | For customization |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related UI menu | Function Settings> Send> E-Mail/I-Fax Settings> Maximum Data Size for Sending |
| JLK-PWSC | | ON/OFF of PCAM password auth doc scan |
| Lv.2 | Details | To set whether to scan the PCAM password authentication document with the MEAP application. |
| | Use case | When scanning the PCAM password authentication document |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| FAX-INT | | Set FAX RX print interruption oprtn mode |
| Lv.2 | Details | To set the mode performing interruption operation of FAX reception print automatically. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Interruption operation mode |
| | Default value | 0 |
| CDS-LVUP | | Set to allow CDS periodical update |
| Lv.1 | Details | To set whether to allow the user (administrator) to use the periodical update function linked with CDS.<br>When 1 is set, the periodical update function can be used from the user mode. |
| | Use case | When allowing the user to use the periodical update function |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not set 1 in Japan. The firmware cannot be updated by user. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Supplement/memo | CDS: Content Delivery System |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| AMSOFFSW | | OFF of AMS mode |
| Lv.1 | Details | Normally, the machine enters in AMS (ACQ) mode automatically when the following conditions are satisfied.<br>• AMS license which is an iR option is installed.<br>• The AMS-supported login application is activated.<br>When turning OFF the AMS mode, set 0. |
| | Use case | When turning OFF the AMS mode |
| | Adj/set/operate method | 1) Enable the AMS mode.<br>• Enter the iR option license for AMS.<br>• Make settings to activate SSOH.<br>• Turn OFF/ON the main power switch twice.<br>• Press Counter button, and display the Device Configuration screen.<br>• Check that "ACCESS MANAGEMENT SYSTEM" is displayed.<br>2) Enter the setting value, and then press OK key.<br>3) Turn OFF/ON the main power switch.<br>4) Check that AMS mode is disabled.<br>• Press Counter button, and display the Device Configuration screen.<br>• Check that "ACCESS MANAGEMENT SYSTEM" is not displayed. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | JP:0, USA:1, EUR:1, AU:1, CN:1, KR:1, TW:1, ASIA:1 |
| | Supplement/memo | AMS: ACCESS MANAGEMENT SYSTEM |
| UA-OFFSW | | ON/OFF of unified auth function |
| Lv.1 | Details | To set ON/OFF of the Unified Authentication function.<br>Set 0 when not preferring to use the Unified Authentication function because of security concern. |
| | Use case | Upon user's request (not to use the Unified Authentication function) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: ON, 1: OFF |
| | Default value | 0 |
| | Supplement/memo | Unified Authentication: A function with which it is considered that login authentication under it is performed by logging in it using SSO-H. |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| MIB-NVTA | | RFC-compatible character stringMIB write |
| Lv.1 | Details | As default, MIB object which NVT-ASCII can be written exists in order to link with LUI entry value. This violates RFC order, so a problem like garbled 2-byte characters may occur in the SNMP monitoring system, such as the 3rd vendor's MPS.<br>Whether non-RFC-compatible character strings are written in MIB can be set using this mode.<br>When 1 is set, only the character strings which are strictly compatible with RFC are written. (Writing operation is executed from the SNMP manager.) LUI is not linked. |
| | Use case | Upon user's request (operation with RFC-compatible system) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: Compatible in a conventional manner, 1: RFC-compatible, 2 to 3: Not used |
| | Default value | 0 |
| | Supplement/memo | RFC: Document of internet-related technical standards<br>NVT-ASCII: Network Virtual Terminal-ASCII |
| MIB-EXT | | ON/OFF of link with Ex-Cont on network |
| Lv.1 | Details | To set whether to link with External Controller on network (Hewlett-Packard Co.). |
| | Use case | When linking with External Controller of Hewlett-Packard Co. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: OFF, 1: ON, 2: Not used |
| | Default value | 0 |
| SVC-RUI | | Enabling of RUI function for servicing |
| Lv.1 | Details | To set whether to enable the RUI function for servicing (not provided to end users).<br>When 0 is set, the RUI function is disabled.<br>When setting the value other than 0, RUI function is enabled. The value entered becomes password to use the RUI function. |
| | Use case | When preferring to use the import function of background image file of main menu |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| LCDSFLG | | Enabling of local CDS server |
| Lv.1 | Details | To set whether to use the local CDS server.<br>When CDSFIRM is 1, this setting is enabled. |
| | Use case | When using the local CDS server |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | When CDSFIRM is 1, this setting is enabled. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > FNC-SW > CDS-FIRM |
| | Related UI menu | Management Settings> License/Other> Register/Update Software> Software Management Setting> Setting |
| | Supplement/memo | When local CDS is used, iW EMC/MC device firmware update plug-in is required. |
| STNDBY-A | | Setting of operation at sleep |
| Lv.1 | Details | To set the sleep operation when pressing the Control Panel Energy Saver Key.<br>Normally, the entire machine shifts to sleep mode.<br>When 1 is set, only the LCD backlight is turned off. |
| | Use case | Upon user's request (FCOT) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | By setting 1 when the machine is not frequently used, the life may become shorter than the estimated life. |
| | Display/adj/set range | 0 to 1<br>0: The entire machine is in sleep mode, 1: Only the LDC backligh is turned off |
| | Default value | 0 |
| | Supplement/memo | FCOT: First Copy Output Time |
| BXSHIFT | | Setting of binding at 0mm binding margin |
| Lv.1 | Details | To set whether to judge the job as a job "without binding" when storing a PDL job in Inbox while the binding margin is set to "0".<br>By setting the binding margin to 0 mm while "0" is set, the job is processed as "without binding". "Booklet" in "Options" on the Inbox screen can be also used.<br>When "1" is set, it is judged as "with binding" even the binding margin is 0 mm so "Booklet", which has an exclusive relationship with "binding", cannot be used. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When storing a PDL job in Inbox while 1 is set, "Booklet" in "Options" on the Inbox screen cannot be used. |
| | Display/adj/set range | 0 to 1<br>0: Without binding, 1: With binding |
| | Default value | 0 |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| SELF-CHK | | Set high voltg error condtn detect func |
| Lv.2 | Details | To set the high voltage error condition detection function. |
| | Display/adj/set range | 0 to 15<br>0: OFF, 1: ON, 2 to 15: Not used |
| | Default value | 0 |
| HOME-SW | | Set screen displayed with Main Menu key |
| Lv.1 | Details | To set whether to display the main menu screen or the screen registered as the startup screen when pressing Main Menu key. |
| | Use case | Upon user's request (to change the startup screen) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Main Menu screen, 1: Screen registered as the startup screen |
| | Default value | 0 |
| NO-LGOUT | | Display/hide of logout button |
| Lv.1 | Details | To set whether to display or hide [Logout] button.<br>When 0 is set, [Logout] button is displayed on the screen, and logout with the ID key is enabled. (Normal)<br>When 1 is set, [Logout] button is not displayed, and logout with the ID key is disabled. |
| | Use case | Upon user's request (for customization, etc.) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Display, 1: Hide |
| | Default value | 0 |
| T-DLV-BK | | Set of Bk-toner level displaying alarm |
| Lv.1 | Details | To set the Bk-toner level to display "absence of toner" message. |
| | Use case | When changing the timing to notify the end of life according to the usage status |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Since toner level is calculated based on the developing supply count, some errors may occur. |
| | Display/adj/set range | 0 to 40 |
| | Default value | JP:15, USA:15, EUR:0, AU:15, CN:15, KR:15, TW:15, ASIA:15 |
| JM-ERR-D | | Set of error display of 0CAx jam (DCON) |
| Lv.2 | Details | To set whether to display "0CAF" jam as the error "E996-0CAF".<br>In the case of a jam, log cannot be obtained depending on the timing.<br>By selecting 1 when the jam "0CAF" occurs, it is displayed as the error "E996-0CAF" so that the log can be obtained. |
| | Use case | When obtaining a log at the occurrence of 0CAF jam |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Display as a jam, 1: Display as an error |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > FNC-SW > JM-ERR-R |

| COPIER > OPTION > FNC-SW | | |
|---|---|---|
| JM-ERR-R | | Set of error display of 0071 jam (RCON) |
| Lv.2 | Details | To set whether to display "0071" jam as the error "E996-0071".<br>In the case of a jam, log cannot be obtained depending on the timing.<br>By selecting 1 when the jam "0071" occurs, it is displayed as the error "E996-0071" so that the log can be obtained. |
| | Use case | When obtaining a log at the occurrence of 0071 jam |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Display as a jam, 1: Display as an error |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > FNC-SW > JM-ERR-D |

T-8-66

## IMG-DEV

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| TSPLY-SW | | [Not used] |
| DRM-IDL | | Set first idle rotn time in NL Ev |
| Lv.1 | Details | To set the duration of idle rotation to be performed first time for the day in an NL (normal temperature/low humidity) environment. |
| | Use case | When image density for the first time of the day is low |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 20 (0: OFF) |
| | Default value | 1 (15 seconds) |
| | Related service mode | COPIER> OPTION> IMG-DEV> DRM-IDL2, DRM-IDL3 |
| DV-RT-LG | | Set Developing Assembly idle rotn time |
| Lv.1 | Details | To set the duration of idle rotation of the Developing Assembly by COPIER> FUNCTION> MISC-P> DV-RT.<br>As the value is incremented by 1, the duration is increased by 1 minute.<br>+: Increase<br>-: Decrease |
| | Use case | When an image failure is not alleviated by executing idle rotation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | If the duration is long, deterioration of developer or toner scattering might occur. |
| | Display/adj/set range | 1 to 20 |
| | Default value | 5 |
| | Related service mode | COPIER> FUNCTION> MISC-P> DV-RT |
| ADJ-VPPN | | Adj developing bias Vpp: Uncoated paper |
| Lv.1 | Details | To adjust Vpp of the developing AC bias for uncoated paper group.<br>The initial value is 1.5 kV, and as the value is decreased by 1, Vpp is decreased by 0.1 kV (density and fogging increase).<br>Decrease the value when fogging or bias leak occurs, and increase the value when the density is low or white spots occur. |
| | Use case | When fogging, bias leak, low density, or white spots occur |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -4 to 2 |
| | Default value | 0 |
| | Supplement/memo | Uncoated paper group: uncoated paper/recycled paper/textured paper/label/postcard/cotton |
| PG-DMAX | | Setting of patch image in D-max control |
| Lv.2 | Details | To set the patch image formed by D-max control.<br>When increasing the target density, accuracy of patch image reading improves by setting 1. |
| | Use case | When increasing the target density |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Solid patch, 1: Shadow patch |
| | Default value | 0 |

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| DRM-IDL2 | | Set first idle rotn time in NN Ev |
| Lv.1 | Details | To set the duration of idle rotation to be performed first time for the day in an NN (normal temperature/normal humidity) environment. |
| | Use case | When image density for the first time of the day is low |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 20 (0: OFF) |
| | Default value | 1 (15 seconds) |
| | Related service mode | COPIER> OPTION> IMG-DEV> DRM-IDL, DRM-IDL3 |
| ATM | | Set of highland ev voltg reduction mode |
| Lv.2 | Details | To set the highland environment voltage reduction mode in the case that leak occurs at a high latitude.<br>When 1 is set, high voltage settings for the Primary Charging Assembly, Pre-transfer Charging Assembly and developing bias are decreased so that leak can be prevented. |
| | Use case | When leak occurs at high latitude |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Voltage reduction mode |
| | Default value | 0 |
| LWDTY-SW | | ON/OFF of low duty ejection |
| Lv.1 | Details | To set ON/OFF of low duty ejection control.<br>When 1 is set, developer is ejected at the time of last rotation/during a job. |
| | Use case | Upon user's request (Reduction of toner consumption) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Be sure to get approval from the user by telling possibility that the image density may be lowered due to deterioration of developer when setting 0. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-DEV> LWDTYADJ |

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| LWDTYADJ | | Set low duty ejection threshold value |
| Lv.1 | Details | To set offset of image density which becomes the threshold value for the low duty ejection control.<br>The threshold value which becomes a reference differs depending on the environment (temperature and humidity).<br>When a positive value is entered, the interval of low duty ejection control becomes shorter. Lowering of image density can be prevented, but replacement timing of the Waste Toner Container becomes early due to the increase of toner consumption. |
| | Use case | When density is lowered at the time of continuous output of low duty image |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-DEV> LWDTY-SW |
| BB-CNT | | Set Bk band output intvl: Cleaning Blade |
| Lv.1 | Details | To set the paper interval to output black band for preventing flip of the Cleaning Blade.<br>When a negative value is entered, the interval to output black band becomes shorter. The possibility that the Cleaning Blade may be flipped is decreased, but replacement timing of the Waste Toner Container becomes early due to the increase of toner consumption. |
| | Use case | When flip of the Cleaning Blade occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -15 to 15 |
| | Default value | 0 |

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| PRI-SHUT | | Set Pry/Pre-trn Chg Shutter close timing |
| Lv.1 | Details | To set the time from when the Photosensitive Drum stops to when the Primary/Pre-transfer Charging Shutter is closed.<br>With the Primary/Pre-transfer Charging Shutter control, the Primary/Pre-transfer Charging Shutter is closed after up to 255 minutes of the stop of the Photosensitive Drum to prevent image smear due to nitrogen oxide.<br>Decrease the value to close the shutter earlier when image smear occurs first time for the day.<br>Depending on the value, the shutter is closed before the machine shifts to sleep mode, so that the first copy time becomes longer for the time to open the shutter again (approx. 13 seconds).<br>As the value is reduced, the life of the Primary/Pre-transfer Charging Wire Cleaning Pad is shortened because cleaning of the Charging Wire is performed every time the shutter is closed. |
| | Use case | When image smear occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | • If the shutter is closed before the machine shifts to sleep mode, the first copy time becomes longer for the time to open it again.<br>• As the value is reduced, the life of the Primary/Pre-transfer Charging Wire Cleaning Pad is shortened. |
| | Display/adj/set range | -7 to 0 |
| | Default value | 0 (255 minutes) |
| TBLTCLSW | | Setting of ETB cleaning timing |
| Lv.1 | Details | To set the timing to execute ETB cleaning control.<br>When 1 or 2 is set, it is also executed at the time of the Charging Wire cleaning.<br>As the value is increased, the soiling of the back side of paper is decreased, but the life of the ETB is shortened and productivity is decreased. |
| | Use case | When the back side of paper is soiled |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | As the number of times of ETB cleaning is increased, the life of the ETB is shortened and productivity is decreased. |
| | Display/adj/set range | 0 to 2<br>0: OFF<br>1: At last rotation + At Charging Wire cleaning<br>2: At last rotation + At initial rotation + At Charging Wire cleaning |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-DEV> TBLTBIS+, TBLTBIS-, TBLTTMS |

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| TBLTBIS+ | | Setting of ETB cleaning bias (+) |
| Lv.1 | Details | "To set the transfer current value to apply cleaning bias(+) at the time of ETB cleaning.<br>As the value is increased, the soiling of the back side of paper is decreased, but the life of the ETB is shortened.<br>Compared with TBLTCLSW, productivity can be sustained, but the life of the ETB is shortened further." |
| | Use case | When the back side of paper is soiled |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | As the greater value is set, the life of the ETB is shortened. |
| | Display/adj/set range | -10 to 10 |
| | Default value | 0(100uA) |
| | Related service mode | COPIER> OPTION> IMG-DEV> TBLTCLSW, TBLTBIS-, TBLTTMS |
| TBLTBIS- | | Setting of ETB cleaning bias (-) |
| Lv.1 | Details | To set the transfer current value to apply cleaning bias (-) at the time of ETB cleaning. |
| | Use case | When the back side of paper is soiled |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 0 to 5 |
| | Default value | 0 (-50 micro A) |
| | Related service mode | COPIER> OPTION> IMG-DEV> TBLTCLSW, TBLTBISP, TBLTTMS |
| TBLTTMS | | Set ETB cleaning bias application times |
| Lv.1 | Details | To set the number of times to apply cleaning bias at the time of ETB cleaning.<br>Apply positive (+) and negative (-) cleaning bias alternately.<br>As the value is increased, the soiling of the back side of paper is decreased, but the life of the ETB is shortened and productivity is decreased. |
| | Use case | When the back side of paper is soiled |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | As the greater value is set, the life of the ETB is shortened and productivity is decreased. |
| | Display/adj/set range | 1 to 10 |
| | Default value | 2 |
| | Related service mode | COPIER> OPTION> IMG-DEV> TBLTCLSW, TBLTBISP, TBLTBIS- |

| COPIER > OPTION > IMG-DEV | | |
|---|---|---|
| DRM-IDL3 | | Set first idle rotn time in HH Ev |
| Lv.1 | Details | To set the idle rotation time to be performed first time for the day in an HH (high temperature and high humidity) environment. |
| | Use case | When image density for the first time of the day is low |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 20 (0: OFF) |
| | Default value | 1 (45 seconds) |
| | Related service mode | COPIER> OPTION> IMG-DEV> DRM-IDL, DRM-IDL2 |

T-8-67

## IMG-FIX

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| FIX-CLN | | Set fixing cleaning execution interval |
| Lv.1 | Details | To set the number of sheets as the intervals to execute fixing cleaning.<br>By performing idle rotation of the Fixing Assembly for 5 seconds every time a specified number of sheets are fed , remove soil adhered on the Pressure Roller.<br>Set 1 when an image failure occurs. If it is not alleviated, set 2 or 3.<br>Because idle rotation is executed by interrupting an ongoing job, as the short execution interval is set, productivity decreases. |
| | Use case | When an image failure due to the Pressure Roller occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | As the short execution interval is set, productivity decreases. |
| | Display/adj/set range | 0 to 3<br>0: OFF, 1: 500 sheets, 2: 300 sheets, 3: 150 sheets |
| | Default value | 0 |
| FIX-TEMP | | Set fixing/productivity: Heavy paper |
| Lv.1 | Details | To set priority between productivity and fixing by changing temperature at which down sequence is applied to Heavy paper.<br>When 2 is set, fixing has priority over productivity because the machine is likely to go into the down sequence.<br>When 0 is set, productivity has priority over fixing. |
| | Use case | When changing priority between fixing and productivity for Heavy paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 2<br>0: Priority on productivity (-5 degC), 1: Normal, 2: Priority on fixing (+5 degC) |
| | Default value | 1 |
| FSPD-S1 | | Setting of fixing improvement mode |
| Lv.2 | Details | To set whether to start the machine in fixing improvement mode.<br>When 1 to 4 is set, duration of warm-up is increased for the specified time to increase the temperature of the Fixing Assembly. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 4<br>0: 0 second, 1: 30 seconds, 2: 60 seconds, 3: 90 seconds, 4: 120 seconds |
| | Default value | 0 |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| CBLTINVL | | Setting of Fixing Web Solenoid ON times |
| Lv.1 | Details | To set frequency to turn ON the Fixing Cleaning Web Drive Solenoid.<br>If an image failure occurs due to the soiled Pressure Roller, set 1.<br>If an image failure occurs due to the soiled Separation Claw, set 2.<br>If the life of Fixing Cleaning Web is shorter than the target (500,000 sheets) (in case of much take-up amount of web), set 3. |
| | Use case | • When an image failure due to the soiled Pressure Roller/ Separation Claw occurs<br>• When the life of Fixing Cleaning Web is too short |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: Normal, 1: 1.5 times higher than normal, 2: 0.5 times higher than normal, 3: 0.75 times higher than normal |
| | Default value | 0 |
| TMP-TBL2 | | Set fixing control temp table: Thin |
| Lv.1 | Details | To set the control temperature table of the Fixing Roller for 52 to 63g/m2 size paper. |
| | Use case | When alleviating the curl |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 2<br>-5 to -1: -5 degC, 0: 0 degC, 1 to 2: +5 degC |
| | Default value | 0 |
| TMP-TBL3 | | Set fixing control temp table: Heavy |
| Lv.1 | Details | To set the control temperature table of the Fixing Roller for 91 to 256g/m2 size paper. |
| | Use case | When alleviating the curl |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 2<br>-5 to -2: -10 degC, -1: -5 degC, 0 to 2: 0 degC |
| | Default value | 0 |
| TMP-TBL4 | | Set fixing control temp table: Bond |
| Lv.1 | Details | To set the control temperature table of the Fixing Roller for bond paper. |
| | Use case | When alleviating the curl |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 2<br>-5 to -1: -5 degC, 0 to 2: 0 degC |
| | Default value | 0 |
| TMP-TBL5 | | [Not used] |
| TMP-TBL6 | | [Not used] |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| RAG-CONT | | Set fix smeared image ctrl mode level |
| Lv.1 | Details | To set level of the mode (skipping) to control smeared image caused by fixing area. |
| | Use case | When a smeared image occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Set RAG-SW to 1 to 3 to enable skipping. |
| | Display/adj/set range | 0 to 3<br>0: No skipping, 1: Small skipping, 2: Medium skipping, 3: Large skipping |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-FIX> RAG-SW |
| RAG-SW | | ON/OFF of fixing burst prevention mode |
| Lv.1 | Details | To set ON/OFF of fixing burst prevention mode (skipping) to prevent line burst.<br>Select “1: ON” in the case all horizontal lines are burst.<br>Set ON according to paper type in the case the degree of line burst differs depending on media. |
| | Use case | When horizontal lines burst |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Set RAG-CONT to 1 to 3 to enable skipping. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-FIX> RAG-CONT |
| FIX-DWN | | Set prdctvty reduct mode: small size |
| Lv.2 | Details | To set the speed ratio in the case of reducing productivity when feeding small size paper. |
| | Use case | When an image failure (crepe mark) occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -3 to 0<br>-3: 40%, -2: 60%, -1: 80%, 0: 100% |
| | Default value | 0 |
| FIX-RT | | Set idle rotation time at last rotation |
| Lv.2 | Details | To set the idle rotation time at last rotation executed after a job is completed. |
| | Use case | When an image failure (crepe mark) occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 3<br>0: No idle rotation, 1: 10 seconds, 2: 20 seconds, 3: 30 seconds |
| | Default value | 0 |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| MIX-WAIT | | Set of fixing wait mode at mixed paper |
| Lv.1 | Details | To set the fixing wait mode when plain paper and heavy paper are mixed.<br>When 0 is set, fixing mode for heavy paper is also used for plain paper while papers are mixed. When switching from plain paper to heavy paper, the machine does not wait until the fixing temperature rises.<br>When 1 is set, the machine waits because the fixing temperature for plain paper is switched to the one for heavy paper. Fixing is improved, but productivity decreases. |
| | Use case | When fixing is deteriorated while plain paper and heavy paper are mixed |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | When 1 is set, productivity decreases |
| | Display/adj/set range | 0 to 3<br>0: Fixing temperature is not switched according to paper type, 2: Fixing temperature is switched, 2 to 3: Spare |
| | Default value | 0 |
| P-BETWN | | Setting of paper interval: 2-sided mode |
| Lv.1 | Details | To set the paper interval at 2-sided mode.<br>Use this mode when uneven gloss occurs on the Fixing Roller pitch (126mm) on 1st side of 2-sided print.<br>When 1 is set, 150mm or less paper interval at 2-sided mode becomes 150mm or more. Uneven gloss can be alleviated, but productivity decreases. |
| | Use case | When uneven gloss occurs on 1st side of 2-sided print |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | When 1 is set, productivity decreases |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Widening paper interval |
| | Default value | 0 |
| FIX-TMP2 | | Set fixing/productivity: Plain paper A3+ |
| Lv.1 | Details | To set priority between productivity and fixing by changing temperature at which down sequence is applied to plain paper A3-Extension (13”x19”).<br>When 1 is set, fixing has priority over productivity because the machine is likely to go into the down sequence.<br>When -1 is set, productivity has priority over fixing. |
| | Use case | When changing priority between fixing and productivity for plain paper A3-Extension (13”x19”) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -1 to 1<br>-1: Priority on productivity (-3 degC), 0: Normal, 1: Priority on fixing (+3 degC) |
| | Default value | 0 |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| FIX-TMP3 | | Set fixing/productivity: Spcl ppr A3+ |
| Lv.1 | Details | To set priority between productivity and fixing by changing temperature at which down sequence is applied to special paper A3-Extension (13”x19”).<br>When 1 is set, fixing has priority over productivity because the machine is likely to go into the down sequence.<br>When -1 is set, productivity has priority over fixing. |
| | Use case | When changing priority between fixing and productivity for special paper A3-Extension (13”x19”) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -1 to 1<br>-1: Priority on productivity (-3 degC), 0: Normal, 1: Priority on fixing (+3 degC) |
| | Default value | 0 |
| FX-IMGLV | | Set img qlty/prdctvty lvl:Qlty Prrty |
| Lv.2 | Details | To set image quality/productivity level when “Quality Priority” is set..<br>When “Quality Priority” is selected in user mode, productivity may be extremely decreased to prevent occurrence of image with crepe mark.<br>When 0 is set, image quality is slightly decreased compared with its of normal Quality Priority mode, but productivity improves (suitable for text document).<br>When 1 is set, image quality is prioritized so image with crepe mark does not occur but productivity decreases (suitable for photo document).<br>When “Quality Priority” is set in user mode, this item is enabled. |
| | Use case | Upon user’s request (Alleviation of image with crepe mark) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Be sure to get approval from the user by telling that the productivity decreases to improve image quality. |
| | Display/adj/set range | 0 to 2<br>0: Text document mode, 1 to 2: Photo document mode |
| | Default value | 0 |
| | Related UI menu | Function Settings > Common > Print Settings > Thin/Plain Paper Printing Priority Settings |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| FX-WNKL | | Setting of paper wrinkle prevention mode |
| Lv.2 | Details | To set paper wrinkle prevention mode.<br>If the edge temperature of the Fixing Roller is lower than the center temperature, feeding speed at the center of a paper becomes faster than the speed at the edge so paper wrinkle occurs.<br>Normally, when printing to paper larger than A3 or LDR size paper at the start of printing in a high humidity environment, control temperature is increased by performing idle rotation. Paper wrinkle which occurs at this time can be decreased, but first copy time becomes longer. In other cases, idle rotation is not performed.<br>When paper wrinkle occurs with A3/LDR or larger size paper in a normal humidity/high humidity environment, set 2. If paper wrinkle is not alleviated with 2, set 3. (First copy time becomes longer.)<br>When paper wrinkle occurs with B4 or larger size paper in all environments, set 4. If it is not alleviated with 4, set 5 or 6. (As the value is larger, first copy time becomes longer.) |
| | Use case | • When paper wrinkles occur<br>• Upon user’s request (shorten the first copy time) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | When 2 to 6 is set, the first copy time becomes longer. |
| | Display/adj/set range | 0 to 6<br>0: OFF<br>1: When paper is larger than A3/LDR size paper in a high humidity environment, idle rotation is performed for up to 20 seconds. (Normal)<br>2: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 10 seconds, whereas it is performed for up to 20 seconds when paper size is 304.8x457.2 mm (12”x18”)/330.2x482.6 mm (13”x19”).<br>3: When paper is A3/LDR or larger size paper in a normal humidity/high humidity environment, idle rotation is performed for up to 20 seconds, whereas it is performed for up to 40 seconds when paper size is 304.8x457.2 mm (12”x18”)/330.2x482.6 mm (13”x19”).<br>4: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 20 seconds.<br>5: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 40 seconds.<br>6: When paper is B4 or larger size paper in all environments, idle rotation is performed for up to 60 seconds. |
| | Default value | 1 |

| COPIER > OPTION > IMG-FIX | | |
|---|---|---|
| FIX-TMP4 | | Set fixing/productivity: Plain paper |
| Lv.1 | Details | To set priority between productivity and fixing by changing temperature at which down sequence is applied to plain paper (64 to 90g/m2).<br>When a positive value is set, fixing has priority over productivity because the machine is likely to go into the down sequence.<br>When a negative value is set, productivity has priority over fixing. |
| | Use case | • When fixing failure occurs on plain paper<br>• When productivity is decreased due to down sequence |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -2 to 2 |
| | Default value | 0 |
| WEB-LIFE | | Set Fixing Web level alarm notice timing |
| Lv.1 | Details | To set the timing to notify the Web absence alarm according to the time required for replacement of the Fixing Cleaning Web.<br>The maximum output number until the error message appears after the Fixing Cleaning Web absence alarm is 3000 sheets (on a A4 size conversion basis). If a large volume of papers is output after the appearance of the alarm message, the machine may stop due to an error before replacing the Web.<br>If 0 is set, an alarm is notified when the Fixing Cleaning Web Level Sensor detects “Web absence” as usual.<br>If the value is between 1 and 7, an alarm is notified when the Fixing Cleaning Web Drive Solenoid counter reaches the specified value. As the value is incremented by 1, the threshold of the counter is increased by 50,000 sheets (on a A4 size conversion basis). |
| | Use case | When changing the timing to notify the Web absence alarm according to the output status |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Depending on the setting value of COPIER > OPTION> IMG-FIX > CBLTINVL, the number of estimated prints to display an alarm differs. |
| | Display/adj/set range | 0 to 7<br>0: Detection by the sensor, 1: Count of 500,000 sheets (on a A4 size conversion basis), 2: 550,000 sheets, 3: 600,000 sheets, 4: 650,000 sheets, 5: 700,000 sheets, 6: 750,000 sheets, 7: 800,000 sheets |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-FIX> CBLTINVL |

T-8-68

## IMG-LSR

| COPIER > OPTION > IMG-LSR | | |
|---|---|---|
| LAPC-SW | | ON/OFF of ini rotn/last rotn APC crrct |
| Lv.2 | Details | To set ON/OFF of laser APC correction executed at initial rotation and last rotation. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: ON, 1: OFF |
| | Default value | 0 |
| 2D-SHADE | | ON/OFF of 2D shading |
| Lv.1 | Details | To set ON/OFF of 2D shading. |
| | Use case | When uneven image occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF<br>1: Drum Heater, first time for the day, potential control when recovering from sleep, 2D shading ON |
| | Default value | 0 |
| | Related service mode | COPIER> DISPLAY> 2D-SHADE> 2D-STS |

T-8-69

## IMG-MCON

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| PASCAL | | Use/no use of auto gradation adj data |
| Lv.1 | Details | To set to use/not to use the gradation adjustment data gamma LUT that is generated by auto gradation adjustment (Full/Quick Adjust) control.<br>Selection is available as to whether to use gamma LUT at the time of image formation. |
| | Use case | When PASCAL-related failure occurs/when identifying the cause of PASCAL-related failure |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: Initial LUT is used. (Automatic gradation adjustment is not used.)<br>1: Auto gradation adjustment is used.<br>2 to 3: Not used |
| | Default value | 1 |
| SHARP | | Setting of sharpness level of image |
| Lv.2 | Details | To set the setting level (center value) of sharpness of image.<br>As the value is increased, the image tends to be sharp, and as the value is decreased, image tends to be soft. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 5 |
| | Default value | 3 |
| DRM-H-SW | | ON/OFF of Drum Heater |
| Lv.2 | Details | To set ON/OFF control of the Drum Heater at power-off/at sleep. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: ON/OFF depending on the environment condition<br>1: ON<br>2: OFF |
| | Default value | 0 |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| SCR-SLCT | | Halftone process in Photo Printout mode |
| Lv.2 | Details | To set halftone process (error diffusion, screen 2 types) in Photo Printout mode when making a copy.<br>Change the setting if the copy image has a problem with the initial setting (Low screen ruling).<br>Select 0 (error diffusion) in the case of moire (suitable for character reproduction).<br>Select 2 (High screen ruling) in the case of rough dots. |
| | Use case | When moire image or rough dots occurs on copy image |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Error diffusion, 1: Low screen ruling, 2: High screen ruling |
| | Default value | 1 |
| | Related UI menu | Function Settings> Copy> Photo Printout mode |
| TMC-SLCT | | Setting of error diffusion coefficient |
| Lv.2 | Details | To set coefficient to be used for error diffusion process.<br>Specify according to the level of granularity and dot stability. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Small granularity/low dot stability<br>1: Small granularity/low dot stability (color mode), Large granularity/high dot stability (B&W mode)<br>2: Large granularity/high dot stability |
| | Default value | 2 |
| CAL-SW | | Set calibration control execute condtn |
| Lv.2 | Details | To set the condition to execute the calibration control.<br>Two types of calibration (patch detection) are available: one for 1/1 speed (for plain paper), and the other for 1/2 speed (for heavy paper).<br>When 0 is set, only patch detection for 1/1 speed is executed.<br>When 1 is set, patch detection for both 1/1 speed and 1/2 speed is executed, which increases the required time. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this when the machine is operating correctly. |
| | Display/adj/set range | 0 to 1<br>0: only for 1/1 speed, 1: both for 1/1 speed and 1/2 speed |
| | Default value | 0 |
| DH-MODE | | [Not used] |
| | Default value | 0 |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| VP-ART | | Setting of line art processing |
| Lv.2 | Details | To set outline processing for line art on scalable PDF.<br>In the outline processing, a binary image outline is extracted in the field which is recognized as line art, and is converted into vector data.<br>Specify whether to convert the binary image outline into vector data or to recognize it as one line (as a thin line). For the thin line, the line width can be specified.<br>Change this value when you want to obtain an output of a wide-width line as one line rather than as an outline (when you want to prioritize edit operation as a line rather than image quality). |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 99 |
| | Default value | 1 |
| VP-TXT | | Setting of character vectorization |
| Lv.2 | Details | To set vector conversion processing for text on scalable PDF.<br>In the vector conversion processing, a binary image outline is extracted in the field which is recognized as text, and is converted into vector data.<br>In regular vector conversion, function approximation is not used for small text because the image quality is not changed.<br>When the value is changed, function approximation processing is executed for small text, which realizes smooth text although the image quality is changed.<br>Change this value when you want to prioritize smoothness in small text. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 99 |
| | Default value | 1 |
| C-PDL-T | | Setting of PDL gradation reference |
| Lv.2 | Details | To set whether gradation or density to be prioritized as the gradation reference for PDL.<br>With priority on gradation (% of halftone dots), gradation is matched with original on the shadow area although the maximum density decreases. With priority on density, density is always matched with original. |
| | Use case | Upon user's request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Priority on gradation (% of halftone dots), 1: Priority on density |
| | Default value | 0 |
| | Supplement/memo | Abbreviation of CAL_PDL_Target |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| C-S-P-D | | High dens end edge crrct: PDL dens prrty |
| Lv.2 | Details | To set ON/OFF of high density trailing edge correction function at PDL.<br>By selecting CAL (priority on density) in C-PDL-T, high density trailing edge correction function is ON in normal operation; however, set OFF as needed. |
| | Use case | ON: When reducing jagged line and jagged outline of text<br>OFF: When matching density with original on high density area, or when prioritizing density and gradation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> IMG-MCON> C-PDL-T |
| | Supplement/memo | Abbreviation of CAL_Shadow_PDL_Density |
| C-S-C-D | | High density end edge crrct ON/OFF: copy |
| Lv.2 | Details | To set ON/OFF of high density trailing edge correction function at copy.<br>With CAL of COPY, high density trailing edge correction function is ON in normal operation; however, set OFF as needed. |
| | Use case | ON: When reducing jagged line and jagged outline of text<br>OFF: When matching density with original on high density area, or when prioritizing density and gradation |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| | Supplement/memo | Abbreviation of CAL_Shadow_COPY_Density. When adjusting the input signal 255 to low in the case that the density of solid area is too high, jaggy (jagged effect of halftone) may occur to text, etc. By entering the input signal 255 as solid, occurrence of jaggy can be prevented. |
| C-SM-P-G | | [Not used] |
| C-SM-C-G | | [Not used] |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| DH-TGT | | Setting of D-half control target |
| Lv.1 | Details | To set the target data of D-half control.<br>When the Reader is installed (copy model), D-half control uses the gradation data before execution of PASCAL control and detection result of D-half control after the execution as control target. If controlled only by the patch image reading detection when Reader-related failure occurs, set to the gradation data manually.<br>When the Reader is not installed (printer mode), only gradation data is available. |
| | Use case | When Reader-related failure occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Detection result of D-half control right after PASCAL control, 1: Gradation data |
| | Default value | Copier model: 0, Printer model: 1 |
| ERS-SEL | | Set EffectiveResolutionSystem proc mthd |
| Lv.2 | Details | To set the processing method of Effective Resolution System for images and texts.<br>When moire occurs on a patterned image with 1200 dpi, set 1 to 7. Moire that hue is changed depending on the position can be prevented. |
| | Use case | When moire occurs on a patterned image with 1200 dpi |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 7 |
| | Default value | 0 |
| | Related UI menu | Settings/Registration> Function Settings> Printer> Printer Settings> Settings> Print Quality> Resolution> Superfine |
| WDREDUCT | | Setting of white dots reduction mode |
| Lv.1 | Details | To set the white dots reduction mode.<br>When 1 is set, white dots become less significant by enlarging black dots by thin line correction. |
| | Use case | When white dots are significant |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-MCON> VDADDCNT, HDADDCNT, LIN-OFST |
| | Related UI menu | Thin line correction, horizontal line correction, and vertical line correction in user mode |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| VDADDCNT | | Horz added dot amnt at white dots reduct |
| Lv.1 | Details | To adjust the amount of dots added to side at white dots reduction mode.<br>As the greater value is set, the size of white dot gets smaller.<br>When WDREDUCT is 1, this setting is enabled. |
| | Use case | When adjusting the level of white dots reduction mode |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 4 |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> IMG-MCON> WDREDUCT |
| HDADDCNT | | Vert added dot amnt at white dots reduct |
| Lv.1 | Details | To adjust the amount of dots added to upside at white dots reduction mode.<br>As the greater value is set, the size of white dot gets smaller.<br>When WDREDUCT is 1, this setting is enabled. |
| | Use case | When adjusting the level of white dots reduction mode |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 4 |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> IMG-MCON> WDREDUCT |
| LIN-OFST | | Set special paper added dot amnt offset |
| Lv.1 | Details | To set the offset amount of dots added to vertical/horizontal direction when lines on special paper are thinner than those on plain paper.<br>When printing special paper, compared to plain paper, the amount of dots specified with this item is added.<br>As the value is larger, lines become thicker.<br>When WDREDUCT is 0, this setting is enabled. |
| | Use case | When the line width of special paper is thinner than the one of plain paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 4 |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> IMG-MCON> WDREDUCT |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| EP-CONT | | ON/OFF wht dot remov/set thin line width |
| Lv.1 | Details | To set ON/OFF of white dots removal and line width of thin line by ON/OFF of laser light modulation and changing the amount of exposure.<br>Normally, white dots are removed, but they may be removed too much, causing a failure (unsmooth gradation, etc.). When -2 is set, white dots are not removed, so the cause whether it is due to image processing or engine can be identified.<br>When widening a thin line , set 1. When narrowing a thin line , set -1. |
| | Use case | When a failure (unsmooth gradation, etc.) occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch.<br>3) Execute “Full Adjust” in user mode. |
| | Display/adj/set range | -2 to 1<br>-2: Narrow the line width, white dots removal OFF<br>-1: Narrow the line width, white dots removal ON<br>0: Normal line width, white dots removal ON<br>1: Widen the line width, white dots removal ON |
| | Default value | 0 |
| | Related UI menu | Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust |
| CL-RDCTN | | High compress PDF TX clr reduct mode |
| Lv.1 | Details | To set whether to execute the color reduction processing mode at high compression PDF (text mode) transmission.<br>Set 1 when image quality is deteriorated at high compression PDF (text mode) transmission. Image quality is improved by executing the color reduction processing mode. |
| | Use case | Upon user’s request (improvement of image quality) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |

| COPIER > OPTION > IMG-MCON | | |
|---|---|---|
| PSCL-TBL | | Set auto gradation adjustment parameters |
| Lv.1 | Details | To set the parameters of auto gradation adjustment (full adjustment).<br>When 0 is set, the parameters are optimized for GF-C081 (81 g/m2) standard paper (Canon-recommended paper).<br>When 1 is set, the parameters are optimized for 64 g/m2 paper. |
| | Use case | When paper arc occurs on 64 g/m2 paper at auto gradation adjustment |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Execute full adjustment of auto gradation adjustment. |
| | Caution | Be sure to execute auto gradation adjustment (full adjustment) after the setting is done. |
| | Display/adj/set range | 0 to 3<br>0: Standard paper (81 g/m2), 1: Plain paper (other than 81 g/m2), 2 to 3: Not used |
| | Default value | 0 |
| BGE-OFS | | Fine adj of background adjustment level |
| Lv.2 | Details | To make a fine adjustment of the background adjustment (background removal) level which can be set manually.<br>Break up the adjustment values into smaller ones when user does not satisfy with the default adjustment values. |
| | Use case | When color fogging occurs on the output image when copying yellowed blank paper as an original |
| | Adj/set/operate method | Enter the setting value (switch negative/positive by -/+ key) and press OK key. |
| | Caution | Since the background color is set to be washed out with this mode, not only the background of yellowed blank paper, but also other light colors (light blue, etc.) are washed out. |
| | Display/adj/set range | -15 to 15 |
| | Default value | 0 |
| | Related UI menu | Copy > Options > Density > Background Density |

T-8-70

## IMG-RDR

| COPIER > OPTION > IMG-RDR | | |
|---|---|---|
| DF-BLINE | | ON/OFF of dust dtct in DADF stream read |
| Lv.2 | Details | To set ON/OFF of dust detection in DADF stream reading mode (measures for black line). |
| | Use case | When black line occurs due to dust on the Platen Roller |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When “1: ON” is set, black line is resolved, but sharpness of image edge is decreased. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| DFDST-L1 | | DADF mode dust dtct level adj: ppr intvl |
| Lv.1 | Details | To adjust dust detection level with dust detection correction control that is executed at paper interval in DADF mode.<br>Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected.<br>Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected. |
| | Use case | • When black line occurs due to dust<br>• Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected.<br>When reducing the value too much, black lines may appear on the image. |
| | Display/adj/set range | 0 to 255<br>0: OFF |
| | Default value | 200 |
| | Supplement/memo | Black lines may appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected. |

| COPIER > OPTION > IMG-RDR | | |
|---|---|---|
| DFDST-L2 | | DADF mode dust dtct level adj: after job |
| Lv.1 | Details | To adjust dust detection level with dust detection correction control that is executed after the job is completed in DADF mode.<br>Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected.<br>Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected. |
| | Use case | • When black line occurs due to dust<br>• Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected.<br>When reducing the value too much, black lines may appear on the image. |
| | Display/adj/set range | 0 to 255<br>0: OFF |
| | Default value | 200 |
| | Supplement/memo | Black lines may appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected. |
| ABC-MODE | | Adj sface digital ABC bckgd dens reduct |
| Lv.1 | Details | To adjust the background density reduction setting level of surface digital ABC (at B&W mode). |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -1 to 4<br>-1: Setting of the direction which the background density reduction is less (For photo original and complex form original)<br>0: Default setting<br>1: Setting of the direction which the background density reduction is more<br>2: Setting of the direction which the background density reduction is more<br>3: Setting of the direction which the background density reduction is more<br>4: Background density reduction according to the density in the 5 mm portion of the image leading edge |
| | Default value | 0 |

| COPIER > OPTION > IMG-RDR | | |
|---|---|---|
| ABC-MD2 | | Adj back digital ABC bckgd dens reduct |
| Lv.1 | Details | To adjust the background density reduction setting level of back side digital ABC (Auto Background Control) at B&W mode. |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -1 to 4<br>-1: Setting of the direction which the background reduction is less (For photo original and complex form original)<br>0: Default<br>1 to 3: Setting of the direction which the background reduction is more<br>4: Background density reduction according to the density in the 5 mm portion of the image leading edge |
| | Default value | 0 |
| | Supplement/memo | Auto Background Control: A control to make the background color of the original close to white with the image processing when reading the image on back side with the Scanner Unit (paper back). |
| DF2DSTL1 | | DADF dust dtct lvl adj at ppr intvl:bck |
| Lv.1 | Details | To adjust dust detection level with dust detection correction control that is executed at paper interval by the Scanner Unit (paper back) in DADF mode.<br>Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected.<br>Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected. |
| | Use case | • When black line occurs due to dust<br>• Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected.<br>When reducing the value too much, black lines may appear on the image. |
| | Display/adj/set range | 1 to 255 |
| | Default value | 200 |
| | Supplement/memo | Black lines may appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected. |

| COPIER > OPTION > IMG-RDR | | |
|---|---|---|
| DF2DSTL2 | | Adj DADF dust dtct level at job end:bck |
| Lv.1 | Details | To adjust dust detection level with dust detection correction control that is executed by the Scanner Unit (paper back) after the job is completed in DADF mode.<br>Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected.<br>Increase the value in the case of black lines. As the value is larger, the small dust is more likely detected. |
| | Use case | • When black line occurs due to dust<br>• Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected.<br>When reducing the value too much, black lines may appear on the image. |
| | Display/adj/set range | 1 to 255 |
| | Default value | 200 |
| | Supplement/memo | Black lines may appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected. |
| IR-FILTR | | Set scan unit with infrared cut filter |
| Lv.1 | Details | Due to the surface texture of an original, reflected light from an original is diffused; thus, green might be detected as reddish brown incorrectly. The Scanner Unit with the Infrared Cut Filter installed is set as a service part to prevent incorrect detection. Set 1 when installing this Scanner Unit. |
| | Use case | When green becomes reddish brown |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not supported, 1: Supported |
| | Default value | 0 |

T-8-71

## NETWORK

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| RAW-DATA | | Setting of received data print mode |
| Lv.2 | Details | To set print mode for the received image data.<br>This item is used to identify the cause whether it's due to image data or image processing in the case of trouble with received image. |
| | Use case | When received image trouble occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to set the value back to "0: Normal print operation" after recovering from the trouble. |
| | Display/adj/set range | 0 to 1<br>0: Normal print operation, 1: Print with original data without image processing |
| | Default value | 0 |
| RMT-LANG | | Language setting of remote UI |
| Lv.2 | Details | To set the language on remote UI. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Switch with +/- key, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | ja/en/de/fr/it/es<br>ja: Japanese, en: English, de: German, fr: French, it: Italian, es: Spanish |
| IFAX-LIM | | No. of max print lines at IFAX reception |
| Lv.2 | Details | To set the maximum number of lines for e-mail text to be printed when receiving IFAX.<br>Setting of this item can prevent endless printing of the attached file data in the case of receiving an error e-mail or failure in interpretation of the context.<br>Selecting 0 prints the header/footer in 1 sheet when receiving e-mail text without attached file. |
| | Use case | When preventing endless print in the case of failure in reception |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999<br>0: E-mail text not printed, 999: Unlimited |
| | Default value | 500 |
| SMTPTXPN | | Setting of SMTP TX port number |
| Lv.2 | Details | To set SMTP transmission port number. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 25 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| SMTPRXPN | | Setting of SMTP reception port number |
| Lv.2 | Details | To set SMTP reception port number. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 25 |
| POP3PN | | Setting of POP3 reception port number |
| Lv.2 | Details | To set POP3 reception port number. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 110 |
| FTPTXPN | | Specification of SEND port (FTP) number |
| Lv.1 | Details | To specify address port (FTP) number for SEND. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 21 |
| NW-SPEED | | Setting of network data transfer speed |
| Lv.2 | Details | To set the data transfer speed when the service network is connected.<br>When downloading the firmware through network, use 0 in the normal operation. When fixed to 100Base-TX/10Base-T for any reason, change the setting. |
| | Use case | When fixing the communication speed |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Auto, 1: 100Base-TX, 2: 10Base-T |
| | Default value | 0 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| STS-PORT | | ON/OFF of TOT sync status comctn port |
| Lv.2 | Details | To set ON/OFF for Inquiry/Response (sync)-mode status communication port with T.O.T.<br>Select “1: ON” in the case of connecting the PC and the machine with the cross cable while Service NAVI is used. |
| | Use case | When the Service NAVI is used |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> NETWORK> CMD-PORT |
| | Supplement/memo | T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon’s own protocol). |
| CMD-PORT | | ON/OFF TOTasync command comctn port |
| Lv.2 | Details | To set ON/OFF for asynchronous command communication port with T.O.T.<br>Select “1: ON” in the case of connecting the PC and the machine with the cross cable while Service NAVI is used. |
| | Use case | When the Service NAVI is used |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> NETWORK> STS-PORT |
| | Supplement/memo | T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon’s own protocol). |
| NS-CMD5 | | Limit CRAM-MD5 auth method at SMTP auth |
| Lv.2 | Details | To restrict use of CRAM-MD5 authentication method at the time of SMTP authentication. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it’s authenticated. |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| NS-GSAPI | | Limit GSSAPI auth method at SMTP auth |
| Lv.2 | Details | To restrict use of GSSAPI authentication method at the time of SMTP authentication. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it’s authenticated. |
| NS-NTLM | | Limit NTLM auth method at SMTP auth |
| Lv.2 | Details | To restrict use of NTLM authentication method at the time of SMTP authentication. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it’s authenticated. |
| NS-PLNWS | | Limit plaintext auth at SMTP auth encry |
| Lv.2 | Details | To restrict use of PLAIN/LOGIN authentication, which is plaintext, at the time of SMTP authentication under the environment where the communication packet is encrypted. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it’s authenticated. |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| NS-PLN | | Limit plaintext auth at SMTPauth noencry |
| Lv.2 | Details | To restrict use of PLAIN/LOGIN authentication, which is plaintext, at the time of SMTP authentication under the environment where the communication packet is not encrypted. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated. |
| NS-LGN | | Limit LOGIN authentication at SMTP auth |
| Lv.2 | Details | To restrict use of LOGIN authentication at the time of SMTP authentication. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: SMTP server-dependent, 1: Not used |
| | Default value | 0 |
| | Supplement/memo | SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated. |
| MEAP-PN | | HTTP port No.setting of MEAP application |
| Lv.2 | Details | To set HTTP port number of MEAP application. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not specify port 8080 when the Print Server is connected. Otherwise, you cannot browse the device RUI in which MEAP authentication application is running (Port 8080 is reserved for redirection of EFI Controller to the iR side.) |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 8000 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| RMT-LGIN | | Set to allow remote login to SSH server |
| Lv.2 | Details | To set whether to allow remote login from the remote host (SSH client: DA) to debug console of the SSH server. |
| | Use case | As needed (This mode is used for the Japanese models only and not used with overseas models (outside Japan)). |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This item is enabled when the setting value of SSH-SW is ON. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> NETWORK> SSH-SW |
| | Supplement/memo | DA: Digital Accessory |
| CHNG-STS | | Set of TOT status connection port number |
| Lv.2 | Details | To set the port number for status connection with T.O.T. |
| | Use case | When the Service NAVI is used |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 65535 |
| | Default value | 20010 |
| | Related service mode | COPIER> OPTION> NETWORK> STS-PORT |
| CHNG-CMD | | Set of TOT command connection port No. |
| Lv.2 | Details | To set the port number for command connection with T.O.T. |
| | Use case | When the Service NAVI is used |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 65535 |
| | Default value | 20000 |
| | Related service mode | COPIER> OPTION> NETWORK> CMD-PORT |
| MEAP-SSL | | HTTPS port setting of MEAP |
| Lv.2 | Details | To set the port of HTTPS server in the case of using SSL with HTTP of MEAP. |
| | Use case | When specifying the setting of HTTPS port for MEAP |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 8443 |
| LPD-PORT | | Setting of LPD port number |
| Lv.2 | Details | To set the LPD port number. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 65535 |
| | Default value | 515 |
| | Supplement/memo | LPD port: Network port for TCP/IP communication when making prints through network. |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| WUEV-SW | | Setting of sleep notification execution |
| Lv.2 | Details | To set whether to notify the sleep mode to the application (imageWARE, etc) on the network when shifting to/recovering from the sleep mode. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Notified, 1: Not notified |
| | Default value | 0 |
| WUEV-INT | | Setting of sleep notification interval |
| Lv.2 | Details | To set the interval of sleep notification. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified. |
| | Display/adj/set range | 60 to 65535 |
| | Default value | 600 |
| | Related service mode | COPIER> OPTION> NETWORK> WUEV-SW |
| WUEV-POT | | Port number setting for sleep notice |
| Lv.2 | Details | To set port number of the PC to notify the sleep mode. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified. |
| | Display/adj/set range | 1 to 65535 |
| | Default value | 11427 |
| | Related service mode | COPIER> OPTION> NETWORK> WUEV-SW |
| WUEV-RTR | | Setting of sleep notification range |
| Lv.2 | Details | To set the number of available routers to the target for sleep notification. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified. |
| | Display/adj/set range | 0 to 254 |
| | Default value | 3 |
| | Related service mode | COPIER> OPTION> NETWORK> WUEV-SW |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| WUEN-LIV | | Recovery time setting after sleep notice |
| Lv.2 | Details | To set the time from the sleep start from network without job assignment until the mode is shifted to the sleep mode. |
| | Use case | When setting the startup time after sleep notification |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 10 to 600 |
| | Default value | 15 |
| IFX-CHIG | | Set operation by IFAX recv mail content |
| Lv.1 | Details | To set the number of characters for the IFAX received mail content, so that the mail is not printed/forwarded when the characters in the text is less than the number of specified characters.<br>This machine can output blank paper because some senders send e-mail text consists of linefeed codes only. In such case, specify 2 (number of characters) so that there will be no output of blank paper.<br>In the case of specifying any number other than 0, header/footer is printed/forwarded in 1 sheet only if the e-mail (body) text is less than the specified value while no TIFF file is attached.<br>As the value is incremented by 1, the number of target characters in e-mail body text is increased by 1 character. |
| | Use case | When reducing print of blank paper due to e-mail received by IFAX |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to get approval from the user by telling that there will be no print of e-mail (body) text if the number of characters is less than the specified value. |
| | Display/adj/set range | 0 to 999<br>0: E-mail (body) text is not ignored. |
| | Default value | 0 |
| | Supplement/memo | 1 Japanese Kanji character is calculated as 2 bytes, and the control codes (such as linefeed code, etc) are included in the number of characters. |
| DNSTRANS | | Setting of DNS transfer priority |
| Lv.1 | Details | To set priority order of the protocol (IPv4/IPv6) to be used for DNS query.<br>In the case of using both IPv6 and IPv4 while the DNS server supports IPv4, it takes time because of timeout when executing DNS query with priority on IPv6. Giving priority on query by IPv4 can shorten the time. |
| | Use case | When it takes time to execute DNS query with priority on IPv6 because the DNS server supports IPv4 |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: IPv4, 1: IPv6 |
| | Default value | 1 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| PROXYRES | | Setting of proxy response to Windows |
| Lv.2 | Details | To set whether to provide proxy response or return the device status when an inquiry is received via Windows while the device is in sleep mode. |
| | Use case | When executing status response for query from Windows correctly |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: No proxy response, 1: Proxy response |
| | Default value | 1 |
| WOLTRANS | | Setting of sleep recovery protocol |
| Lv.1 | Details | To set the protocol for recovery from sleep mode according to the value of WOL (Wake On LAN) trans.<br>Reception of a specific network packet is one of the requirements for the device to recover from sleep mode.<br>When the number of network protocols supported by the device increases, the types of network packets which activate recovery from sleep mode vary. However, there is a possibility that the existing network protocol is actually used.<br>Select the type of network packet which activates recovery from sleep mode according to the environment where the device is used. |
| | Use case | When selecting protocol for sleep recovery |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 3<br>1: WSD and SNMP, 2: WSD and CPCA, 3: CPCA and SNMP |
| | Default value | 1 |
| 802XTOUT | | Set of IEEE802.1X authentication timeout |
| Lv.1 | Details | To set timeout value for IEEE802.1X authentication.<br>If the device executes 802.1X authentication, change the wait time for response from the authentication server. |
| | Use case | When response from the authentication server is slow/fast |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 10 to 120 |
| | Default value | 30 |
| IKERETRY | | Setting of IKE retry times |
| Lv.1 | Details | To set the number of retries in the case of no response from the communication target at the time of IKE packet transmission. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3 |
| | Default value | 2 |
| | Supplement/memo | IKE: Internet Key Exchange |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| SPDALDEL | | Initialization of SPD value |
| Lv.2 | Details | To initialize all the SPD values that are under management.<br>SPD values can be initialized without clearing SRAM. |
| | Use case | At the time of SPD value mismatch when IPSec Board is added |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Supplement/memo | SPD: Database that manages SA (Security Association).<br>SPD value is managed when IPSec Board is used. Normally, SRAM needs to be cleared in the case of mismatch in SPD value. |
| NCONF-SW | | ON/OFF of Network Configurator function |
| Lv.1 | Details | To set ON/OFF of Network Configurator function.<br>If the user does not use the function, select OFF to prevent remote attack through network. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| | Supplement/memo | Network Configurator function is a function to be used for communication with NetSpot Device Installer, etc., and the network setting can be changed from the remote. |
| IKEINTVL | | Setting of IKE retry interval |
| Lv.1 | Details | To set retry interval in the case of no response from the communication target at the time of IKE packet transmission. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 10 |
| | Default value | 5 |
| | Supplement/memo | IKE: Internet Key Exchange |
| IPSDEBLV | | Setting of IPSec debug level |
| Lv.2 | Details | For R&D use |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| SP-LINK | | Mode setting at 1W sleep |
| Lv.1 | Details | Switch to execute 10base-T standby as default to realize the standby power 1W in sleep mode. |
| | Use case | When shifting to sleep mode after negotiation (same as conventional machines) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Shift to sleep mode with 10base-T<br>1: Shift to sleep mode after negotiation |
| | Default value | 0 |
| LM-LEVEL | | Set of SMB client authentication method |
| Lv.1 | Details | To set the authentication method (LM, NTLMv1, NTLMv2) that the SMB client uses for authentication.<br>In SMB authentication, authentication is generally made by the authentication method with higher level, and if it fails, the authentication level is lowered. (NLTMv2 => NLTMv1 => LM)<br>It is possible to limit the authentication level by setting 1 or 2 to avoid using the authentication method with lower level. |
| | Use case | Upon user's request |
| | Display/adj/set range | 0 to 2<br>0: Authentication is made by LM, NTLMv1 and NTLMv2<br>1: Authentication is made by NTLMv1 and NTLMv2<br>2: Authentication is made by NTLMv2 |
| | Default value | 0 |
| | Supplement/memo | Windows NT LAN Manager authentication: A user authentication method for network logon, which was generally used in the OS for Windows NT Series prior to Windows NT 4.0 |
| AFS-JOB | | Set of FAX server job reception port |
| Lv.1 | Details | To set the reception port of the fax server to which a fax client sends jobs. |
| | Use case | When changing the job reception port of the fax server |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 20317 |
| | Related service mode | COPIER> OPTION> NETWORK> AFC-EVNT |
| AFC-EVNT | | Set of FAX client event reception port |
| Lv.1 | Details | To set the event notification reception port of a fax client. |
| | Use case | When changing the event notification reception port of a fax client |
| | Display/adj/set range | 0 to 65535 |
| | Default value | 29400 |
| | Related service mode | COPIER> OPTION> NETWORK> AFS-JOB |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| ILOGMODE | | Setting of IP address block mode |
| Lv.1 | Details | To set all protocols or TCP/UDP/ICMP unicast as the target of IP block.<br>When 0 is set, the machine responds to ARP, ICMP multicast and broadcast which have no direct relation, and consequently the number of logs is increased.<br>When 1 is set, the machine filters TCP, UDP and ICMP unicast only. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 0 to 3<br>0: All protocols support mode<br>1: TCP/UDP/ICMP unicast support mode<br>2, 3: Not used |
| | Default value | 0 |
| ILOGKEEP | | Set of IP address block log hold time |
| Lv.1 | Details | To set the retention time from the log time of IP block.<br>When access is made again from a same IP address which was blocked before, if it is within the retention time of the previous log, its log is not recorded.<br>If access is frequently made from a same IP address, the log record of the UI might be filled with its logs. If the user considers that a single log for a same IP address is enough, set the longer retention time. |
| | Use case | Upon user's request |
| | Display/adj/set range | 0 to 48<br>0: 1 minute (special mode)<br>1 to 48: 1 hour to 48 hours |
| | Default value | 1 |
| IPTBROAD | | Set to allow broad/multicast TX |
| Lv.1 | Details | To set whether to permit transmission of broadcast packets and multicast packets.<br>Transmission of broadcast packets and multicast packets is permitted without specifying an exception address. It is permitted within the device even if it is rejected in the default setting of the IPv4/v6 transmission filter.<br>Set "1: Disabled" when the user does not want to send them. |
| | Use case | Upon user's request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 5<br>0: Enabled, 1: Disabled, 2 to 5: Not used |
| | Default value | 0 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| PFWFTPRT | | Set of RST reply at IP filter FTP SEND |
| Lv.1 | Details | When FTP SEND is executed using an IP filter by which packets from a specific remote PC are rejected, SYN is returned to the port 113 if the PC supports authentication of the FTP port 113. However, since the IP filter blocks the packets, the block logs are increased and the performance is lowered.<br>When 1 is set, RST is returned to the port 113 without blocking packets. |
| | Use case | When executing FTP SEND against the OS which supports authentication of the FTP port 113 while the IP filter is enabled |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| IPMTU | | Setting of MTU size |
| Lv.1 | Details | To set MTU size of network packet.<br>This item is used when performing SEND communication between locations connected with Ethernet in a field environment where MTU black hole problem occurs. |
| | Use case | When MTU black hole problem occur |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 1 to 10<br>1: 600 byte, 2: 700 byte, ..., 9: 1400 byte, 10: 1500 byte |
| | Default value | 10 |
| DDNSINTV | | Set of DDNS periodical update interval |
| Lv.1 | Details | DNS registration is executed only once at start-up with the current iR, so the registered contents are deleted in an environment where the DNS server settings are deleted at intervals.<br>To set the interval of DDNS periodical update for not deleting the registered contents. |
| | Use case | When the DNS server settings are deleted at intervals |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 48<br>0: No periodical update, 1: 1-hour interval, 2: 2-hour interval, ..., 47: 47-hour interval, 48: 48-hour interval |
| | Default value | 24 |

| COPIER > OPTION > NETWORK | | |
|---|---|---|
| NWLOGINT | | Set ntwrk trigger log acquisition intvl |
| Lv.2 | Details | To set the interval to obtain network trigger log.<br>When network-related error occurs, information of sublog only may not be sufficient enough.<br>To grasp the network status to proceed investigation and analysis, change the interval to obtain network trigger log according to the environment where an error occurs. |
| | Use case | When a network-related error occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 20<br>0: 30 minutes, 1: 10 seconds, 2: 30 seconds, 3: 1 minute, 4 to 20: Not used |
| | Default value | 0 |

T-8-72

## USER

| COPIER > OPTION > USER | | |
|---|---|---|
| COPY-LIM | | Setting of upper limit for copy |
| Lv.1 | Details | To set the upper limit value for copy. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 9999 |
| | Default value | 9999 |
| SLEEP | | Setting of auto sleep function |
| Lv.1 | Details | To set ON/OFF of auto sleep function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| SIZE-DET | | ON/OFF of original size detect function |
| Lv.2 | Details | To set ON/OFF of original size detection function. |
| | Use case | Upon user's request (glare of the scan lamp, etc) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| COUNTER1 | | Display of software counter 1 |
| Lv.1 | Details | To display counter type for software counter 1 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Display only. No change is available. |
| | Default value | It differs according to the location. |
| COUNTER2 | | Setting of software counter 2 |
| Lv.1 | Details | To set counter type for software counter 2 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999 |
| | Default value | It differs according to the location. |

| COPIER > OPTION > USER | | |
|---|---|---|
| COUNTER3 | | Setting of software counter 3 |
| Lv.1 | Details | To set counter type for software counter 3 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999 |
| | Default value | It differs according to the location. |
| COUNTER4 | | Setting of software counter 4 |
| Lv.1 | Details | To set counter type for software counter 4 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999 |
| | Default value | It differs according to the location. |
| COUNTER5 | | Setting of software counter 5 |
| Lv.1 | Details | To set counter type for software counter 5 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999 |
| | Default value | 0 |
| COUNTER6 | | Setting of software counter 6 |
| Lv.1 | Details | To set counter type for software counter 6 on the Counter Check screen. |
| | Use case | Upon user/dealer's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 999 |
| | Default value | 0 |
| DATE-DSP | | Setting of data/time display format |
| Lv.2 | Details | To set date/time display format according to the country or region. After the display format is set with this mode, the order of date is reflected to the followings: Preferences > Timer/Energy Settings > Date/Time Settings, and report output. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: YYMM/DD, 1: DD/MMYY, 2: MM/DD/YY |
| | Default value | It differs according to the location. |
| | Related UI menu | Preferences > Timer/Energy Settings > Date/Time Settings |

| COPIER > OPTION > USER | | |
|---|---|---|
| MB-CCV | | Control card usage limit for Mail Box |
| Lv.2 | Details | To restrict use of control card for Mail Box. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Unlimited, 1: Limited |
| | Default value | 1 |
| CONTROL | | Charge setting of PDL job |
| Lv.1 | Details | To set charge count transmission of PDL job to the connecting charging management device (Coin Manager or non-Canon-made control card). |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: No charge, 1: Charge |
| | Default value | 0 |
| B4-L-CNT | | Count setting of B4 size |
| Lv.1 | Details | To set B4 count with software counter 1 to 8 as to whether B4 is counted as large size or small size.<br>Selecting 1 counts B4 or larger size paper as large size while paper smaller than B4 size as small size. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Small size, 1: Large size |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> FNC-SW> SC-L-CNT |
| TRY-STP | | Set of Fin Tray output suspension ref |
| Lv.2 | Details | To set the reference which judges to suspend outputting to Finisher Tray. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: At detection of full tray, 1: At detection of height |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| MF-LG-ST | | Display/hide of long strip mode |
| Lv.2 | Details | To set whether to display or hide the [Long Original] button.<br>When 1 is set, [Long Original] button is displayed in Copy > Options screen and the long strip paper becomes available. |
| | Use case | Upon user's request (use of long strip original or long strip paper) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related UI menu | Copy > Options |
| | Supplement/memo | Up to 630mm length paper is supported when DADF is used. |
| CNT-DISP | | Display/hide of serial No. |
| Lv.2 | Details | To set whether to display or hide the serial No. on the Counter Check screen. |
| | Use case | When setting to display/hide serial No. on the Counter Check screen. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Display, 1: Hide |
| | Default value | 0 |
| PH-D-SEL | | Set dither matrix at screen processing |
| Lv.2 | Details | To set the screen dither matrix to be used for halftoning processing at the time of copy output, B&W Inbox scan output and B&W SEND output.<br>When moire occurs frequently, set to "1: 141 lines".<br>When the setting is changed, the number of PG lines to be output at PASCAL control is also changed. |
| | Use case | When moire frequently occurs at the time of copy output, B&W Inbox scan output and B&W SEND output. Especially when moire frequently occurs in the halftone density area of photo and image gradation areas |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: 134 lines, 1: 141 lines |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> USER> PH-D-SL2 |

| COPIER > OPTION > USER | | |
|---|---|---|
| COPY-JOB | | Setting of copy job reservation |
| Lv.1 | Details | To set to enable/disable copy job reservation when the Card Reader/ Coin Manager is used. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Enabled, 1: Disabled |
| | Default value | 0 |
| OP-SZ-DT | | Orgnl size dtct ON/OFF at copyboard open |
| Lv.2 | Details | To set ON/OFF of original size detection while the Copyboard is opened.<br>When "0: OFF" is set, enter original size manually from the Control Panel.<br>When "1: ON" is set, original size is detected automatically. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| NW-SCAN | | Setting of network scan function usage |
| Lv.2 | Details | To set to enable/disable use of network scan function. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not change this mode in Japan.<br>• For PS/PCL machines for overseas (outside Japan), fix the setting value as "1: Enabled". For others, permit the use. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| HDCR-DSP | | Setting of HDD complete delete method |
| Lv.2 | Details | To set data deletion method of HDD data complete deletion function. |
| | Use case | When switching the deletion method in HDD data complete deletion mode |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 4<br>1: 1-time deletion with 0 data, 2: 1-time deletion with random data, 3: 3-time deletion with random data, 4: DOD |
| | Default value | 1 |
| | Supplement/memo | HDD data complete deletion function: a function to completely delete data in HDD by overwriting with 0 (null) data or random data to the file data when logically deleting file on HDD (deleting management information data). |

| COPIER > OPTION > USER | | |
|---|---|---|
| JOB-INVL | | Job intvl setting at interruption copy |
| Lv.2 | Details | To set output interval between jobs at the time of interruption copy. Sorting is difficult after interruption copy because of the continuous output of the next job. Paper interval becomes longer when starting pickup for the next job after the last sheet of the previous job is delivered. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Continuous output of the interruption copy and the next job<br>1: Starting pickup for the next job after the interruption copy is delivered all.<br>2: Starting pickup for the next job after the previous job is delivered all. (For all jobs) |
| | Default value | 0 |
| TAB-ROT | | Set of landscape img rotn at PDL:tab ppr |
| Lv.1 | Details | To set whether to rotate landscape image by 180 degrees when PDL print is made on tab paper.<br>When "1: Rotated" is set, image is rotated. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not rotated, 1: Rotated |
| | Default value | 0 |
| PR-PSESW | | Display/hide of output Stop button |
| Lv.1 | Details | To set whether to display or hide [Stop] button on the Status Monitor screen. |
| | Use case | • Upon user's request<br>• When promptly stopping the print job in operation or under reservation |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |

| COPIER > OPTION > USER | | |
|---|---|---|
| IDPRN-SW | | Charge target job set of dept mngm cntr |
| Lv.1 | Details | To set the job type that advances the department management counter. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0:<br>PRINT category: Inbox Print, Report Print, Send Local Print, PDL Print<br>COPY category: COPY<br>1:<br>PRINT category: Report Print, Send Local Print, PDL Print<br>COPY category: COPY, Inbox Print |
| | Default value | 0 |
| PCL-COPY | | Set of PCL COPIES command control method |
| Lv.2 | Details | To set the binder control method of COPIES command with PCL. Select whether to use the control method of Canon-made PCL or use the same control method of non-Canon-made PCL. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535<br>0: Control method of Canon-made PCL (following the value of COPIES command that is specified for each page to control on a page basis)<br>1: Control method of non-Canon-made PCL (handling the value of COPIES command, which is specified for page 1 at the time of Collate mode, as bind figure while the value of COPIES command for the next page or later is invalid. Same control applies as Canon-made PCL at the time of non-sorted mode)<br>2 to 65535: For future use |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| CNT-SW | | Set default dspl items on charge counter |
| Lv.1 | Details | To set default display items of the charge counter on the Counter Check screen. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this mode overseas (outside Japan). |
| | Display/adj/set range | 0 to 2<br>For Japan<br>0: Counter 1 - Total 1: 101<br>1: Counter 1 - Total 2: 102, Counter 2 - Copy (Total 2): 202, Counter 3 - Total A2: 127<br>2: Not used<br>For UL<br>0: Counter 1 - Total 1: 101, Counter 2 - Total (Large): 103, Counter 3 - Copy (Total 1): 201, Counter 4 - Copy (Large): 203<br>1: Counter 1 - Total 2: 102, Counter 2 - Copy (Total 2): 202<br>2: Not used |
| | Default value | 0 |
| TAB-ACC | | Auto cassette change set for tab paper |
| Lv.1 | Details | To set to enable/disable auto cassette change when tab paper runs out. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to instruct the user to thoroughly comply the following:<br>• Use tab paper with the same number of tabs.<br>• Set tab paper.<br>Be sure to comply the above; otherwise, proper print is not available and it can cause soil inside the machine because of toner. |
| | Display/adj/set range | 0 to 1<br>0: Auto cassette change disabled, 1: Auto cassette change enabled |
| | Default value | 0 |
| BCNT-AST | | Set of box print charge target job |
| Lv.1 | Details | To set the job type that advances the count in box print with NE Controller (ASSIST). |
| | Use case | When switching the job type that is subject to counting of the box print with NE Controller |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: PDL job, 1: Copy job |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| PRJOB-CP | | Set count TX at RX/report print |
| Lv.2 | Details | To set to enable/disable a page-basis count pulse transmission to the charging management device at the time of reception print or report print. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: No transmission, 1: Transmission |
| | Default value | 0 |
| | Supplement/memo | Charging management device: Coin Manager, Non-Canon-made control card |
| DOC-REM | | Display/hide of original removal message |
| Lv.1 | Details | To set whether to display or hide the message to remove original when scanning with DADF without opening/closing DADF after scanning with the Copyboard. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| DPT-ID-7 | | Password entry set at dept ID reg/auth |
| Lv.2 | Details | To set whether to require a password entry at the time of registration/authentication of department ID.<br>With the setting to require entry, entry of 7-digit password is required as well as entry of department ID. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Department ID only, 1: 7-digit (password) entry |
| | Default value | 0 |
| RUI-RJT | | Connct set at invalid auth from remoteUI |
| Lv.2 | Details | To set to disconnect HTTP port when the machine receives invalid authentication from remote UI 3 times. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Continued connection, 1: Disconnected |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| CTM-S06 | | Set of password delete from export file |
| Lv.2 | Details | To set to delete password for file transmission address from export file.<br>With the setting to delete password, the password of file transmission target is deleted at the time of exporting address book data from remote UI. |
| | Use case | • Upon user's request<br>• When avoiding information leak |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Retained, 1: Deleted |
| | Default value | 0 |
| FREG-SW | | Dspl/hide of MEAP counter free rgst area |
| Lv.2 | Details | To set whether to display or hide the free register area of MEAP counter for SEND |
| | Use case | At trouble analysis |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use this at the normal service.<br>• Take necessary action in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Supplement/memo | Individual count-up (counter advance) of MEAP application is available in the free register area of MEAP counter. |
| IFAX-SZL | | Setting of IFAX send size limit |
| Lv.2 | Details | To set for restricting data size at the time of IFAX transmission that does not go through the server.<br>With the setting to restrict the data size, there will be #830 error in the case of sending data that exceeds the upper limit value.<br>In the case that the data goes through the server, the size of transmission data is always restricted. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Limited, 1: Not limited (Restriction applies when data goes through the server.) |
| | Default value | 1 |
| | Related UI menu | Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending |
| | Supplement/memo | Specify the upper limit value for transmission data size in user mode. |

| COPIER > OPTION > USER | | |
|---|---|---|
| IFAX-PGD | | Set page split TX at IFAX Simple mode TX |
| Lv.2 | Details | To set to enable/disable split-data transmission on a page basis in the case that the transmission size in IFAX Simple mode exceeds the upper limit value. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | In the case to enable split-data transmission, be sure to get approval from the user by explaining the following:<br>• No guarantee for page order on the reception side<br>• There is a possibility of interruption of other received jobs between pages. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> CLEANING> W-CLN-P |
| | Related UI menu | Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending |
| | Supplement/memo | Specify the upper limit value for transmission data size in user mode. |
| MEAPSAFE | | Setting of MEAP safe mode |
| Lv.2 | Details | To set safe mode for MEAP platform.<br>MPSF is displayed on the Control Panel in safe mode.<br>In safe mode, MEAP application is stopped while just the system application, which starts with initial state, is activated. This mode enables obtaining log for cause analysis of MEAP failure. |
| | Use case | Perform system recovery processing when MEAP platform fails to be activated due to resource confliction between MEAP applications, service registration or use order. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Normal mode, 1: Safe mode |
| | Default value | 0 |
| AFN-PSWD | | Access limit setting to user mode |
| Lv.2 | Details | To set to restrict password entry when accessing to the user mode.<br>With the setting to enable this mode, password entry of system administrator is required after pressing Settings/Registration key. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Password is not required, 1: Password is required |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| PTJAM-RC | | Auto reprint setting at PDL print jam |
| Lv.2 | Details | To set to automatically restart printing after jam recovery that occurs with PDL print. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not automatically reprinted, 1: Automatically reprinted |
| | Default value | 1 |
| PDL-NCSW | | Card mngm setting for PDL print job |
| Lv.2 | Details | To set to make PDL print job to be subject to card management by the Card Reader.<br>With the setting to enable this mode, PDL print is available only when the card ID of the card inserted to the Card Reader matches the department ID. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: PDL print is available with no card inserted.<br>1: PDL print is available only when the card ID matches the department ID in the case that the card is inserted. |
| | Default value | 0 |
| SLP-SLCT | | Usage setting of network applications |
| Lv.2 | Details | With the setting to use network-related application, the machine can be recovered through network because it does not move to sleep mode 1.<br>For this machine to recover from sleep mode 1 through network, a particular packet needs to be received; however, the existing network-related application does not send this packet. With the setting not to use the network-related application, this machine cannot recover from sleep mode 1 through network when it gets into sleep mode 1. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Do not use this at the normal service. |
| | Display/adj/set range | 0 to 1<br>0: Not used (Shift to sleep mode 1 is available.)<br>1: Used (Shift to sleep mode 1 is not available.) |
| | Default value | 0 |
| | Supplement/memo | Network-related application: NetSpot Accountant, imageWARE |

| COPIER > OPTION > USER | | |
|---|---|---|
| PS-MODE | | Setting of PS print line drawing |
| Lv.2 | Details | Details To set the line drawing processing at PS print.<br>In case that line width differs according to the print position, when 8 is set, PostScript interpreter automatically adjusts the line width. |
| | Use case | Use case When right and left ruled lines are different in width |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 65535<br>8: Auto adjustment of line width<br>0 to 7, 9 to 65535: Spare |
| | Default value | 0 |
| CNCT-RLZ | | Setting of connection serialize function |
| Lv.2 | Details | Connection serialize is a function to assure job grouping function of imageWARE Output Manager Select Edition V1.0.<br>The setting to enable this mode can avoid job rearrangement because the machine does not receive job data from other connection until it completes job data reception from the current connection. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Supplement/memo | Connection: Connection to be established through network between multiple hosts (PC, etc).<br>Job grouping function: A function of imageWARE Output Manager Select Edition V1.0. This is to prevent job interruption from other PC by group job (sending multiple jobs in 1 session at job transmission). |
| JA-FUNC | | ON/OFF of job archive function |
| Lv.2 | Details | To set ON/OFF of job archive function. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Changing this mode is not available in service mode, but reference is available (in service mode).<br>This mode is available only with the MEAP program that supports job archive. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| JA-JOB | | Setting of job archive target job |
| Lv.2 | Details | To set the job type subject to job archive.<br>With the job archive function enabled, archive operation is executed when executing the target job. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Changing this mode is not available in service mode, but reference is available (in service mode).<br>This mode is available only with the MEAP program that supports job archive. |
| | Display/adj/set range | 0: N/A, 3: Limited to FAX/IFAX, 0xFFFFFFFF: All jobs |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > USER > JA-FUNC |
| JA-RESTR | | Setting of job archive limit items |
| Lv.2 | Details | To set restriction items for job archive specification.<br>With job archive function enabled, follow the setting to execute operation to restrict specification. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Changing this mode is not available in service mode, but reference is available (in service mode).<br>This mode is available only with the MEAP program that supports job archive. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON<br>32 specification restrictions with Bit definition<br>Bit0: Function to obtain image file (0: OFF, 1:ON)<br>Bit1: Function to compose form registration (0: OFF, 1: ON)<br>Bit2: Function to edit document (0:OFF, 1: ON) |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > USER > JA-FUNC |
| LDAP-SW | | Retrieval condition set for LDAP server |
| Lv.1 | Details | To set the condition to search e-mail address, etc. from LDAP server. |
| | Use case | When specifying condition to search e-mail address, etc. from LDAP server |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 5<br>0: Includes the next, 1: Not include the next, 2: Equivalent to the next, 3: Not equivalent to the next, 4: Starts with the next, 5: Finishes with the next |
| | Default value | 4 |
| | Supplement/memo | LDAP (Lightweight Directory Access Protocol): Registering LDAP server enables to search e-mail address, etc. from LDAP server and the result can be registered in the Address Book, etc. Registration is available by the following: Set Destination > Register LDAP Server |

| COPIER > OPTION > USER | | |
|---|---|---|
| FROM-OF | | Deletion of mail sender's address |
| Lv.1 | Details | To set whether to delete the sender's address (From) at the time of e-mail transmission. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Retained, 1: Deleted |
| | Default value | 0 |
| DOM-ADD | | Additional entry of mail destn domain |
| Lv.2 | Details | To set to automatically add the domain specified in user mode to the sending address (To) entered at the time of e-mail transmission.<br>If specifying "xxx.com" as a domain in user mode in advance, just entering "aaa" enables to display "aaa@xxx.com" when sending e-mail. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Not added, 1: Added |
| | Default value | 0 |
| FILE-OF | | File send prohibition to entered address |
| Lv.1 | Details | To set to prohibit address entry at the time of file transmission.<br>File transmission is not available by entering the address because of no display of "File" on the transmission screen.<br>The addresses already registered in the Address Book can be used. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used. |
| | Display/adj/set range | 0 to 1<br>0: Enabled, 1: Disabled |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| MAIL-OF | | Mail send prohibition to entered address |
| Lv.1 | Details | To set to prohibit address entry at the time of e-mail transmission.<br>E-mail transmission is not available by entering the address because of no display of "E-Mail" on the transmission screen.<br>The addresses already registered in the Address Book can be used. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used. |
| | Display/adj/set range | 0 to 1<br>0: Enabled, 1: Disabled |
| | Default value | 0 |
| IFAX-OF | | IFAX send prohibition to entered address |
| Lv.1 | Details | To set to prohibit address entry at the time of I-Fax transmission.<br>IFAX transmission is not available by entering the address because of no display of "I-Fax" on the transmission screen.<br>The addresses already registered in the Address Book can be used. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used. |
| | Display/adj/set range | 0 to 1<br>0: Enabled, 1: Disabled |
| | Default value | 0 |
| LDAP-DEF | | Initial condtn set of LDAP server search |
| Lv.1 | Details | To set initial condition for search target attribute that is specified at the time of LDAP server Details search. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 6<br>0: Name, 1: E-mail, 2: FAX, 3: Organization, 4: Organization unit, 5: No registration 1 (any setting), 6: No registration 2 (any setting) |
| | Default value | 0 |
| | Related service mode | COPIER > OPTION > USER > LDAP-SW |

| COPIER > OPTION > USER | | |
|---|---|---|
| FREE-DSP | | Display/hide of charge disable screen |
| Lv.2 | Details | To set whether to display or hide the Use Charge Management screen for switching between charge and no charge.<br>The hardware switch for switching charge/no charge in the Coin Manager enables the mode in which all the services are available for free (store manager mode) by temporarily releasing the charging system.<br>Even without the hardware switch, the mode can be switched with the software switch when it is set to display the Use Charge Management screen in Settings/Registration. |
| | Use case | When enabling all the services to be provided for free by temporarily releasing the charging system |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related UI menu | Management Settings > Charge Management > Use Charge Management |
| HDCR-DSW | | Dspl/hide of HDD complete delete ON/OFF |
| Lv.1 | Details | To set whether to display or hide “Hard Disk Data Complete Deletion” in user mode.<br>With this setting, HDD data complete deletion function is available with ON/OFF button on the screen. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| | Related UI menu | Management Settings > Data Management > HDD Data Complete Deletion > Hard Disk Data Complete Deletion |

| COPIER > OPTION > USER | | |
|---|---|---|
| DK1-ASST | | Setting of machine’s Deck Air Heater |
| Lv.1 | Details | To set the condition to turn ON the machine’s Deck Air Heater for air floatation.<br>When the media is switched from non-coated paper to coated paper, pickup operation does not start until the Air Heater for air floatation reaches the specified temperature. To shorten the wait time, set to non media-dependent.<br>When the use environment is near the threshold for turning ON/OFF the Air Heater, switching occurs frequently, which increases the wait time. To shorten the wait time, set to Always ON. |
| | Use case | When receiving a request to shorten the wait time |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • When setting non media-dependent, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance for non-coated paper may decrease.<br>• When setting Always ON, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance may decrease if humidity decreases. |
| | Display/adj/set range | 0 to 2<br>0: Media and environment condition-dependent<br>1: Environment condition-dependent (No media-dependent)<br>2: Always Air Heater ON (No environment/media-dependent) |
| | Default value | 0 |
| SNMP-COA | | Inside comty name SNMPaccess limit:admin |
| Lv.2 | Details | To restrict SNMP access by the community name (administrator right) that is kept internally.<br>This machine internally retains the community name (administrator right) other than the SNMP community name that is specified in user mode. Canon-made utility software, such as NetSpot, uses this community name.<br>Because of security concern, select 0/1 in the case to restrict SNMP access with the internal community name. |
| | Use case | When restricting SNTP access with the community name (administrator right) that is retained internally |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: OFF, 1: Read only, 2: Read/Write |
| | Default value | 1 |
| | Related UI menu | Preferences > Network > SNMP Settings > Community Name 1 Settings |

| COPIER > OPTION > USER | | |
|---|---|---|
| SCALL-SW | | Display/hide of repair request button |
| Lv.1 | Details | To set whether to display or hide the repair-request button on the Control Panel. |
| | Use case | When the sales company supports service by the repair-request button |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| SCALLCMP | | Set of repair request complete notice |
| Lv.1 | Details | With this setting enabled, a notification of repair completion is sent to UGW server to clear the repair-request status that is retained internally. |
| | Use case | Service technician uses this mode after completing repair. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1 |
| | Default value | 0 |
| USBH-DSP | | Display/hide of “Use USB Host” |
| Lv.2 | Details | To set whether to display “Preferences > External Interface > USB Settings > Use USB Host”.<br>By selecting “1: Display”, whether to use USB host on USB Settings screen can be selected. |
| | Use case | When switching to display or hide “Use USB Host” on USB Settings screen |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related UI menu | Preferences > External Interface > USB Settings > Use USB Host |

| COPIER > OPTION > USER | | |
|---|---|---|
| USBM-DSP | | Dspl/hide of USB ex-memory device driver |
| Lv.2 | Details | To set whether to display “Preferences > External Interface > USB Settings > Use MEAP Driver for USB External Device”.<br>By selecting “0: Hide”, the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB external memory device. |
| | Use case | When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB External Device”, set 0 after the specified setting is completed. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| | Related UI menu | Preferences> External Interface> USB Settings> Use MEAP Driver for USB External Device |
| USBI-DSP | | Dspl/hide of USB input device driver set |
| Lv.2 | Details | To set whether to display “Preferences > External Interface > USB Settings > Use MEAP Driver for USB Input Device”.<br>By selecting “0: Hide”, the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB input device. |
| | Use case | When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB Input Device”, set 0 after the specified setting is completed. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |
| | Related UI menu | Preferences > External Interface > USB Settings > Use MEAP Driver for USB Input Device |
| CTCHKDSP | | Display/hide of counter print |
| Lv.1 | Details | To set whether to display or hide “Print List” on the Counter Check screen.<br>Model name, model number information, counter check date and counter information can be output as a total count management report. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 1 |

| COPIER > OPTION > USER | | |
|---|---|---|
| DFLT-ADJ | | Tgt Auto Adj Gradation initial dspl set |
| Lv.1 | Details | To set the initial display (highlight in blue) of the target Full Adjust/ Quick Adjust items on Auto Adjust Gradation screen of user mode.<br>This setting is enabled when EFI Controller is connected or only on the copy model which Adobe PS/PDF is available.<br>When 0 is set, the adjustment item is not displayed.<br>When 1 to 3 is set, the target adjustment item (Copy/Printer/Both) is displayed to select (highlighted in blue). |
| | Use case | When switching the initial display at the time of Auto Adjust Gradation |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 3<br>0: Adjustment item is not displayed.<br>1: “Copy” in the target adjustment items is selected.<br>2: “Printer” in the target adjustment items is selected.<br>3: “Both” in the target adjustment items is selected. |
| | Default value | 0 |
| | Related UI menu | Settings/Registration> Adjustment/Maintenance> Auto Adjust Gradation |
| USBR-DSP | | Dspl/hide of USB infrared device driver |
| Lv.2 | Details | To set whether to display “Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device.” |
| | Use case | When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB Infrared Device,” set 0 after the specified setting is completed. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related UI menu | Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device |
| POL-SCAN | | Dspl/hide Rights Management Server set |
| Lv.1 | Details | When “1: Display” is set, the Rights Management Server function screen is displayed.<br>While the Rights Management Server function is a standard feature, it is possible to hide if not necessary. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| PH-D-SL2 | | Set halftone process in text/photo mode |
| Lv.2 | Details | When copying or B&W scanning to Inbox in text/photo mode, halftone processing of the image which reproduces gradation of text and photo judgment areas can be specified with this setting.<br>Set to 1 when jaggy occurs or request to use the same halftoning method (text area) as conventional one is raised.<br>Set to 2 when moire occurs frequently or request to use the same halftoning method as conventional B&W MFP method is raised.<br>Even 0 is set, TBIC is used for text judgment area and low screen ruling for photo judgment area at the time of B&W Inbox scan.<br>The setting is disabled when the B&W Inbox scanning density is set to auto. |
| | Use case | • When jaggy occurs on the edge of text or thin lines at copy output. Especially when jaggy occurs in the text or thin lines (text in halftone dots) of the area where gradation in the halftone density is expressed like photo, graphics, etc.<br>• When moire occurs frequently at the time of copy or B&W Inbox scan Especially when moire frequently occurs in the area where gradation in the halftone density is expressed like photo, graphics, etc. and this symptom is not alleviated with PH-D-SEL or sharpness adjustment<br>• When receiving a request to use the same halftoning method (text area) as the conventional one (model with image area separation method) at copy output<br>• When receiving a request to use the same halftoning method (both text and photo areas) as the conventional B&W MFP method at the time of copy or B&W Inbox output |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Low screen ruling (134 lines) is used for photo judgment area and high screen ruling (141 lines) for text judgment area.<br>1: Low screen ruling is used for photo judgment area and TBIC for text judgment area.<br>2: TBIC is used for both photo and text judgment areas. |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> USER> PH-D-SEL |
| SCAN-RSL | | Setting of scanned image resolution |
| Lv.2 | Details | To set the resolution of image which is generated by scan processing. |
| | Use case | When the scan processing performance with 1200 dpi is low |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: 1200 dpi, 1: 600 dpi |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| JA-SBOX | | Setting of linking with Advanced Box:SAM |
| Lv.2 | Details | To set the link with Advanced Box when iW SAM is enabled.<br>When 1 is set, linking with Advanced Box is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-DFAX | | Setting of direct fax transmission: SAM |
| Lv.2 | Details | To set the direct fax transmission when iW SAM is enabled.<br>When 1 is set, the direct fax transmission is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-REP | | Setting of TX Report with image: SAM |
| Lv.2 | Details | To set the TX Report with image when iW SAM is enabled.<br>When 1 is set, the TX Report with image is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-FREP | | Setting of Fax TX Report with image: SAM |
| Lv.2 | Details | To set the Fax TX Report with image when iW SAM is enabled.<br>When 1 is set, the Fax TX Report with image is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-BOX | | Setting of Inbox document operation: SAM |
| Lv.2 | Details | To set the operation for Inbox document at the time of iW SAM<br>When 1 is set, the Inbox document can be operated. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-FORM | | Setting of image composition: SAM |
| Lv.2 | Details | To set the image composition when iW SAM is enabled.<br>When 1 is set, the image composition is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| JA-PREV | | Setting of preview page deletion: SAM |
| Lv.2 | Details | To set whether a page is deleted from the scan preview screen at the time of iW SAM<br>When 1 is set, a page is deleted from the scan preview screen. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-PULL | | Setting of network scan: SAM |
| Lv.2 | Details | To set the network scan when iW SAM is enabled.<br>When 1 is set, the network scan is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-PDLB | | Set of printer driver multi box save:SAM |
| Lv.2 | Details | To set whether a document can be simultaneously saved to multiple Inboxes from the printer driver at the time of iW SAM.<br>When 1 is set, a document can be saved to multiple Inboxes from the printer driver. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-JOBK | | Setting of job merge allowance:SAM |
| Lv.2 | Details | To set whether merging jobs is allowed when iW SAM is enabled.<br>When 1 is set, jobs can be merged. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-JDF | | Setting of JDF: SAM |
| Lv.2 | Details | To set the use of JDF when iW SAM is enabled.<br>When 1 is set, JDF can be used. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |

| COPIER > OPTION > USER | | |
|---|---|---|
| JA-RUI | | Setting of Inbox document access: SAM |
| Lv.2 | Details | To set the Inbox document access from remote UI at the time of iW SAM<br>When 1 is set, accessing to the Inbox document from remote UI is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| JA-WEB | | Setting of Inbox document upload: SAM |
| Lv.2 | Details | To set the Inbox document upload with the Web browser at the time of iW SAM.<br>When 1 is set uploading to the Inbox document with the Web Browser is enabled. |
| | Use case | When the operation restriction is cleared at the time of iW SAM |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Disabled, 1: Enabled |
| | Default value | 0 |
| EXP-CRYP | | Confdntial encrypt ON/OFF:add book exprt |
| Lv.1 | Details | To set whether to encrypt the confidential part (password part) in the Address Book when exporting the Address Book and device settings via RUI.<br>When 0 is set, the confidential part in the Address Book is exported without encryption. |
| | Use case | When there is a need to export password without encryption because of operation and tool |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure not to allow the user to execute export without encryption because of security concern. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |

| COPIER > OPTION > USER | | |
|---|---|---|
| THK1-DSP | | Dspl/hide Fin prdctvty/stck condtn prrty |
| Lv.1 | Details | To set whether to display or hide “Productivity/stacking condition priority of Finisher (heavy paper 1)” in user mode. |
| | Use case | When setting productivity/stacking condition priority of Finisher by user |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to receive approval from the user in advance after explaining that there is a possibility that stacking condition may decrease by giving priority on productivity. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> BUFF-THK |
| SLEEP1SW | | Power supply when shifting to SLEEP1 |
| Lv.1 | Details | When shifting to SLEEP1 mode, the power stops to be supplied, so it takes time to activate after a job is received.<br>When 1 is set, the power keeps to be supplied even after shifting to SLEEP1 mode, so the activation of job processing becomes earlier. |
| | Use case | Upon user’s request (when job processing after shifting to SLEEP1 is slow) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| CNCL-ATH | | ON/OFF of secure print domain judgment |
| Lv.1 | Details | To set whether to conduct authentication when stopping a secured job.<br>By setting 1, security for the secured job is enhanced when user authentication is not conducted. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |

| COPIER > OPTION > USER | | |
|---|---|---|
| EZY-SCRP | | ON/OFF of secure print simple auth |
| Lv.1 | Details | To set whether to conduct secure print simple authentication.<br>When 1 is set, secured print, encryption secured print and inbox print are received, but the normal print jobs are canceled.<br>If the password “3758211” is entered at job sending, authentication by entering the password on the Control Panel is not required. If the password is not entered at job sending, authentication by entering the password on the Control Panel is necessary at job output.<br>In addition, the following selection is added as auto deletion time of secure job: 10 minutes, 20 minutes, 30 minutes |
| | Use case | Upon user’s request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| DMN-MTCH | | ON/OFF of secure print domain judgment |
| Lv.1 | Details | To set whether to display only the job which matches the domain in the “My Job Status” screen of the secure print.LS<br>When 1 is set, only the job which matches the user name and domain name is displayed in the “My Job Status” screen, so the job which does not match the domain is not displayed. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| SCN-RSLG | | Set outpt resolution at composition copy |
| Lv.1 | Details | To set the output resolution when the composition function is used at copy in Text/Photo mode.<br>When 0 is set, image quality becomes the same level (1200dpi) as when the composition function is not used, but productivity decreases. |
| | Use case | Upon user’s request (to improve image quality) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to receive approval from the user in advance by explaining that productivity decreases by changing the setting. |
| | Display/adj/set range | 0 to 1<br>0: 1200 dpi, 1: 600 dpi |
| | Default value | 1 |
| | Supplement/memo | Composition function: Page Numbering, Copy Set Numbering, Watermark, Print-Date |

| COPIER > OPTION > USER | | |
|---|---|---|
| SMD-EXPT | | Setting of export target data: remote UI |
| Lv.1 | Details | To set whether to export “service mode data” from remote UI.<br>When 1 is set, “service mode data” is displayed as the target data of export on remote UI. When installing more than 1 machine at the same time, the same service mode data can be registered. |
| | Use case | When installing more than 1 machine at the same time |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| | Supplement/memo | If selecting “service mode data” as the target data of export on remote UI after setting SMD-EXPT to 1, service mode data can be exported. |
| SNDSTREN | | Set of setting delete aftr scan and send |
| Lv.1 | Details | To set whether to delete the transmission settings except for the address after transmission from the “Scan and Send” screen. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Delete, 1: Retain |
| | Default value | JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| FAXSTREN | | Set of setting delete aftr fax transmit |
| Lv.1 | Details | To set whether to delete the transmission settings except for the address after transmission from the “Fax” screen. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Delete, 1: Retain |
| | Default value | JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |

T-8-73

## CST

| COPIER > OPTION > CST | | |
|---|---|---|
| U1-NAME | | Dspl/hide ppr name in ppr size group U1 |
| Lv.2 | Details | To set whether to display or hide paper name at paper size group U1 detection. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| U2-NAME | | Dspl/hide ppr name in ppr size group U2 |
| Lv.2 | Details | To set whether to display or hide paper name at paper size group U2 detection. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| U3-NAME | | Dspl/hide ppr name in ppr size group U3 |
| Lv.2 | Details | To set whether to display or hide paper name at paper size group U3 detection. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| U4-NAME | | Dspl/hide ppr name in ppr size group U4 |
| Lv.2 | Details | To set whether to display or hide paper name at paper size group U4 detection. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |

| COPIER > OPTION > CST | | |
|---|---|---|
| P-SZ-C1 | | Setting of Right Deck paper size |
| Lv.1 | Details | To set the paper size used in the Right Deck. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 2<br>0: A4, 1: B5, 2: LTR |
| | Default value | 0 |
| P-SZ-C2 | | Setting of Left Deck paper size |
| Lv.1 | Details | To set the paper size used in the Left Deck. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 2<br>0: A4, 1: B5, 2: LTR |
| | Default value | 0 |
| CST3-P1 | | Setting of Cassette 3 paper size |
| Lv.1 | Details | To set the paper size used in Cassette 3. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 1<br>0: A5R, 1: STMTR |
| | Default value | JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Related UI menu | Preferences> Paper Settings> Paper Settings> A5R/STMTR Original Selection |
| CST3-P2 | | Setting of Cassette 3 paper size |
| Lv.1 | Details | To set the paper size used in Cassette 3. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 1<br>0: B5, 1: EXEC |
| | Default value | JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Related UI menu | Preferences> Paper Settings> Paper Settings> B5/EXEC Original Selection |

| COPIER > OPTION > CST | | |
|---|---|---|
| CST4-P1 | | Setting of Cassette 4 paper size |
| Lv.1 | Details | To set the paper size used in Cassette 4. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 1<br>0: A5R, 1: STMTR |
| | Default value | JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Related UI menu | Preferences> Paper Settings> Paper Settings> A5R/STMTR Original Selection |
| CST4-P2 | | Setting of Cassette 4 paper size |
| Lv.1 | Details | To set the paper size used in Cassette 4. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to match with the hardware setting size. |
| | Display/adj/set range | 0 to 1<br>0: B5, 1: EXEC |
| | Default value | JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0 |
| | Related UI menu | Preferences> Paper Settings> Paper Settings> B5/EXEC Original Selection |
| CST3-U1 | | Set Cst3 overseas special ppr category 1 |
| Lv.1 | Details | To set the overseas special paper category 1 used in Cassette 3. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 42<br>0: Special paper is not used, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4 |
| | Default value | 0 |
| CST3-U3 | | Set Cst3 overseas special ppr category 3 |
| Lv.1 | Details | To set the overseas special paper category 3 used in Cassette 3. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 31<br>0: Special paper is not used, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR |
| | Default value | 0 |

| COPIER > OPTION > CST | | |
|---|---|---|
| CST4-U1 | | Set Cst4 overseas special ppr category 1 |
| Lv.1 | Details | To set the overseas special paper category 1 used in Cassette 4. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 42<br>0: Special paper is not used, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35: Not used, 36: A-OFI, 37: M-OFI, 38 to 41: Not used, 42: FA4 |
| | Default value | 0 |
| CST4-U3 | | Set Cst4 overseas special ppr category 3 |
| Lv.1 | Details | To set the overseas special paper category 3 used in Cassette 4. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 31<br>0: Special paper is not used, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR |
| | Default value | 0 |

T-8-74

## ■ ACC

| COPIER > OPTION > ACC | | |
|---|---|---|
| COIN | | Setting of charge management |
| Lv.1 | Details | To set charging management method. |
| | Use case | At installation of Coin Manager |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Following items are automatically specified when changing the value to 3 (from 0 to 2). The change will not be returned even if changing back the value to 0 to 2 (from 3) once the mode has been changed.<br>• COPIER> OPTION> USER> CONTROL=1<br>• COPIER> OPTION> NETWORK> DA-CNCT=1<br>• COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX=0<br>• Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings > SMTP Receive, POP=OFF<br>• Preferences> Network > TCP/IP Settings > DNS Settings > FTP Print Settings > Use FTP Printing=OFF<br>• Preferences> Network > TCP/IP Settings > DNS Settings > IPP Print Settings > Use IPP Printing=ON |
| | Display/adj/set range | 0 to 7<br>0: No charge<br>1: Charge with Coin Manager<br>2: Charge with remote counter<br>3: Charge with DA (only in Japan)<br>4: Charge with this machine itself<br>5: Not used<br>6: External charge mode 6<br>7: External charge mode 7 |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> USER> CONTROL<br>COPIER> OPTION> FNC-SW> DA-CNCT<br>COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX<br>COPIER> OPTION> ACC> PDL-THR |
| | Related UI menu | Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings<br>Preferences> Network > TCP/IP Settings > DNS Settings > FTP Print Settings<br>Preferences> Network > TCP/IP Settings > DNS Settings > IPP Print Settings |
| | Supplement/memo | Control card can be used with “0: No charge”.<br>DA: Digital Accessory |
| DK-P | | Setting of Paper Deck paper size |
| Lv.1 | Details | To set the paper size used in the Paper Deck. |
| | Display/adj/set range | 0 to 2<br>0: A4, 1: B5, 2: LTR |
| | Default value | 0 |

| COPIER > OPTION > ACC | | |
|---|---|---|
| CARD-SW | | Screen set when Coin Manager connected |
| Lv.1 | Details | To set coin or card that the user is urged to insert on the Control Panel when the Coin Manager is connected. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 3<br>0: Card, 1: certification by external device, 2: Coin and card, 3: Card |
| PD-SIZE | | Setting of Side Paper Deck paper size |
| Lv.1 | Details | To set the paper size used in the Side Paper Deck.<br>Although the setting value 0 to 37 can be set, by setting 1 to 21, the basic paper size can be set from the user mode.<br>In the service mode, set the special paper size. |
| | Use case | Upon user’s request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 37 |
| | Default value | 0 |
| CC-SPSW | | Support setting of control card I/F |
| Lv.2 | Details | To set support level for control card (CCIV/CCV) interface. |
| | Use case | Upon user’s request (when connecting to the external counter management system using the control card interface) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: No support, 1: Support |
| | Default value | 0 |
| UNIT-PRC | | Setting of Coin Manager currency unit |
| Lv.2 | Details | To set currency unit to be handled with Coin Manager |
| | Use case | At installation of Coin Manager |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 6<br>0: Japanese yen, 1: Euro, 2: Pound, 3: Swiss Franc, 4: Dollar, 5: No currency unit (no fractional unit), 6: No currency unit (with fractional unit) |
| | Default value | 0 |

| COPIER > OPTION > ACC | | |
|---|---|---|
| MIN-PRC | | Set of Coin Manager minimum price |
| Lv.1 | Details | To set the minimum amount to be handled with Coin Manager.<br>Enter 10 when specifying 10 Japanese yen as the minimum amount to be handled with the Coin Manager that supports Japanese yen.<br>In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents ($ 0.50). |
| | Use case | At installation of Coin Manager |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN. |
| | Display/adj/set range | 0 to 9999 |
| | Default value | 10 |
| | Related service mode | COPIER> OPTION> ACC> COIN, UNIT-PRC |
| | Supplement/memo | As for the charging amount, it causes an error if specifying the value that is smaller than the minimum currency unit with Settings/Registration mode.<br>The unit differs according to the setting value by the following: COPIER> OPTION> ACC> UNIT-PRC. |
| MAX-PRC | | Set of Coin Manager maximum price |
| Lv.1 | Details | To set the maximum amount to be handled with Coin Manager.<br>Enter 8800 when specifying 8800 Japanese yen as the maximum amount to be handled with the Coin Manager that supports Japanese yen.<br>In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents ($ 0.50). |
| | Use case | At installation of Coin Manager |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN. |
| | Display/adj/set range | 0 to 9999 |
| | Default value | 8800 |
| | Related service mode | COPIER> OPTION> ACC> COIN, UNIT-PRC |
| | Supplement/memo | As for charging amount, it causes an error if specifying the value that is larger than the maximum currency unit with Settings/Registration mode.<br>The unit differs according to the setting value by the following: COPIER> OPTION> ACC> UNIT-PRC. |

| COPIER > OPTION > ACC | | |
|---|---|---|
| MIC-TUN | | Manual adj of voice recognize microphone |
| Lv.1 | Details | To manually adjust the voice receiving level (sensitivity) of the connected voice recognition microphone.<br>Microphone sensitivity is automatically tuned in user mode; however, adjust it manually as needed. |
| | Use case | When the sensitivity of microphone is not improved by auto tuning |
| | Display/adj/set range | 0 to 255 |
| | Default value | 128 |
| | Related UI menu | Preferences > Accessibility > Voice Navigation Settings > Tune Microphone |
| SRL-SPSW | | Setting of Serial I/F Kit support |
| Lv.1 | Details | To set the support level of the Serial Interface Kit.<br>To keep processing performance of printer engine, select “1: Priority on speed”.<br>To correctly stop the output by the upper limit number of sheets, select “2: Priority on upper limit number of sheets”. |
| | Use case | At installation of Serial Interface Kit |
| | Caution | With priority on speed, output cannot be correctly stopped by the upper limit number of sheets.<br>With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location. |
| | Display/adj/set range | 0 to 2<br>0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets |
| | Default value | 0 |
| PDL-THR | | Norm PDL pnt set:External charge mode6/7 |
| Lv.2 | Details | To set normal PDL print job processing at external charge mode 6/7.<br>When 1 is set and external charge mode 6/7 is set with COIN, normal PDL print job is executed without being cancelled. |
| | Use case | When setting the normal PDL print processing in external charge mode 6/7 |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Cancel, 1: Execute |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> ACC> COIN |

| COPIER > OPTION > ACC | | |
|---|---|---|
| CR-TYPE | | Setting of Card Reader |
| Lv.1 | Details | To set the model of the Card Reader.<br>Set 1 in the case of connecting the Card Reader-C1. It operates even 0 is set, but recognition rate decreases. |
| | Use case | When connecting the Card Reader-C1 |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Card Reader-F1, 1: Card Reader-C1 |
| | Default value | 0 |

T-8-75

## INT-FACE

| COPIER > OPTION > INT-FACE | | |
|---|---|---|
| IMG-CONT | | Connection setting of print server |
| Lv.1 | Details | To set connection with print server. |
| | Use case | At installation |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 4<br>0: Normal mode (Print server not connected), 1, 2, 3: Not used, 4: Print server connected |
| | Default value | 0 |
| AP-OPT | | Output set of appli with print server |
| Lv.2 | Details | To set whether to permit output from the application (PrintMe) equipped with print server. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Permits the specified account only, 1: Permits, 2: Permits the specified department ID only |
| | Default value | 0 |
| AP-ACCNT | | Job dept ID set of appli w/ print server |
| Lv.2 | Details | To set department ID to the print job from the application (PrintMe) equipped with print server. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 9999999 |
| | Default value | 0 |
| AP-CODE | | Set output pass code from print server |
| Lv.2 | Details | To set the pass code for output from print server. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 9999999 |
| | Default value | 0 |
| NWCT-TM | | Timeout setting of network connection |
| Lv.2 | Details | To set the time to keep network connection between this machine and the PC application (keep-alive setting).<br>As the value is incremented by 1, the time is increased by 1 minute. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 5 |
| | Default value | 5 |
| | Supplement/memo | Expected PC application: Network print application, E-mail function, cascade copy, MEAP network application, etc. |

| COPIER > OPTION > INT-FACE | | |
|---|---|---|
| CNT-TYPE | | Connection setting of print server |
| Lv.1 | Details | To switch print server to be connected.<br>Specify print server with EFI Controller ID. |
| | Use case | At installation of print server |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 999<br>445: imagePASS-U1 |
| | Default value | 1 |

T-8-76

## TEMPO

| COPIER > OPTION > TEMPO | | |
|---|---|---|
| F-POT-SW | | Setting at Potential Sensor failure |
| Lv.2 | Details | To set the control at the Potential Sensor failure.<br>If the potential control, D-max control, etc. are executed at the Potential Sensor failure, an image failure or error occurs.<br>When 0 is set, the potential control and D-max become OFF, so the device can be run temporarily although the Potential Sensor failure occurs.<br>Use the item as a temporary measure when it takes time until replacing the Potential Sensor. |
| | Use case | When replacing the Potential Sensor |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Be sure to set the value back to 1 (ON) after replacing. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 1 |
| | Related service mode | COPIER> OPTION> FNC-SW> PO-CNT |
| F-HUM-SW | | ON/OFF of humidity manual entry |
| Lv.2 | Details | To set whether to enable F-HUM-D setting when an error (failure) in the Environment Sensor occurs.<br>When 1 is set, the F-HUM-D setting is enabled. Use the item as a temporary measure until replacing the Environment Sensor. |
| | Use case | When an error (failure) in the Environment Sensor occurs |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> OPTION> TEMPO> F-HUM-D |
| F-HUM-D | | Manual entry of humidity |
| Lv.2 | Details | Enter the humidity at the installation location manually when an error in the Environment Sensor occurs.<br>When F-HUM-SW is 1, this setting is enabled. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 30 to 99 |
| | Default value | 35 |
| | Related service mode | COPIER>OPTION>TEMPO>F-HUM-SW |

T-8-77

## LCNS-TR

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-SEND | | Installation state dspl of SEND function |
| Lv.2 | Details | To display installation state of SEND function when transfer is disabled. |
| | Use case | When checking whether SEND function is installed |
| | Adj/set/operate method | 1) Select ST-SEND.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-SEND. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 1 |
| TR-SEND | | Trns license key dspl of SEND function |
| Lv.2 | Details | To display transfer license key to use SEND function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-SEND.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-SEND. |
| | Display/adj/set range | 24 digits |
| ST-ENPDF | | Install state dspl of Encryption PDF |
| Lv.2 | Details | To display installation state of Encryption PDF when transfer is disabled. |
| | Use case | When checking whether Encryption PDF is installed |
| | Adj/set/operate method | 1) Select ST-ENPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-ENPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-ENPDF | | Trns license key dspl of Encryption PDF |
| Lv.2 | Details | To display transfer license key to use Encryption PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-ENPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-ENPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-SPDF | | Install state dspl of Searchable PDF |
| Lv.2 | Details | To display installation state of Searchable PDF when transfer is disabled. |
| | Use case | When checking whether Searchable PDF is installed |
| | Adj/set/operate method | 1) Select ST-SPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-SPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-SPDF | | Trns license key dspl of Searchable PDF |
| Lv.2 | Details | To display transfer license key to use Searchable PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-SPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-SPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |
| ST-EXPDF | | Instal state of Encry PDF + Searchbl PDF |
| Lv.2 | Details | To display installation state of Encryption PDF + Searchable PDF when transfer is disabled. |
| | Use case | When checking whether Encryption PDF + Searchable PDF is installed |
| | Adj/set/operate method | 1) Select ST-EXPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-EXPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-EXPDF | | Trns lcns key of Encry PDF+Searchbl PDF |
| Lv.2 | Details | To display transfer license key to use Encryption PDF + Searchable PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-EXPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-EXPDF. |
| | Caution | This mode is enabled when SEND function is installed for Japan. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-PDFDR | | Install state dspl of Direct Print PDF |
| Lv.2 | Details | To display installation state of Direct Print PDF when transfer is disabled. |
| | Use case | When checking whether Direct Print PDF is installed |
| | Adj/set/operate method | 1) Select ST-PDFDR.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PDFDR. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PDFDR | | Trns lcns key dspl of Direct Print PDF |
| Lv.2 | Details | To display transfer license key to use Direct Print PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PDFDR.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PDFDR. |
| | Display/adj/set range | 24 digits |
| ST-SCR | | Install state dspl of Encry Secure Print |
| Lv.2 | Details | To display installation state of Encrypted Secure Print when transfer is disabled. |
| | Use case | When checking whether Encrypted Secure Print is installed |
| | Adj/set/operate method | 1) Select ST-SCR.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-SCR. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-SCR | | Trns license key dspl: Encry Secure Pnt |
| Lv.2 | Details | To display transfer license key to use Encrypted Secure Print when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-SCR.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-SCR. |
| | Caution | This mode is enabled when there is “3DES+USH-H” Board. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-HDCLR | | Installation state display of Data Erase |
| Lv.2 | Details | To display installation state of Data Erase (for old model) when transfer is disabled. |
| | Use case | When checking whether Data Erase (for old model) is installed |
| | Adj/set/operate method | 1) Select ST-HDCLR.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-HDCLR. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-HDCLR | | Transfer license key dspl of Data Erase |
| Lv.2 | Details | To display transfer license key to use Data Erase (for old model) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-HDCLR.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-HDCLR. |
| | Caution | This mode is enabled when there is “3DES+USH-H” Board. |
| | Display/adj/set range | 24 digits |
| ST-BRDIM | | Install state dspl: PCL Barcode Printing |
| Lv.2 | Details | To display installation state of Barcode Printing for PCL when transfer is disabled. |
| | Use case | When checking whether Barcode Printing for PCL is installed |
| | Adj/set/operate method | 1) Select ST-BRDIM.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-BRDIM. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-BRDIM | | Trns lcns key dspl: PCL Barcode Printing |
| Lv.2 | Details | To display transfer license key to use Barcode Printing for PCL when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-BRDIM.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-BRDIM. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-VNC | | Install state dspl of Remote Oprtr Soft |
| Lv.2 | Details | To display installation state of Remote Operators Software when transfer is disabled. |
| | Use case | When checking whether Remote Operators Software is installed |
| | Adj/set/operate method | 1) Select ST-VNC.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-VNC. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-VNC | | Trns lcns dspl of Remote Operators Soft |
| Lv.2 | Details | To display transfer license key to use Remote Operators Software when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-VNC.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-VNC. |
| | Display/adj/set range | 24 digits |
| ST-WEB | | Install state dspl: Web Access Software |
| Lv.2 | Details | To display installation state of Web Access Software when transfer is disabled. |
| | Use case | When checking whether Web Access Software is installed |
| | Adj/set/operate method | 1) Select ST-WEB.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-WEB. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-WEB | | Trns license key dspl of Web Access Soft |
| Lv.2 | Details | To display transfer license key to use Web Access Software when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-WEB.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-WEB. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-HRPDF | | Install state dspl of High Compress PDF |
| Lv.2 | Details | To display installation state of High Compression PDF when transfer is disabled. |
| | Use case | When checking whether High Compression PDF is installed |
| | Adj/set/operate method | 1) Select ST-HRPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-HRPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 1 |
| TR-HRPDF | | Trns lcns key dspl of High Compress PDF |
| Lv.2 | Details | To display transfer license key to use High Compression PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-HRPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-HRPDF. |
| | Display/adj/set range | 24 digits |
| OF-HRPDF | | System.Exception: #N/A! |
| ST-TRSND | | Install state dspl: Trial SEND function |
| Lv.2 | Details | To display installation state of Trial SEND function when transfer is disabled. |
| | Use case | When checking whether Trial SEND function is installed |
| | Adj/set/operate method | 1) Select ST-TRSND.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-TRSND. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-TRSND | | Trns lcns key dspl: Trial SEND function |
| Lv.2 | Details | To display transfer license key to use Trial SEND function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-TRSND.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-TRSND. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-WTMRK | | Install state dspl of Secure Watermark |
| Lv.2 | Details | To display installation state of Secure Watermark when transfer is disabled. |
| | Use case | When checking whether Secure Watermark is installed |
| | Adj/set/operate method | 1) Select ST-WTMRK.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-WTMRK. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-WTMRK | | Trns license key dspl: Secure Watermark |
| Lv.2 | Details | To display transfer license key to use Secure Watermark when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-WTMRK.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-WTMRK. |
| | Display/adj/set range | 24 digits |
| ST-TSPDF | | Install state dspl of Time Stamp PDF: JP |
| Lv.2 | Details | To display installation state of Time Stamp PDF (JP only) when transfer is disabled. |
| | Use case | When checking whether Time Stamp PDF (JP only) is installed |
| | Adj/set/operate method | 1) Select ST-TSPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-TSPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-TSPDF | | Trns lcns key dspl of Time Stamp PDF: JP |
| Lv.2 | Details | To display transfer license key to use Time Stamp PDF (JP only) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-TSPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-TSPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-USPDF | | Install state dspl of Dgtl User Sign PDF |
| Lv.2 | Details | To display installation state of Digital User Signature PDF when transfer is disabled. |
| | Use case | When checking whether Digital User Signature PDF is installed |
| | Adj/set/operate method | 1) Select ST-USPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-USPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-USPDF | | Trns lcns key dspl of Dgtl User Sign PDF |
| Lv.2 | Details | To display transfer license key to use Digital User Signature PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-USPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-USPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |
| ST-DVPDF | | Install state dspl of Device Sign PDF |
| Lv.2 | Details | To display installation state of Device Signature PDF when transfer is disabled. |
| | Use case | When checking whether Device Signature PDF is installed |
| | Adj/set/operate method | 1) Select ST-DVPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-DVPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-DVPDF | | Trns lcns key dspl of Device Sign PDF |
| Lv.2 | Details | To display transfer license key to use Device Signature PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-DVPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-DVPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-SCPDF | | Install state dspl of Trace & Smooth PDF |
| Lv.2 | Details | To display installation state of Trace & Smooth PDF when transfer is disabled. |
| | Use case | When checking whether Trace & Smooth PDF is installed |
| | Adj/set/operate method | 1) Select ST-SCPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-SCPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-SCPDF | | Trns lcns key dspl of Trace & Smooth PDF |
| Lv.2 | Details | To display transfer license key to use Trace & Smooth PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-SCPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-SCPDF. |
| | Caution | This mode is enabled when SEND function is installed. |
| | Display/adj/set range | 24 digits |
| ST-AMS | | Install state dspl of Access Mngm System |
| Lv.2 | Details | To display installation state of Access Management System when transfer is disabled. |
| | Use case | When checking whether Access Management System is installed |
| | Adj/set/operate method | 1) Select ST-AMS.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-AMS. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-AMS | | Trns lcns key dspl of Access Mngm System |
| Lv.2 | Details | To display transfer license key to use Access Management System when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-AMS.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-AMS. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-ERDS | | Install state dspl: E-RDS 3rd Pty Expnsn |
| Lv.2 | Details | To display installation state of E-RDS 3rd Party Expansion when transfer is disabled. |
| | Use case | When checking whether E-RDS 3rd Party Expansion is installed |
| | Adj/set/operate method | 1) Select ST-ERDS.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-ERDS. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| | Supplement/memo | E-RDS 3rd Party Expansion: A function to send charge counter to the third party's charge server. |
| TR-ERDS | | Trns lcns key dspl: E-RDS 3rd Pty Expnsn |
| Lv.2 | Details | To display transfer license key to use E-RDS 3rd Party Expansion when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-ERDS.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-ERDS. |
| | Display/adj/set range | 24 digits |
| | Supplement/memo | E-RDS 3rd Party Expansion: A function to send charge counter to the third party's charge server. |
| ST-PS | | Install state display of PS function |
| Lv.2 | Details | To display installation state of PS function when transfer is disabled. |
| | Use case | When checking whether PS function is installed |
| | Adj/set/operate method | 1) Select ST-PS.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PS. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PS | | Transfer license key dspl of PS function |
| Lv.2 | Details | To display transfer license key to use PS function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PS.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PS. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-PCL | | Install state display of PCL function |
| Lv.2 | Details | To display installation state of PCL function when transfer is disabled. |
| | Use case | When checking whether PCL function is installed |
| | Adj/set/operate method | 1) Select ST-PCL.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PCL. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PCL | | Transfer license key dspl: PCL function |
| Lv.2 | Details | To display transfer license key to use PCL function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PCL.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PCL. |
| | Display/adj/set range | 24 digits |
| ST-PSLI5 | | Install state dspl: PS/LIPS4/LIPS LX: JP |
| Lv.2 | Details | To display installation state of PS/LIPS4/LIPS LX function (JP only) when transfer is disabled. |
| | Use case | When checking whether PS/LIPS4/LIPS LX function (JP only) is installed |
| | Adj/set/operate method | 1) Select ST-PSLI5.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PSLI5. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PSLI5 | | Trns lcns key dspl: PS/LIPS4/LIPS LX: JP |
| Lv.2 | Details | To display transfer license key to use PS/LIPS4/LIPS LX function (JP only) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PSLI5.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PSLI5. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-LIPS5 | | Install state dspl:LIPS LX/LIPS4 func:JP |
| Lv.2 | Details | To display installation state of LIPS LX/LIPS4 function (JP only) when transfer is disabled. |
| | Use case | When checking whether LIPS LX/LIPS4 function (JP only) is installed |
| | Adj/set/operate method | 1) Select ST-LIPS5.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-LIPS5. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-LIPS5 | | Trns lcns key dspl:LIPS LX/LIPS4 func:JP |
| Lv.2 | Details | To display transfer license key to use LIPS LX/LIPS4 function (JP only) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-LIPS5.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-LIPS5. |
| | Display/adj/set range | 24 digits |
| ST-LIPS4 | | Install state display of LIPS4 func: JP |
| Lv.2 | Details | To display installation state of LIPS4 function (JP only) when transfer is disabled. |
| | Use case | When checking whether LIPS4 function (JP only) is installed |
| | Adj/set/operate method | 1) Select ST-LIPS4.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-LIPS4. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-LIPS4 | | Trns license key dspl of LIPS4 func: JP |
| Lv.2 | Details | To display transfer license key to use LIPS4 function (JP only) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-LIPS4.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-LIPS4. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-PSPCL | | Install state dspl of PS/PCL function |
| Lv.2 | Details | To display installation state of PS/PCL function when transfer is disabled. |
| | Use case | When checking whether PS/PCL function is installed |
| | Adj/set/operate method | 1) Select ST-PSPCL.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PSPCL. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PSPCL | | Transfer license key dspl of PS/PCL func |
| Lv.2 | Details | To display transfer license key to use PS/PCL function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PSPCL.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PSPCL. |
| | Display/adj/set range | 24 digits |
| ST-PCLUF | | Install state dspl: PCL/UFR II function |
| Lv.2 | Details | To display installation state of PCL/UFR II function when transfer is disabled. |
| | Use case | When checking whether PCL/UFR II function is installed |
| | Adj/set/operate method | 1) Select ST-PCLUF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PCLUF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PCLUF | | Trns license key dspl of PCL/UFR II func |
| Lv.2 | Details | To display transfer license key to use PCL/UFR II function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PCLUF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PCLUF. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-PSLIP | | Install state dspl of PS/LIPS4 func: JP |
| Lv.2 | Details | To display installation state of PS/LIPS4 function (JP only) when transfer is disabled. |
| | Use case | When checking whether PS/LIPS4 function (JP only) is installed |
| | Adj/set/operate method | 1) Select ST-PSLIP.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PSLIP. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PSLIP | | Trns license key dspl: PS/LIPS4 func:JP |
| Lv.2 | Details | To display transfer license key to use PS/LIPS4 function (JP only) when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PSLIP.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PSLIP. |
| | Display/adj/set range | 24 digits |
| ST-PSPCU | | Install state dspl of PS/PCL/UFR II func |
| Lv.2 | Details | To display installation state of PS/PCL/UFR II function when transfer is disabled. |
| | Use case | When checking whether PS/PCL/UFR II function is installed |
| | Adj/set/operate method | 1) Select ST-PSPCU.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-PSPCU. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-PSPCU | | Trns lcns key dspl of PS/PCL/UFR II func |
| Lv.2 | Details | To display transfer license key to use PS/PCL/UFR II function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-PSPCU.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-PSPCU. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-LXUFR | | Install state display of UFR II function |
| Lv.2 | Details | To display installation state of UFR II function when transfer is disabled. |
| | Use case | When checking whether UFR II function is installed |
| | Adj/set/operate method | 1) Select ST-LXUFR.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-LXUFR. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 1 |
| TR-LXUFR | | Trns license key dspl of UFR II function |
| Lv.2 | Details | To display transfer license key to use UFR II function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-LXUFR.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-LXUFR. |
| | Display/adj/set range | 24 digits |
| ST-HDCR2 | | Install state dspl:HDD Init All Data/Set |
| Lv.2 | Details | To display installation state of HDD Initialize All Data/Settings when transfer is disabled. |
| | Use case | When checking whether HDD Initialize All Data/Settings is installed |
| | Adj/set/operate method | 1) Select ST-HDCR2.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-HDCR2. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-HDCR2 | | Trns lcns key dspl:HDD Init All Data/Set |
| Lv.2 | Details | To display transfer license key to use HDD Initialize All Data/Settings when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-HDCR2.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-HDCR2. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-JBLK | | Install state dspl of Document Scan Lock |
| Lv.2 | Details | To display installation state of Document Scan Lock when transfer is disabled. |
| | Use case | When checking whether Document Scan Lock is installed |
| | Adj/set/operate method | 1) Select ST-JBLK.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-JBLK. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-JBLK | | Trns lcns key dspl of Document Scan Lock |
| Lv.2 | Details | To display transfer license key to use Document Scan Lock when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-JBLK.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-JBLK. |
| | Display/adj/set range | 24 digits |
| ST-AFAX | | Installation state display of Remote Fax |
| Lv.2 | Details | To display installation state of Remote Fax when transfer is disabled. |
| | Use case | When checking whether Remote Fax is installed |
| | Adj/set/operate method | 1) Select ST-AFAX.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-AFAX. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-AFAX | | Transfer license key dspl of Remote Fax |
| Lv.2 | Details | To display transfer license key to use Remote Fax when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-AFAX.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-AFAX. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-POPDF | | Install state display of PDF w/ Policy |
| Lv.2 | Details | To display installation state of PDF function with Policy when transfer is disabled. |
| | Use case | When checking whether PDF function with Policy is installed |
| | Adj/set/operate method | 1) Select ST-POPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-POPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-POPDF | | Trns lcns key display of PDF w/ Policy |
| Lv.2 | Details | To display transfer license key to use PDF function with Policy when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-POPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-POPDF. |
| | Display/adj/set range | 24 digits |
| ST-REPDF | | Install state dspl:Reader Extensions PDF |
| Lv.2 | Details | To display installation state of Reader Extensions PDF when transfer is disabled. |
| | Use case | When checking whether Reader Extensions PDF is installed |
| | Adj/set/operate method | 1) Select ST-REPDF.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-REPDF. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-REPDF | | Trns lcns key dspl:Reader Extensions PDF |
| Lv.2 | Details | To display transfer license key to use Reader Extensions PDF when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-REPDF.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-REPDF. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-OOXML | | Install state display of Office Open XML |
| Lv.2 | Details | To display installation state of Office Open XML when transfer is disabled. |
| | Use case | When checking whether Office Open XML is installed |
| | Adj/set/operate method | 1) Select ST-OOXML.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-OOXML. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-OOXML | | Trns lcns key display of Office Open XML |
| Lv.2 | Details | To display transfer license key to use Office Open XML when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-OOXML.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-OOXML. |
| | Display/adj/set range | 24 digits |
| ST-XPS | | Install state dspl of Direct Print XPS |
| Lv.2 | Details | To display installation state of Direct Print XPS when transfer is disabled. |
| | Use case | When checking whether Direct Print XPS is installed |
| | Adj/set/operate method | 1) Select ST-XPS.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-XPS. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-XPS | | Trns lcns key dspl of Direct Print XPS |
| Lv.2 | Details | To display transfer license key to use Direct Print XPS when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-XPS.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-XPS. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-2600 | | Instal state dspl: IEEE2600.1 scrty func |
| Lv.2 | Details | To display installation state of the IEEE2600.1 security function when transfer is disabled. |
| | Use case | When checking whether the IEEE2600.1 security function is installed |
| | Adj/set/operate method | 1) Select ST-2600.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-2600. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-2600 | | Trn lcns key dspl: IEEE2600.1 scrty func |
| Lv.2 | Details | To display transfer license key of the IEEE2600.1 security function when transfer is disabled. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-2600.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-2600. |
| | Display/adj/set range | 24 digits |
| ST-OPFNT | | Install state display of PCL Font Set |
| Lv.2 | Details | To display installation state of PCL Font Set when disabling the function with license transfer. |
| | Use case | When checking whether PCL Font Set is installed |
| | Adj/set/operate method | 1) Select ST-OPFNT.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-OPFNT. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-OPFNT | | Trns license key display of PCL Font Set |
| Lv.2 | Details | To display transfer license key to use the PCL option Font when disabling the function with license transfer. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-OPFNT.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-OPFNT. |
| | Display/adj/set range | 24 digits |

| COPIER > OPTION > LCNS-TR | | |
|---|---|---|
| ST-NCAPT | | Install state display of NetCap function |
| Lv.2 | Details | To display installation state of network packet capture function when disabling the function with license transfer. |
| | Use case | When checking whether network packet capture function is installed |
| | Adj/set/operate method | 1) Select ST-NCAPT.<br>2) Enter 0, and then press OK key.<br>When installation has been completed, the transfer license key is displayed under TR-NCAPT. |
| | Display/adj/set range | When operation finished normally: OK! |
| | Default value | 0 |
| TR-NCAPT | | Transfer license key dspl of NetCap func |
| Lv.2 | Details | To display transfer license key to use the network packet capture function when disabling the function with license transfer. |
| | Use case | • When replacing HDD<br>• When replacing the device |
| | Adj/set/operate method | 1) Select ST-NCAPT.<br>2) Enter 0, and then press OK key.<br>The transfer license key is displayed under TR-NCAPT. |
| | Display/adj/set range | 24 digits |

T-8-78

## ■ ACCPST-D

| COPIER > OPTION > ACCPST-D | | |
|---|---|---|
| ACC1 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 1 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |
| ACC2 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 2 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |
| ACC3 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 3 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |

| COPIER > OPTION > ACCPST-D | | |
|---|---|---|
| ACC4 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 4 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |
| ACC5 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 5 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |
| ACC6 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 6 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |

| COPIER > OPTION > ACCPST-D | | |
|---|---|---|
| ACC7 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 7 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |
| ACC8 | | Set of delivery option connection order |
| Lv.1 | Details | Setting of connecting order for delivery options to be connected with ARCNET. |
| | Use case | • At the time of installation<br>• When replacing DC controller PCB/at RAM clear |
| | Adj/set/operate method | 1) Check where is ACC 8 option in the connecting order from the host machine.<br>2) Enter the order (number), and then press OK key.<br>3) Turn OFF and then ON the main power of the host machine and the options. |
| | Display/adj/set range | Type: 8 characters<br>Node ID: 8 digits<br>Order: 2 digits |
| | Supplement/memo | Delivery options connected to ARCNET: Document Insertion Unit, Professional Puncher, Paper Folding Unit, Finisher |

T-8-79

# TEST

## PG

| COPIER > TEST > PG | | |
|---|---|---|
| TYPE | | Test print |
| Lv.1 | Details | To execute the test print. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | Enter the setting value, and then press Start key.<br>Test print is executed. |
| | Caution | Be sure to return the value to 0 after the test print output. |
| | Display/adj/set range | 0 to 50<br>0: Normal print<br>1: Grid<br>2: 17 gradations Tbic rank 2<br>3: 17 gradations 600dpi (134-line screen or 141-line screen)<br>4: Solid white<br>5: Halftone (density: 80H, Tbic rank 2, without image correction)<br>6: Halftone (density: 80H, 134-line screen or 141-line screen, without image correction)<br>7: Solid black<br>8: Horizontal line (4 dots, 27 spaces)<br>9: Horizontal line (6 dots, 50 spaces)<br>10: Horizontal line (2 dots, 3 spaces)<br>11: Halftone (density: 60H, Tbic rank 2, without image correction)<br>12: Halftone (density: 80H, 134-line screen or 141-line screen, without image correction)<br>13: Halftone (density: 30H, Tbic rank 2, without image correction)<br>14: Halftone (density: 30H, 134-line screen or 141-line screen, without image correction)<br>15-50: For development |
| | Default value | 0 |
| TXPH | | Setting of test print image mode |
| Lv.1 | Details | To set the image mode at the time of test print output.<br>This mode is enabled for test print only. |
| | Use case | At trouble analysis |
| | Display/adj/set range | 0 to 6<br>0: Error diffusion<br>1: Low screen ruling (approx. 133 to 190 lines)<br>2: High screen ruling (approx. 200 to 268 lines)<br>3: Copy screen (approx. 220 lines)<br>4: REOS screen (no screen structure)<br>5: Error diffusion (with trailing edge adjustment)<br>6: High screen ruling (with trailing edge adjustment) |

| COPIER > TEST > PG | | |
|---|---|---|
| DENS-K | | Adj of Bk color density at test print |
| Lv.1 | Details | To adjust Bk color density when performing test print (TYPE=5).<br>As the greater value is set, the image gets darker. |
| | Use case | At test print (TYPE=5) |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 1 to 25 |
| F/M-SW | | Setting of PG full color/mono color |
| Lv.1 | Details | To set for the output in full color/monochrome color with PG. |
| | Use case | When separating (identifying) the cause whether it's due to color or monochrome. |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Full color, 1: Single color |
| | Default value | 0 |
| PG-PICK | | Setting of test print Pickup Cassette |
| Lv.1 | Details | To set the Pickup Cassette for test print output. |
| | Use case | At trouble analysis<br>• At test print output |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | 1 to 8<br>1: Cassette 1 (Right Deck), 2: Cassette 2 (Left Deck), 3: Cassette 3 (Option Cassette 2), 4: Cassette 4 (Option Cassette 2), 5: Paper Deck, 6: Multi-purpose Tray, 7 to 8: Not used |
| 2-SIDE | | Setting of PG 2-sided mode |
| Lv.1 | Details | To set 1-sided/2-sided print for PG output. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: 1-sided, 1: 2-sided |
| | Default value | 0 |
| PG-QTY | | Setting of PG output quantity |
| Lv.1 | Details | To set the number of sheets for PG output. |
| | Use case | At trouble analysis |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 1 to 999 |
| | Default value | 1 |

| COPIER > TEST > PG | | |
|---|---|---|
| FINISH | | Accessory processing function test print |
| Lv.1 | Details | To execute the test print relating to accessory processing function. |
| | Use case | When checking operation of accessory processing function |
| | Adj/set/operate method | 1) Enter the number of sheets for PG-QTY, and then press OK key.<br>2) Enter the setting value, and then press OK key.<br>3) Press Start button.<br>The machine outputs a test print. |
| | Display/adj/set range | 0 to 99<br>0: N/A<br>1: Staple (front) *1<br>2: Staple (2 points) *1<br>3: Staple (rear) *1<br>4: Booklet (saddle stitch) *1<br>5: Z-fold (single sleeve) *1<br>6: 2-fold *1<br>7: C-fold *2<br>8: V-fold *2<br>9: 4-fold *2<br>10: Z-fold (out-3-fold) *2<br>11: Punch (Inner Puncher) *3<br>12: Multiple-hole punch *4<br>13: Shift *1<br>14 to 99: Spare (for future use)<br>*1 Finisher, *2 Multi-folding machine, *3 Inner Puncher, *4 Multiple-hole Puncher |
| | Default value | 0 |
| | Related service mode | COPIER> TEST> PG> PG-QTY |

T-8-80

## NETWORK

| COPIER > TEST > NETWORK | | |
|---|---|---|
| PING | | Network connection check |
| Lv.1 | Details | To check connection between this machine and TCP/IP network. |
| | Use case | When checking network connection at the time of installation<br>• At network connection failure |
| | Adj/set/operate method | 1) Turn OFF the main power switch.<br>2) Connect the network cable to this machine, and then turn ON the main power switch.<br>3) Inform the system administrator at user's site that installation of this machine is complete, and ask for network setting.<br>4) Ask the system administrator to check the network connection, and check the remote host address of PING transmission target.<br>5) Select the item and enter the remote host address, and then press OK key and Start key.<br>OK: Connection is normal. Checking procedure is complete.<br>NG: Connection failed. Go to step 6) if the cable connection is OK. In case of cable connection failure, connect again and then go to step 5).<br>6) Select the item and enter loopback address, and then press OK key and Start key.<br>OK: TCP/IP setting of this machine is normal. Go to step 7) to check NIC.<br>NG: TCP/IP setting of this machine has failure. Go to step 3) to check the setting again.<br>7) Select the item and enter the local host address, and then press OK key.<br>OK: Network setting of this machine and NIC are normal. Inform the system administrator that the trouble is due to network environment and ask for countermeasure.<br>NG: Connection failure/fault with NIC. Check connection of NIC/ replace NIC. |
| | Display/adj/set range | 0.0.0.0 to 255.255.255.255<br>At normal state: OK<br>At failure occurrence: NG |
| | Supplement/memo | Remote host address: IP address of PC terminal in network.<br>• Loopback address: 127.0.0.1. Checking TCP/IP of this machine is available because the signal is returned before NIC.<br>• NIC: Network interface board<br>• Local host address: IP address of this machine |

| COPIER > TEST > NETWORK | | |
|---|---|---|
| IPV6-ADR | | Setting of PING send address (IPv6) |
| Lv.1 | Details | To set the IPv6 address to send PING.<br>When PING is sent to this address by COPIER> TEST> NETWORK> PING-IP6, the network connection condition in the IPv6 environment can be checked. |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Caution | Enter a consistent character string as an address of IPv6.<br>• Enter an address within 39 characters including hexadecimal numbers (0-9, a-f) and a separator (:). |
| | Related service mode | COPIER> TEST> NETWORK> PING-IP6 |
| PING-IP6 | | PING transmission to IPv6 address |
| Lv.1 | Details | To send PING to the address specified by IPV6-ADR.<br>The network connection condition in the IPv6 environment can be checked. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | COPIER> TEST> NETWORK> IPV6-ADR |
| IPSECPOL | | Polling test of IPSec Encryption Board |
| Lv.1 | Details | To execute polling test of IPSec Encryption Board.<br>To check whether a hardware failure has occurred. |
| | Use case | When checking whether a hardware failure has occurred to the IPSec Encryption Board |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | At normal state: OK<br>At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.) |
| IPSECINT | | Interrupt test of IPSec Encryption Board |
| Lv.1 | Details | To execute the interrupt test of IPSec Encryption Board.<br>To check whether a hardware failure has occurred. |
| | Use case | When checking whether a hardware failure has occurred to the IPSec Encryption Board |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | At normal state: OK<br>At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.) |

T-8-81

## NET-CAP

| COPIER > TEST > NET-CAP | | |
|---|---|---|
| CAPOFFON | | ON/OFF of NetCap function |
| Lv.2 | Details | To set ON/OFF of network packet capture function. |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |
| STT-STP | | Start and stop of network packet capture |
| Lv.2 | Details | To start and stop network packet capture. |
| | Display/adj/set range | 0 to 1<br>0: Stop, 1: Start |
| | Default value | 0 |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |
| CAPSTATE | | State display of network packet capture |
| Lv.2 | Details | To display the state of network packet capture. |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |
| PONSTART | | Set network packet capture start timing |
| Lv.2 | Details | To set whether to perform network packet capture from power-on. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |
| OVERWRIT | | Setting of NetCap data overwriting |
| Lv.2 | Details | To set whether to finish network capturing or overwrite when HDD becomes full. |
| | Display/adj/set range | 0 to 1<br>0: No overwriting (finish network packet capture), 1: Overwriting |
| | Default value | 1 |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |
| PAYLOAD | | Set network packet capture data save |
| Lv.2 | Details | To set whether to discard payload when saving the captured packet data. |
| | Display/adj/set range | 0 to 1<br>0: Save captured packet data as is, 1: Discard payload and save the packet data |
| | Default value | 0 |
| | Related service mode | COPIER> TEST> NET-CAP |
| | Related UI menu | Store Network Packet Log |

| COPIER > TEST > NET-CAP | | |
|---|---|---|
| FILE-CLR | | Deletion of network packet capture data |
| Lv.2 | Details | To delete the captured packet data. |
| SIMPFILT | | Settings of packet data filtering |
| Lv.2 | Details | To set whether to perform filtering when capturing packet data.<br>When 0 is set, filtering is not performed (All the data are captured.)<br>When 1 is set, packet data is captured only when the receiver's or sender's address coincides with the Mac address of this machine. |
| | Use case | At problem analysis (at packet data analysis) |
| | Display/adj/set range | 0 to 1<br>0: Not filtered, 1: Filtered |
| ENCDATA | | Setting of packet data encryption |
| Lv.2 | Details | To set whether to encrypt the packet data when writing the captured packet data to the USB memory. |
| | Use case | At problem analysis (at packet data analysis)<br>• When improving security of written packet data |
| | Caution | This setting is enabled only when writing data to the USB memory.<br>Even when the packet data is loaded using SST, the file is specified, therefore the setting is disabled. |
| | Display/adj/set range | 0 to 2<br>0: Encrypted (encrypted file)<br>1: Not encrypted (plain text file)<br>2: Encrypted (encrypted file + plain text file) |
| | Default value | 0 |

T-8-82

# COUNTER

## TOTAL

| COPIER > COUNTER > TOTAL | | |
|---|---|---|
| SERVICE1 | | Service-purposed total counter 1 |
| Lv.1 | Details | To count up when the paper is delivered outside the machine.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| SERVICE2 | | Service-purposed total counter 2 |
| Lv.1 | Details | To count up when the paper is delivered outside the machine.<br>Large size: 2, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| COPY | | Total copy counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| PDL-PRT | | PDL print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine according to the charge counter at PDL print.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| FAX-PRT | | FAX reception print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine according to the charge counter at FAX reception.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| RMT-PRT | | Remote print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine and 2-sided print is stacked according to the charge counter at report print.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| BOX-PRT | | Inbox print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine according to the charge counter at Inbox print.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |

| COPIER > COUNTER > TOTAL | | |
|---|---|---|
| RPT-PRT | | Report print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine according to the charge counter at report print.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| 2-SIDE | | 2-sided copy/print counter |
| Lv.1 | Details | To count up when the paper is delivered outside the machine according to the charge counter at 2-sided copy/print.<br>Large size: 1, small size: 1<br>A blank sheet is not counted. |
| | Display/adj/set range | 0 to 99999999 |
| SCAN | | Scan counter |
| Lv.1 | Details | To count the number of scan operations according to the charge counter when the scanning operation is complete.<br>Large size: 1, small size: 1 |
| | Display/adj/set range | 0 to 99999999 |

T-8-83

## PICKUP

| COPIER > COUNTER > PICKUP | | |
|---|---|---|
| C1 | | Cassette 1 pickup total counter |
| Lv.1 | Details | Small size: 1 |
| C2 | | Cassette 2 pickup total counter |
| Lv.1 | Details | Small size: 1 |
| C3 | | Cassette 3 pickup total counter |
| Lv.1 | Details | Large size: 1, Small size: 1 |
| C4 | | Cassette 4 pickup total counter |
| Lv.1 | Details | Large size: 1, Small size: 1 |
| MF | | Multi-purpose Tray pickup total counter |
| Lv.1 | Details | Large size: 1, Small size: 1 |
| DK | | Deck pickup total counter |
| Lv.1 | Details | Large size: 1, Small size: 1 |
| 2-SIDE | | 2-sided pickup total counter |
| Lv.1 | Details | Large size: 1, Small size: 1 |

T-8-84

## FEEDER

| COPIER > COUNTER > FEEDER | | |
|---|---|---|
| FEED | | DADF original pickup total counter |
| Lv.1 | Details | DADF original pickup total counter |
| | Use case | When checking the total counter of original pickup by DADF |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| L-FEED | | DADF large size pickup total counter |
| Lv.1 | Details | DADF large size pickup total counter |
| | Use case | When checking the total counter of large size pickup by DADF |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| S-FEED | | DADF small size pickup total counter |
| Lv.1 | Details | DADF small size pickup total counter |
| | Use case | When checking the total counter of small size pickup by DADF |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| DFOP-CNT | | DADF hinge open/close counter |
| Lv.1 | Details | DADF hinge open/close counter |
| | Use case | When checking the DADF hinge open/close counter |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

T-8-85

## JAM

| COPIER > COUNTER > JAM | | |
|---|---|---|
| TOTAL | | Host machine total jam counter |
| Lv.1 | Details | Host machine total jam counter |
| | Use case | When checking the total jam counter of the host machine |
| FEEDER | | Feeder total jam counter |
| Lv.1 | Details | Feeder total jam counter |
| | Use case | When checking the total jam counter of feeder |
| SORTER | | Finisher total jam counter |
| Lv.1 | Details | Finisher total jam counter |
| | Use case | When checking the total jam counter of finisher |
| 2-SIDE | | Duplex Unit jam counter |
| Lv.1 | Details | Duplex Unit jam counter |
| | Use case | When checking the jam counter of Duplex Unit |
| MF | | Multi-purpose Tray jam counter |
| Lv.1 | Details | Multi-purpose Tray jam counter |
| | Use case | When checking the jam counter of Multi-purpose Tray |
| C1 | | Right Deck jam counter |
| Lv.1 | Details | Right Deck jam counter |
| | Use case | When checking the jam counter of machine's Right Deck |
| C2 | | Left Deck jam counter |
| Lv.1 | Details | Left Deck jam counter |
| | Use case | When checking the jam counter of machine's Left Deck |
| C3 | | Cassette 3 pickup jam counter |
| Lv.1 | Details | Cassette 3 pickup jam counter |
| | Use case | When checking the jam counter of machine's Cassette 3 |
| C4 | | Cassette 4 pickup jam counter |
| Lv.1 | Details | Cassette 4 pickup jam counter |
| | Use case | When checking the jam counter of machine's Cassette 4 |
| DK | | Pickup decks jam counter |
| Lv.1 | Details | Pickup decks jam counter |
| | Use case | When checking the jam counter of all pickup decks |

T-8-86

## MISC

| COPIER > COUNTER > MISC | | |
|---|---|---|
| FIX-WEB | | Fixing Cleaning Web counter |
| Lv.1 | Details | The number of Fixing Cleaning Web Drive Solenoid (SL9) operations executed after the Fixing Cleaning Web Level Sensor (PS45) is ON. When the counter reaches 2000, E005-0001 occurs. |
| | Use case | At the time of Fixing Cleaning Web level detection/replacement |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key. |
| | Caution | Clear the counter value after replacement. |
| WST-TNR | | Waste toner counter |
| Lv.1 | Details | This item is used to clear the warning when the Waste Toner full warning is displayed. |
| | Use case | When replacing the Waste Toner Container |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key. |
| T-SPLY-K | | Toner supply counter |
| Lv.1 | Details | Number of toner supply blocks.<br>Counted for every one rotation of Toner Feed Screw. |
| | Use case | When checking the usage status of toner |
| ALLPW-ON | | Number of DCON PCB power-on times |
| Lv.1 | Details | Number of power-on times (Non-all-night Power Unit).<br>To count up when power is turned ON (Non-all-night Power Unit). |
| | Use case | When checking the usage status of the product |
| HDD-ON | | Number of HDD start-up times |
| Lv.1 | Details | To count up at HDD start-up. |
| | Use case | When checking the usage status of the product |

T-8-87

## JOB

| COPIER > COUNTER > JOB | | |
|---|---|---|
| DVPAPLEN | | Average paper length of job |
| Lv.1 | Details | Average paper length in the period from when the printer engine starts printing operation to when it stops the operation.<br>Since the printer engine considers small jobs that are executed continuously as a large job, the average paper length affects calculation of the life. |
| | Display/adj/set range | 0 to 99999999 |
| DVRUNLEN | | Average distance of job |
| Lv.1 | Details | Average running distance in the period from when the printer engine starts printing operation to when it stops the operation.<br>Since the printer engine considers small jobs that are executed continuously as a large job, the average running distance affects calculation of the life. |
| | Display/adj/set range | 0 to 99999999 |

T-8-88

## PRDC-1

| COPIER > COUNTER > PRDC-1 | | |
|---|---|---|
| PRM-WIRE | | Primary Charging Wire parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | This is commonly used as operator maintenance parts counter. |
| PO-WIRE | | Pre-transfer Charging Wire parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PRM-CLN | | Primary Charge Wire Clean Pad prts cntr |
| Lv.1 | Details | Primary Charging Wire Cleaning Pad 1, 2<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PO-CLN | | Pre-trn Charge Wire Clean Pad prts cntr |
| Lv.1 | Details | Pre-transfer Charging Wire Cleaning Pad 1, 2<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > PRDC-1 | | |
|---|---|---|
| FIX-TH1 | | Fixing Main Thermistor parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIX-TH2 | | Fixing Sub Thermistor parts counter |
| Lv.1 | Details | Fixing Sub Thermistor 1, 2<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| OZ-FIL1 | | Fixing Ozone Filter parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | This is commonly used as operator maintenance parts counter. |
| AR-FIL1 | | Primary Suction Air Filter prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | This is commonly used as operator maintenance parts counter. |

T-8-89

## DRBL-1

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| PRM-UNIT | | Primary Charging Assembly parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PO-UNIT | | Pre-transfer Charging Ass'y parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| T-CLN-BD | | ETB Cleaning Blade parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| T-CN-BRU | | Transfer Cleaner Brush prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| TR-BLT | | Transfer Belt (ETB) parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Related service mode | COPIER> ADJUST> FEED-ADJ> TBLT-ADJ<br>COPIER> FUNCTION> CLEAR> TR-BLT |
| TR-ROLL | | Transfer Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | This is commonly used as operator maintenance parts counter. |
| PT-DRM | | Photosensitive Drum parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| CLN-BLD | | Drum Cleaning Blade parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| SP-CLAW | | Drum Cleaner Separation Claw prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| BS-SL-F | | Drum Cleaner Side Seal (Front) prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| BS-SL-R | | Drum Cleaner Side Seal (Rear) prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| DVG-CYL | | Developing Cylinder parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| C1-PU-RL | | Right Deck Pickup Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C1-SP-RL | | Right Deck Separation Roller parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C1-FD-RL | | Right Deck Feed Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C2-PU-RL | | Left Deck Pickup Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| C2-SP-RL | | Left Deck Separation Roller prts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C2-FD-RL | | Left Deck Feed Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C3-PU-RL | | Cassette 3 Pickup Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C3-SP-RL | | Cassette 3 Separation Roller parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| C3-FD-RL | | Cassette 3 Feed Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C4-PU-RL | | Cassette 4 Pickup Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C4-SP-RL | | Cassette 4 Separation Roller parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| C4-FD-RL | | Cassette 4 Feed Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| M-SP-RL | | Multi-purpose Tray Sprtn Roll prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| M-FD-RL | | Multi-purpose Tray Feed Roll prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FX-UP-RL | | Fixing Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FX-LW-RL | | Pressure Roller parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| FX-IN-BS | | Fixing Roller Insulating Bush parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FX-WEB | | Fixing Cleaning Web parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FX-L-STC | | Press Roller Static Eliminator prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| DLV-UCLW | | Delivery Upper Separation Claw prts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-1 | | |
|---|---|---|
| FX-RTNR | | Fixing Roller Thrust Stopper parts cntr |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| EXP-SCRP | | Pre-exposure Scraper parts counter |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

T-8-90

## DRBL-2

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DF-PU-RL | | Pickup Roller parts counter: DADF |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed. |
| DF-FD-RL | | Feed Roller parts counter: DADF |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed. |
| DF-SP-RL | | Separation Roller parts counter: DADF |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed. |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| LNT-TAP1 | | Dust Removal Sheet 1 counter: DADF |
| Lv.1 | Details | Dust-colleting<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed. |
| LNT-TAP2 | | Dust Removal Sheet 2 counter: DADF |
| Lv.1 | Details | Dust-colleting type E<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Regardless of the read mode (1-sided/2-sided), the counter is advanced every time a sheet is fed. |
| STAMP | | Stamp parts counter: DADF |
| Lv.1 | Details | To display the estimated life and parts counter of DADF stamp.<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life to be entered by operator |
| | Use case | At replacement |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| PD-PU-RL | | Pickup Roller parts counter: Deck |
| Lv.1 | Details | Pickup Roller (Front/Rear) of Paper Deck/POD Deck Lite/Multi Deck (Upper)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PD-SP-RL | | Separation Roller parts counter: Deck |
| Lv.1 | Details | Separation Roller of Paper Deck/POD Deck Lite/Multi Deck (Upper)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PD-FD-RL | | Feed Roller parts counter: Deck |
| Lv.1 | Details | Feed Roller of Paper Deck/POD Deck Lite/Multi Deck (Upper)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| NON-SORT | | Non-sort path parts counter: Fin-Q1 |
| Lv.1 | Details | Delivery static eliminator<br>1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| FIN-STPR | | Stapler parts counter: Fin-N1/P1 |
| Lv.1 | Details | Stapler Unit<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SDL-STPL | | Saddle stapler parts counter: Fin-N1/Q1 |
| Lv.1 | Details | Saddle stapler unit<br>1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PUNCH | | Punch unit parts counter: Fin-N1/Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SORT-2 | | Sort path 2 parts counter: Fin-Q1 |
| Lv.1 | Details | Process upper unit knuring belt<br>1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DL-STC-L | | Static Eliminator prts cntr: Fin-N1/P1 |
| Lv.1 | Details | Fin-N1: Swing Guide Assembly Static Eliminator (Front/Rear)<br>Fin-P1: Delivery Static Eliminator (Left)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| DL-STC-R | | Static Eliminator prts cntr: Fin-N1/P1 |
| Lv.1 | Details | Fin-N1: Feed Guide Assembly Static Eliminator<br>Fin-P1: Delivery Static Eliminator (Right)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| STK-STC | | Stck Delv Rol Sttc Elim prts cntr:Fin-N1 |
| Lv.1 | Details | Process delivery static eliminator<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SDL-STC1 | | Sddle feed upr gude inlet sttc cntr:F-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| SDL-STC2 | | Sddle feed upr gude sttc elmtr cntr:F-Q1 |
| Lv.1 | Details | Inlet roller static eliminator<br>1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SDL-RL | | Saddle sprtn roller parts counter:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-P-RL1 | | Pickup Roll prts cntr: INS-K1/L1, PF/INS |
| Lv.1 | Details | INS-H1: Upper Tray Pickup Roller<br>INS-J1, PF/INS: Inserter Pickup Roller<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-S-RL1 | | Sprtn Roll prts cntr: INS-K1/L1, PF/INS |
| Lv.1 | Details | INS-H1: Upper Tray Separation Roller<br>INS-J1, PF/INS: Inserter Separation Roller<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| IS-F-RL1 | | Feed Roller prts cntr: INS-K1/L1, PF/INS |
| Lv.1 | Details | INS-H1: Upper Tray Feed Roller<br>INS-J1, PF/INS: Inserter Feed Roller<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-TQLM1 | | Drive Torque Limt cntr:INS-K1/L1,PF/INS |
| Lv.1 | Details | INS-H1: Upper Tray Torque Limiter<br>INS-J1, PF/INS: Inserter Drive Torque Limiter<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-P-RL2 | | Lowr Tray Pickup Roll prts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-S-RL2 | | Lower Tray Sprtn Roll parts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| IS-F-RL2 | | Lower Tray Feed Roller prts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-TQLM2 | | Lower Tray Torque Limt prts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| TRM-CUT1 | | Cutter upper blade parts countr: trimmer |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of trimmer: Trimmer-D1 |
| TRM-CUT2 | | Cutter lower blade parts countr: trimmer |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of trimmer: Trimmer-D1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| TRM-BLT | | Flat belt parts counter: trimmer |
| Lv.1 | Details | Displaying the parts counter and the estimated life of trimmer flat belt.<br>The 1st line shows the number of sheets transported after the previous replacement.<br>2nd line shows the estimated life entered by the operator. |
| | Use case | When replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item and enter the value. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of trimmer: Trimmer-D1 |
| PNCH-RL | | Aligner idler roller assy cuntr:P-Punchr |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Pruduct name of P-Puncher: Professional Puncher-C1 |
| PN-BP-RL | | Bypass Roller Kit parts counter:P-Punchr |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Pruduct name of P-Puncher: Professional Puncher-C1 |
| PN-DR-RL | | Energy Drive Roller parts cuntr:P-Punchr |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Pruduct name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| PNCH-BLT | | Aligner Belt parts counter: P-Puncher |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Pruduct name of P-Puncher: Professional Puncher-C1 |
| PNCH-SL | | BackGage Solenoid parts counter:P-Punchr |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Pruduct name of P-Puncher: Professional Puncher-C1 |
| BEHL-RL | | Stck Tray Ppr Rtnr Roll prts cntr:Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| TRM-CUT3 | | [Not used] |
| TRM-CUT4 | | [Not used] |
| IU-ELM | | Static eliminator parts counter: IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET1 | | Die set 1 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET2 | | Die set 2 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET3 | | Die set 3 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET4 | | Die set 4 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET5 | | Die set 5 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET6 | | Die set 6 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET7 | | Die set 7 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET8 | | Die set 8 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET9 | | Die set 9 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET10 | | Die set 10 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET11 | | Die set 11 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET12 | | Die set 12 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET13 | | Die set 13 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET14 | | Die set 14 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET15 | | Die set 15 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET16 | | Die set 16 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET17 | | Die set 17 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET18 | | Die set 18 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET19 | | Die set 19 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET20 | | Die set 20 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET21 | | Die set 21 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET22 | | Die set 22 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET23 | | Die set 23 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET24 | | Die set 24 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET25 | | Die set 25 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET26 | | Die set 26 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET27 | | Die set 27 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET28 | | Die set 28 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET29 | | Die set 29 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET30 | | Die set 30 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET31 | | Die set 31 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET32 | | Die set 32 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET33 | | Die set 33 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET34 | | Die set 34 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET35 | | Die set 35 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET36 | | Die set 36 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET37 | | Die set 37 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET38 | | Die set 38 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET39 | | Die set 39 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET40 | | Die set 40 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET41 | | Die set 41 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET42 | | Die set 42 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET43 | | Die set 43 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET44 | | Die set 44 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET45 | | Die set 45 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET46 | | Die set 46 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET47 | | Die set 47 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET48 | | Die set 48 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET49 | | Die set 49 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET50 | | Die set 50 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET51 | | Die set 51 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET52 | | Die set 52 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET53 | | Die set 53 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET54 | | Die set 54 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET55 | | Die set 55 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET56 | | Die set 56 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET57 | | Die set 57 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET58 | | Die set 58 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET59 | | Die set 59 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET60 | | Die set 60 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| DIESET61 | | Die set 61 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET62 | | Die set 62 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET63 | | Die set 63 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET64 | | Die set 64 parts counter: P-Puncher |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| TRM-CUT5 | | [Not used] |
| TRM-CUT6 | | [Not used] |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| FIN-ERT | | Stk dlvry roll lowr sttc elmntr PC:FinQ1 |
| Lv.1 | Details | Stack delivery roller lower static eliminator<br>1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SDL-JRL | | Saddle align roller parts counter:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SDL-STC3 | | Saddle mid sttc elmntr parts cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| | Supplement/memo | Saddle middle static eliminator is the unified parts that consists of the static eliminator and mylar sheet. |
| SDL-STC4 | | Sdle fed guide low sttcEM prts cntr:F-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| FIN-FLP1 | | Upr Path Sw Solend prts cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIN-FLP2 | | Saddle Path Sw Solend prts cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIN-FLP3 | | Buf Path Sw Slnd prts cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| TRY-SL | | Auxlry Tr Lift Slnd prts cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| STP-BASE | | Staple base unit parts counter:Fin-Q1 |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts. |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| BEHLTQLM | | Tray 1/2 Torque Limt parts cntr: Fin-N1 |
| Lv.1 | Details | Process Tray Torque Limiter (Tray 1/2 Paper Retainer)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SWG-RL | | Proc Tray Ppr Rtn Roll prts cntr:Fin-N1 |
| Lv.1 | Details | Process Tray Paper Return Roller (Front/Rear)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SWG-DL-1 | | Swng Ejectn Roll (F/R) prts cntr: Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| SWG-DL-2 | | Delivery Upr Roll (Ctr) prts cntr:Fin-N1 |
| Lv.1 | Details | Swing Guide Delivery Upper Roller (Center)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SHT-CL | | Swng Guide Electmag Clt prts cntr:Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SHT-TQLM | | Shutter Torque Limiter prts cntr: Fin-N1 |
| Lv.1 | Details | Stack Wall Lower Assembly Torque Limiter (Shutter)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SWG-TQLM | | Process Tray Torq Limt prts cntr: Fin-N1 |
| Lv.1 | Details | Process Tray Torque Limiter (Process Tray Paper Retainer)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| SUB-TQLM | | Sub Guide Torque Limt prts cntr: Fin-N1 |
| Lv.1 | Details | Process Tray Torque Limiter (Sub Guide)<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| TRY-TQLM | | Tray 1 Torque Limiter prts cntr: Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| TR2-TQLM | | Tray 2 Torque Limiter prts cntr: Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SWG-RB | | Proc Tray Ppr Rtnr Rubr prts cntr:Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| IS-CL2 | | Lowr Tray Electmag Clt prts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-ELM1 | | Thru Fd Inlt Sttc Elim prts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-CL1 | | Upr Tray Electmag Clt parts cntr: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IS-RV-SL | | Reverse Solenoid parts counter: INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| IS-ELM2 | | Thru Feed Out Sttc Elim prts cntr:INS-K1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-ELM2 | | Thru Feed Out Sttc Elim prts cntr: PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-CL2 | | Pre-fold Lowr Rol Drv Clt2 prts cntr:PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-ELM1 | | Thru Feed Inlet Sttc Elim prts cntr: PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| PF-CL1 | | Pre-fold Lowr Rol Drv Clt1 prts cntr:PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-RL-SL | | Fold/Separation Solenoid parts cntr: PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-FL-SL | | Thru/Fold Flapper Solend parts cntr: PFU |
| Lv.1 | Details | Through/Fold Branch Flapper Solenoid<br>1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-ST-SL | | C-fold Stopper Solenoid parts cntr: PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > DRBL-2 | | |
|---|---|---|
| PF-TR-SL | | C-fold Tray Branch Solend prts cntr: PFU |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| SWG-SL | | Swing Solenoid parts counter: Fin-N1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FN-PDL-U | | Tray 1 Rtn Roll Lift member cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FN-PDL-L | | Tray 2 Rtn Roll Lift member cntr:Fin-Q1 |
| Lv.1 | Details | 1st line: Total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts/replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item, and then press Clear key.<br>To change the estimated life: Select the item, enter the value, and then press OK key. |
| | Caution | Clear the counter value after replacement. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

T-8-91

## H-DBL-A1

| COPIER > COUNTER > H-DBL-A1 | | |
|---|---|---|
| FIN-CMN1 | | Sht cntr:Common feed path(to 12M):Fin-Q1 |
| Lv.1 | Details | Buffer upper cover unit, Buffer roller 1, Buffer roller 2, Buffer roller3, Pre-buffer feed roller, Side registration detection unit, Drive detection unit, Inlet feed roller, Shift unit<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIN-UP1 | | Sht cntr:Uppr path delvry(to 12M):Fin-Q1 |
| Lv.1 | Details | Upper delivery roller<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIN-DWN1 | | Sht cntr:Lowr path delvry(to 12M):Fin-Q1 |
| Lv.1 | Details | Stack delivery roller<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A1 | | |
|---|---|---|
| FIN-PRC1 | | Sheet counter:Saddle feed(to 12M):Fin-Q1 |
| Lv.1 | Details | Process unit, Process upper guide unit<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| FIN-SDL1 | | Sheet counter:Saddle feed(to 12M):Fin-Q1 |
| Lv.1 | Details | Saddle unit, Conveyer unit<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IU-SL | | Flapper solenoid oprt countr(to 250):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| IU-BP-RL | | Sheet counter: Bypass roller(to 12M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A1 | | |
|---|---|---|
| IU-RV-RL | | Sht cntr:Reverse path roller(to 12M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-FLD | | Sheet counter of fold feed area: PFU |
| Lv.1 | Details | Fold roller 1 to 3, Fold motor, Folding unit front area static eliminator, Folding unit rear area static eliminator<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |
| PF-TRY | | Sheet counter of fold tray feed area:PFU |
| Lv.1 | Details | Folding unit bottom area static eliminator<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Default value | 0 |

T-8-92

## SORTER

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET1 | | Total punch No. of die set 1: P-Puncher |
| Lv.1 | Details | Total punch number of die set 1 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET2 | | Total punch No. of die set 2: P-Puncher |
| Lv.1 | Details | Total punch number of die set 2 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET3 | | Total punch No. of die set 3: P-Puncher |
| Lv.1 | Details | Total punch number of die set 3 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET4 | | Total punch No. of die set 4: P-Puncher |
| Lv.1 | Details | Total punch number of die set 4 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET5 | | Total punch No. of die set 5: P-Puncher |
| Lv.1 | Details | Total punch number of die set 5 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET6 | | Total punch No. of die set 6: P-Puncher |
| Lv.1 | Details | Total punch number of die set 6 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET7 | | Total punch No. of die set 7: P-Puncher |
| Lv.1 | Details | Total punch number of die set 7 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET8 | | Total punch No. of die set 8: P-Puncher |
| Lv.1 | Details | Total punch number of die set 8 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET9 | | Total punch No. of die set 9: P-Puncher |
| Lv.1 | Details | Total punch number of die set 9 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET10 | | Total punch No. of die set 10: P-Puncher |
| Lv.1 | Details | Total punch number of die set 10 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET11 | | Total punch No. of die set 11: P-Puncher |
| Lv.1 | Details | Total punch number of die set 11 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET12 | | Total punch No. of die set 12: P-Puncher |
| Lv.1 | Details | Total punch number of die set 12 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET13 | | Total punch No. of die set 13: P-Puncher |
| Lv.1 | Details | Total punch number of die set 13 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET14 | | Total punch No. of die set 14: P-Puncher |
| Lv.1 | Details | Total punch number of die set 14 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET15 | | Total punch No. of die set 15: P-Puncher |
| Lv.1 | Details | Total punch number of die set 15 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET16 | | Total punch No. of die set 16: P-Puncher |
| Lv.1 | Details | Total punch number of die set 16 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET17 | | Total punch No. of die set 17: P-Puncher |
| Lv.1 | Details | Total punch number of die set 17 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET18 | | Total punch No. of die set 18: P-Puncher |
| Lv.1 | Details | Total punch number of die set 18 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET19 | | Total punch No. of die set 19: P-Puncher |
| Lv.1 | Details | Total punch number of die set 19 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET20 | | Total punch No. of die set 20: P-Puncher |
| Lv.1 | Details | Total punch number of die set 20 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET21 | | Total punch No. of die set 21: P-Puncher |
| Lv.1 | Details | Total punch number of die set 21 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET22 | | Total punch No. of die set 22: P-Puncher |
| Lv.1 | Details | Total punch number of die set 22 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET23 | | Total punch No. of die set 23: P-Puncher |
| Lv.1 | Details | Total punch number of die set 23 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET24 | | Total punch No. of die set 24: P-Puncher |
| Lv.1 | Details | Total punch number of die set 24 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET25 | | Total punch No. of die set 25: P-Puncher |
| Lv.1 | Details | Total punch number of die set 25 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET26 | | Total punch No. of die set 26: P-Puncher |
| Lv.1 | Details | Total punch number of die set 26 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET27 | | Total punch No. of die set 27: P-Puncher |
| Lv.1 | Details | Total punch number of die set 27 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET28 | | Total punch No. of die set 28: P-Puncher |
| Lv.1 | Details | Total punch number of die set 28 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET29 | | Total punch No. of die set 29: P-Puncher |
| Lv.1 | Details | Total punch number of die set 29 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET30 | | Total punch No. of die set 30: P-Puncher |
| Lv.1 | Details | Total punch number of die set 30 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET31 | | Total punch No. of die set 31: P-Puncher |
| Lv.1 | Details | Total punch number of die set 31 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET32 | | Total punch No. of die set 32: P-Puncher |
| Lv.1 | Details | Total punch number of die set 32 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET33 | | Total punch No. of die set 33: P-Puncher |
| Lv.1 | Details | Total punch number of die set 33 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET34 | | Total punch No. of die set 34: P-Puncher |
| Lv.1 | Details | Total punch number of die set 34 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET35 | | Total punch No. of die set 35: P-Puncher |
| Lv.1 | Details | Total punch number of die set 35 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET36 | | Total punch No. of die set 36: P-Puncher |
| Lv.1 | Details | Total punch number of die set 36 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET37 | | Total punch No. of die set 37: P-Puncher |
| Lv.1 | Details | Total punch number of die set 37 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET38 | | Total punch No. of die set 38: P-Puncher |
| Lv.1 | Details | Total punch number of die set 38 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET39 | | Total punch No. of die set 39: P-Puncher |
| Lv.1 | Details | Total punch number of die set 39 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET40 | | Total punch No. of die set 40: P-Puncher |
| Lv.1 | Details | Total punch number of die set 40 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET41 | | Total punch No. of die set 41: P-Puncher |
| Lv.1 | Details | Total punch number of die set 41 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET42 | | Total punch No. of die set 42: P-Puncher |
| Lv.1 | Details | Total punch number of die set 42 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET43 | | Total punch No. of die set 43: P-Puncher |
| Lv.1 | Details | Total punch number of die set 43 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET44 | | Total punch No. of die set 44: P-Puncher |
| Lv.1 | Details | Total punch number of die set 44 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET45 | | Total punch No. of die set 45: P-Puncher |
| Lv.1 | Details | Total punch number of die set 45 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET46 | | Total punch No. of die set 46: P-Puncher |
| Lv.1 | Details | Total punch number of die set 46 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET47 | | Total punch No. of die set 47: P-Puncher |
| Lv.1 | Details | Total punch number of die set 47 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET48 | | Total punch No. of die set 48: P-Puncher |
| Lv.1 | Details | Total punch number of die set 48 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET49 | | Total punch No. of die set 49: P-Puncher |
| Lv.1 | Details | Total punch number of die set 49 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET50 | | Total punch No. of die set 50: P-Puncher |
| Lv.1 | Details | Total punch number of die set 50 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET51 | | Total punch No. of die set 51: P-Puncher |
| Lv.1 | Details | Total punch number of die set 51 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET52 | | Total punch No. of die set 52: P-Puncher |
| Lv.1 | Details | Total punch number of die set 52 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET53 | | Total punch No. of die set 53: P-Puncher |
| Lv.1 | Details | Total punch number of die set 53 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET54 | | Total punch No. of die set 54: P-Puncher |
| Lv.1 | Details | Total punch number of die set 54 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET55 | | Total punch No. of die set 55: P-Puncher |
| Lv.1 | Details | Total punch number of die set 55 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET56 | | Total punch No. of die set 56: P-Puncher |
| Lv.1 | Details | Total punch number of die set 56 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET57 | | Total punch No. of die set 57: P-Puncher |
| Lv.1 | Details | Total punch number of die set 57 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET58 | | Total punch No. of die set 58: P-Puncher |
| Lv.1 | Details | Total punch number of die set 58 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET59 | | Total punch No. of die set 59: P-Puncher |
| Lv.1 | Details | Total punch number of die set 59 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET60 | | Total punch No. of die set 60: P-Puncher |
| Lv.1 | Details | Total punch number of die set 60 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET61 | | Total punch No. of die set 61: P-Puncher |
| Lv.1 | Details | Total punch number of die set 61 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET62 | | Total punch No. of die set 62: P-Puncher |
| Lv.1 | Details | Total punch number of die set 62 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| DIESET63 | | Total punch No. of die set 63: P-Puncher |
| Lv.1 | Details | Total punch number of die set 63 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |

| COPIER > COUNTER > SORTER | | |
|---|---|---|
| DIESET64 | | Total punch No. of die set 64: P-Puncher |
| Lv.1 | Details | Total punch number of die set 64 on Professional Puncher. |
| | Use case | When checking the usage status of each die set |
| | Unit | 1time |
| | Default value | 0 |
| | Supplement/memo | Product name of P-Puncher: Professional Puncher-C1 |
| FIN-DWN | | Sheet counter of lower delivery: Fin-Q1 |
| Lv.1 | Details | Counter to indicate the number of sheet that are delivered to the lower tray of the stacker |
| | Use case | At the time of checking the usage |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-SDL | | Sheet counter of saddle feed: Fin-Q1 |
| Lv.1 | Details | Counter to indicate the number of sheets that go through the saddle assembly of the finisher |
| | Use case | At the time of checking the usage |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-UP | | Sheet counter of upper delivery: Fin-Q1 |
| Lv.1 | Details | Counter to indicate the number of sheet that are delivered to the upper tray of the finisher |
| | Use case | At the time of checking the usage |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-CMN | | Sheet counter of common feed path:Fin-Q1 |
| Lv.1 | Details | Counter to indicate the number of sheets that go through the common feed path of the finisher |
| | Use case | At the time of checking the usage |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-PRC | | Sheet counter of process delivery:Fin-Q1 |
| Lv.1 | Details | Counter to indicate the number of sheet that are delivered at the middle process of the finisher |
| | Use case | At the time of checking the usage |
| | Unit | 1sheet |
| | Default value | 0 |

T-8-93

## H-DBL-A2

| COPIER > COUNTER > H-DBL-A2 | | |
|---|---|---|
| FIN-CMN2 | | Sht cntr of cmmn feed pth(to 24M):Fin-Q1 |
| Lv.1 | Details | Inlet roller feed motor<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-PRC2 | | ST cntr of prcss tray dlvy(to 24M):Fn-Q1 |
| Lv.1 | Details | Trailing edge drop motor<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IU-BPS-M | | Sht cntr of bypass feed motr(to 24M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A2 | | |
|---|---|---|
| IU-DRW-M | | Sheet cuntr of lead-in motor(to 24M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IU-PRV-M | | ST cntr; pre-revers feed mtr(to 24M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IU-RV-M | | Sheet cuntr of reverse motor(to 24M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IU-EJT-M | | ST cntr of revers dlvry motr(to 24M):IFU |
| Lv.1 | Details | 1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

T-8-94

## H-DBL-A3

| COPIER > COUNTER > H-DBL-A3 | | |
|---|---|---|
| FIN-CMN3 | | ST cntr of cmmn path feed(to 36M):Fin-Q1 |
| Lv.1 | Details | Buffer motor, Pre-buffer feed motor, Side registration shift motor, Delivery motor<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| FIN-PRC3 | | STcntr of prcss tray dlvry(to 36M):Fn-Q1 |
| Lv.1 | Details | Process delivery motor<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IS-ENT | | Prt cntr:Thrgh pth inlt feed area:Insrtr |
| Lv.1 | Details | Through feed driven roll, Through feed roller (inlet)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A3 | | |
|---|---|---|
| IS-FD1 | | Prt cntr of upper bin feed area :Insertr |
| Lv.1 | Details | Separation feed guide (upper)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| PF-ENT | | Parts cntr: Thrgh pth inlt feed area:PFU |
| Lv.1 | Details | Through feed driven roll, Through feed roller(inlet)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| PF-CNT | | Prt cntr:Thrgh path center feed area:PFU |
| Lv.1 | Details | Through feed driven roll, Through feed roller(center)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A3 | | |
|---|---|---|
| IS-FD2 | | Prt cntr of lower bin feed area :Insertr |
| Lv.1 | Details | Separation feed guide (lower)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| PF-EXT | | Parts cntr: Thrgh pth exit feed area:PFU |
| Lv.1 | Details | Drawer connector(housing), Drawer connector(socket)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |
| IS-EXT | | Prt cntr:Thrgh pth exit feed area:Insrtr |
| Lv.1 | Details | Through feed driven roll, Through feed roller(exit)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

| COPIER > COUNTER > H-DBL-A3 | | |
|---|---|---|
| IS-CNT | | PT cntr:Thrgh pth centr feed area:Insrtr |
| Lv.1 | Details | Through feed driven roll, Through feed roller(center)<br>1st line: total counter value from the previous replacement<br>2nd line: Estimated life |
| | Use case | When checking the consumption level of parts or replacing the parts |
| | Adj/set/operate method | To clear the counter value: Select the item and press the Clear key.<br>To change the estimated life: Select the item, enter the value and press OK key. |
| | Caution | Clear the counter value after cleaning. |
| | Display/adj/set range | 0 to 99999999 |
| | Unit | 1sheet |
| | Default value | 0 |

T-8-95

## LF

| COPIER > COUNTER > LF | | |
|---|---|---|
| K-DRM-LF | | Display of Drum Unit (Bk) life |
| Lv.1 | Details | To display how much the Drum Unit (Bk) is close to the end of life in % (percentage). |
| | Use case | When checking the life of Drum Unit |
| | Unit | 1% |
| | Default value | 0 |
| | Related service mode | COPIER> FUNCTION> INSTALL> DRM-INIT |

T-8-96

# FEEDER

## DISPLAY

| FEEDER > DISPLAY | | |
|---|---|---|
| FEEDSIZE | | Dspl of original size detected by DADF |
| Lv.1 | Details | To display the original size detected by DADF. |
| | Adj/set/operate method | N/A (Display only) |
| TRY-WIDE | | Distance of Original Width Detect Slider |
| Lv.1 | Details | To display the distance between the Original Width Detection Sliders. |
| | Use case | At original size detection error |
| | Adj/set/operate method | Check whether the value matching the slide position is displayed when the Original Width Slider is moved to the specified size width position. |
| | Display/adj/set range | 0 to approx. 2970 |
| SPSN-LMN | | Dspl of Post-sprtn Sensr emit voltage |
| Lv.1 | Details | To display the light-emitting voltage value for the Post-separation Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 255 |
| SPSN-RCV | | Dspl of Post-sprtn Sensr recv voltage |
| Lv.1 | Details | To display the light-receiving voltage value for the Post-separation Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper. |
| | Display/adj/set range | 0 to 1023 |
| RDSN-LMN | | Display of Lead Sensor emission voltage |
| Lv.1 | Details | To display the light-emitting voltage value for the Lead Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 255 |
| RDSN-RCV | | Display of Lead Sensor reception voltage |
| Lv.1 | Details | To display the light-receiving voltage value for the Lead Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper. |
| | Display/adj/set range | 0 to 1023 |
| DRSN-LMN | | Dspl of Delivery Sensor emission voltg |
| Lv.1 | Details | To display the light-emitting voltage value for the Delivery Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 255 |

| FEEDER > DISPLAY | | |
|---|---|---|
| DRSN-RCV | | Dspl of Delivery Sensor reception voltg |
| Lv.1 | Details | To display the light-receiving voltage value for the Delivery Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper. |
| | Display/adj/set range | 0 to 1023 |
| RGSN-LMN | | Display of Rgst Sensor emission voltage |
| Lv.1 | Details | To display the light-emitting voltage value for the Registration Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | N/A (Display only) |
| | Display/adj/set range | 0 to 255 |
| RGSN-RCV | | Display of Rgst Sensor reception voltage |
| Lv.1 | Details | To display the light-receiving voltage value for the Registration Sensor. |
| | Use case | When jams frequently occur |
| | Adj/set/operate method | Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper. |
| | Display/adj/set range | 0 to 1023 |

T-8-97

# ADJUST

| FEEDER > ADJUST | | |
|---|---|---|
| DOCST | | Adj of DADF img lead edge margin: front |
| Lv.1 | Details | To adjust the margin at the leading edge of the image for DADF scanning.<br>Execute when the output image after DADF installation is dislocated.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1mm. (The image moves in the direction of the leading edge of the sheet.) |
| | Use case | • When installing DADF<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| LA-SPEED | | Fine adj of DADF image magnifictn: front |
| Lv.1 | Details | To adjust the image magnification in vertical scanning direction for DADF scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in vertical scanning direction. (The feeding speed increases, and the image is reduced.) |
| | Use case | • When installing DADF<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -30 to 30 |
| | Unit | 0.1% |
| | Default value | 0 |
| DOCST2 | | Adj of DADF img lead edge margin: back |
| Lv.1 | Details | To adjust the margin at the leading edge of the image for DADF scanning.<br>Execute when the output image after DADF installation is dislocated.<br>When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.<br>As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1mm. (The image moves in the direction of the leading edge of the sheet.) |
| | Use case | • When installing DADF<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |

| FEEDER > ADJUST | | |
|---|---|---|
| LA-SPD2 | | Fine adj of DADF image magnifictn: back |
| Lv.1 | Details | To adjust the image magnification in vertical scanning direction for DADF scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in vertical scanning direction. (The feeding speed increases, and the image is reduced.) |
| | Use case | • When installing DADF<br>• When replacing the Reader Controller PCB/clearing RAM data |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1% |
| | Default value | 0 |
| ADJMSCN1 | | Zoom adj in 2-sided horz scan way: front |
| Lv.1 | Details | To make a fine adjustment of the front side image magnification in horizontal scanning direction at the time of DADF duplex scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in horizontal scanning direction. |
| | Use case | When a displacement occurs to the front/back side image magnification at the time of duplex scanning |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 0.1% |
| | Default value | 0 |
| ADJMSCN2 | | Zoom adj in 2-sided horz scan way: back |
| Lv.1 | Details | To make a fine adjustment of the back side image magnification in horizontal scanning direction at the time of DADF duplex scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in horizontal scanning direction. |
| | Use case | When a displacement occurs to the front/back side image magnification at the time of duplex scanning |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 0.1% |
| | Default value | 0 |
| ADJSSCN1 | | Zoom adj in 2-sided vert scan way: front |
| Lv.1 | Details | To make a fine adjustment of the front side image magnification in vertical scanning direction at the time of DADF duplex scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in vertical scanning direction. |
| | Use case | When a displacement occurs to the front/back side image magnification at the time of duplex scanning |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 0.1% |
| | Default value | 0 |

| FEEDER > ADJUST | | |
|---|---|---|
| ADJSSCN2 | | Zoom adj in 2-sided vert scan way: back |
| Lv.1 | Details | To make a fine adjustment of the back side image magnification in vertical scanning direction at the time of DADF duplex scanning.<br>As the value is incremented by 1, the image is reduced by 0.1% in vertical scanning direction. |
| | Use case | When a displacement occurs to the front/back side image magnification at the time of duplex scanning |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 0.1% |
| | Default value | 0 |

T-8-98

## FUNCTION

| FEEDER > FUNCTION | | |
|---|---|---|
| SENS-INT | | Initialization of DADF Sensors |
| Lv.1 | Details | To initialize DADF Sensors. |
| | Use case | When replacing Reader Controller PCB / Post-separation Sensor 1 (SR2) / Post-separation Sensor 2 (SR3) / Post-separation Sensor 3 (PCB2) / Registration Sensor (PCB3) / Lead Sensor 1 (PCB4) / Lead Sensor 2 (SR5) |
| | Adj/set/operate method | Select the item, and then press OK key. |
| MTR-CHK | | Specification of DADF Operation Motor |
| Lv.1 | Details | To specify the DADF Motor to operate.<br>The motor is activated by MTR-ON. |
| | Use case | At operation check |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 9<br>0: Pickup Motor (M1), 1: Feed Motor (M2), 2: Registration Motor (M3), 3: Read Motor (M4), 4: Delivery Motor (M5), 5: Disengagement Motor 1 (M6), 6: Disengagement Motor 2 (M7), 7: Tray Lifter Motor (M8), 8: Glass Shift Motor (M9), 9: Pickup Roller Unit Lifter Motor (M10) |
| | Related service mode | FEEDER> FUNCTION> MTR-ON |
| TRY-A4 | | Adj of DADF Tray width detect ref 1: A4 |
| Lv.1 | Details | To automatically adjust the paper width detection reference point 1 for the DADF Tray. (A4) |
| | Use case | • When replacing the Original Width Volume (VR)<br>• When replacing the Reader Controller PCB/clearing RAM data |
| TRY-A5R | | Adj of DADF Tray width detect ref 2: A5R |
| Lv.1 | Details | To automatically adjust the paper width detection reference point 2 for the DADF Tray. (A5R) |
| | Use case | • When replacing the Original Width Volume (VR)<br>• When replacing the Reader Controller PCB/clearing RAM data |
| TRY-LTR | | Adj of DADF Tray width detect ref 1: LTR |
| Lv.1 | Details | To automatically adjust the paper width detection reference point 1 for the DADF Tray. (LTR) |
| | Use case | • When replacing the Original Width Volume (VR)<br>• When replacing the Reader Controller PCB/clearing RAM data |
| TRY-LTRR | | Adj of DADF Tray width detect ref2: LTRR |
| Lv.1 | Details | To automatically adjust the paper width detection reference point 2 for the DADF Tray. (LTRR) |
| | Use case | • When replacing the Original Width Volume (VR)<br>• When replacing the Reader Controller PCB/clearing RAM data |

| FEEDER > FUNCTION | | |
|---|---|---|
| FEED-CHK | | Specify DADF individual feed mode |
| Lv.1 | Details | To specify the feed mode for DADF.<br>Feed operation is activated by FEED-ON. |
| | Use case | At operation check |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 3<br>0: 1-sided pickup/delivery operation<br>1: 2-sided pickup/delivery operation<br>2: 1-sided pickup/delivery operation (with stamp)<br>3: 2-sided pickup/delivery operation (with stamp) |
| | Related service mode | FEEDER> FUNCTION> FEED-ON |
| FAN-CHK | | Specification of DADF Operation Fan |
| Lv.1 | Details | To specify the DADF Fan to operate.<br>The fan is activated by FAN-ON. |
| | Use case | At operation check |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Motor Driver Cooling Fan (FM1)<br>1: Read Motor Cooling Fan (FM2) |
| | Related service mode | FEEDER> FUNCTION>FAN-ON |
| FAN-ON | | Operation check of DADF Fan |
| Lv.1 | Details | To start operation check for the fan specified by FAN-CHK. |
| | Use case | At operation check |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>The unit operates for approximately 5 seconds and automatically stops.<br>2) Press OK key.<br>The operation check is completed. |
| | Caution | Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed). |
| | Related service mode | FEEDER> FUNCTION> FAN-CHK |
| SL-CHK | | Specification of DADF Operation Solenoid |
| Lv.1 | Details | To specify the DADF solenoid to operate.<br>The solenoid is activated by SL-ON. |
| | Use case | At operation check |
| | Adj/set/operate method | Enter the value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: Disengagement Solenoid (SL1)<br>1: Stamp Solenoid (SL2) |
| | Related service mode | FEEDER> FUNCTION> SL-ON |

| FEEDER > FUNCTION | | |
|---|---|---|
| SL-ON | | Operation check of DADF Solenoid |
| Lv.1 | Details | To start operation check for the solenoid specified by SL-CHK. |
| | Use case | At operation check |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>The unit operates for approximately 5 seconds and automatically stops.<br>2) Press OK key.<br>The operation check is completed. |
| | Caution | Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed). |
| | Related service mode | FEEDER> FUNCTION> SL-CHK |
| MTR-ON | | Operation check of Motor |
| Lv.1 | Details | To start operation check for the motor specified by MTR-CHK. |
| | Use case | At operation check |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>The unit operates for approximately 5 seconds and automatically stops.<br>2) Press OK key.<br>The operation check is completed. |
| | Caution | Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed). |
| | Related service mode | FEEDER> FUNCTION> MTR-CHK |
| ROLL-CLN | | Rotation of DADF Rollers |
| Lv.1 | Details | To rotate for cleaning the DADF Rollers.<br>Clean the roller by putting the lint-free paper moistened with alcohol while it is rotating. |
| | Use case | At roller cleaning |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Clean the rotating rollers with lint-free paper moistened with alcohol.<br>3) Press OK key.<br>The rollers stop. |
| FEED-ON | | Operation check of DADF individual feed |
| Lv.1 | Details | To start operation check for the feed mode specified by FEED-CHK. |
| | Use case | At operation check |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Related service mode | FEEDER> FUNCTION> FEED-CHK |

T-8-99

# OPTION

| FEEDER > OPTION | | |
|---|---|---|
| SIZE-SW | | ON/OFF of mixed paper detection:AB, Inch |
| Lv.1 | Details | To set ON/OFF of mixed paper detection: AB configuration and Inch configuration |
| | Use case | When enabling to mix AB and Inch configuration sizes original |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF (Mixed paper is not detected), 1: ON (Mixed paper is detected) |

T-8-100

# SORTER

## ADJUST

| SORTER > ADJUST | | |
|---|---|---|
| PNCH-Y | | Adjust punch hole side regist position |
| Lv.1 | Details | To adjust the punch hole in side registration direction.<br>As the value is incremented by 1, the punch hole moves by 0.45 mm.<br>+: Toward rear<br>-: Toward front |
| | Use case | When the punch hole is misaligned in the side registration direction |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -5 to 5 |
| | Unit | 0.45mm |
| | Default value | 0 |
| PF-A3Z1 | | Adj of A3 Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A3 paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A3Z2 | | Adj of A3 Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of A3 paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-B4Z1 | | Adj of B4 Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of B4 paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| PF-B4Z2 | | Adj of B4 Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of B4 paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4RZ1 | | Adj of A4R Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A4R paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4RZ2 | | Adj of A4R Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of A4R paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-LDRZ1 | | Adj of LDR Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LDR paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-LDRZ2 | | Adj of LDR Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LDR paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| PF-LGLZ1 | | Adj of LGL Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LGL paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-LGLZ2 | | Adj of LGL Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LGL paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRRZ1 | | Adj of LTRR Z-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LTRR paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRRZ2 | | Adj of LTRR Z-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LTRR paper Z-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4RC1 | | Adj of A4R C-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A4R paper C-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -70 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| PF-A4RC2 | | Adj of A4R C-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of A4R paper C-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 70 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRRC1 | | Adj of LTRR C-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LTRR paper C-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -70 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRRC2 | | Adj of LTRR C-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LTRR paper C-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 70 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4R31 | | Adj of A4R out-3-fold position(1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A4R paper out-3-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 120 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4R32 | | Adj of A4R out-3-fold position(2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of A4R paper out-3-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -120 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| PFLTRR31 | | Adj of LTRR out-3-fold pstn (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LTRR paper out-3-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 120 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRR32 | | Adj of LTRR out-3-fold pstn (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LTRR paper out-3-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -120 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4R41 | | Adj of A4R 4-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A4R paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 120 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4R42 | | Adj of A4R 4-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of A4R paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 55 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRR41 | | Adj of LTRR 4-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LTRR paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 120 |
| | Unit | 0.5mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| PFLTRR42 | | Adj of LTRR 4-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LTRR paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 55 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-A4R21 | | Adj of A4R 2-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of A4R paper 2-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 55 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PFLTRR21 | | Adj of LTRR 2-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LTRR paper 2-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 55 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PRCS-ALG | | Adjust Process Tray Align Plate width |
| Lv.1 | Details | To adjust the width of Alignment Plate on Finisher Process Tray Assembly.<br>As the value is incremented by 1, the width of Alignment Plate is increased by 0.1mm.<br>+: Increase (widen)<br>-: Decrease (narrow) |
| | Use case | When the paper displacement occurs on paper stack |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |

| SORTER > ADJUST | | |
|---|---|---|
| STP-F1 | | Front 1-staple position (R size) |
| Lv.1 | Details | To adjust the A4R/LGL/LTRR paper front 1-staple position on Finisher.<br>As the value is incremented by 1, the staple position moves by 0.1mm.<br>+: Toward front<br>-: Toward rear |
| | Use case | When the A4R/LGL/LTRR paper front staple position is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -6 to 6 |
| | Unit | 0.1mm |
| STP-F2 | | Front 1-staple position(half size) |
| Lv.1 | Details | To adjust the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper front 1-staple position on Finisher.<br>As the value is incremented by 1, the staple position moves by 0.1mm.<br>+: Toward front<br>-: Toward rear |
| | Use case | When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper front staple position is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -6 to 6 |
| | Unit | 0.1mm |
| STP-R1 | | Rear 1-staple position (R size) |
| Lv.1 | Details | To adjust the A4R/LGL/LTRR paper rear 1-staple position on Finisher.<br>As the value is incremented by 1, the staple position moves by 0.1mm.<br>+: Toward front<br>-: Toward rear |
| | Use case | When the A4R/LGL/LTRR paper rear staple position is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -6 to 6 |
| | Unit | 0.1mm |

| SORTER > ADJUST | | |
|---|---|---|
| STP-R2 | | Rear 1-staple position (half size) |
| Lv.1 | Details | To adjust the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper rear 1-staple position on Finisher.<br>As the value is incremented by 1, the staple position moves by 0.1mm.<br>+: Toward front<br>-: Toward rear |
| | Use case | When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper rear staple position is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -6 to 6 |
| | Unit | 0.1mm |
| STP-2P | | Adj front/rear 2-staple position |
| Lv.1 | Details | To adjust the front/rear 2-staple position on Finisher.<br>As the value is incremented by 1, the staple position moves by 0.1mm.<br>+: Toward front<br>-: Toward rear |
| | Use case | When the front/rear 2-staple position is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| BFF-SFT | | Paper displace amount on buffer |
| Lv.1 | Details | To adjust the paper displacement amount on Finisher Buffer Assembly.<br>As the value is incremented by 1, the paper position moves by 0.1mm. |
| | Use case | When the paper displacement occurs on the 1st to 3rd sheets of the 2nd sets (B5/A4/LTR) and later |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| PNCH-X | | Punch hole position in feed way |
| Lv.1 | Details | To adjust the punch hole position on Finisher in feed direction.<br>As the value is incremented by 1, the punch hole moves by 0.1mm.<br>+: Toward delivery direction<br>-: Toward inlet direction |
| | Use case | When the punch hole is displaced in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | 0.1mm |

| SORTER > ADJUST | | |
|---|---|---|
| TRM-RG1 | | Skew adjust (small size) |
| Lv.1 | Details | To adjust the skew of A4 size or smaller paper stack on Finisher Trimmer.<br>As the value is incremented by 1, the paper stack stop position moves by 0.1mm.<br>+: Toward delivery direction<br>-: Toward inlet direction |
| | Use case | When the skew occurs on A4 or smaller paper stack |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| TRM-RG2 | | Skew adjust (large size) |
| Lv.1 | Details | To adjust the skew of paper stack larger than A4 size on Finisher Trimmer.<br>As the value is incremented by 1, the paper stack stop position moves by 0.1mm.<br>+: Toward delivery direction<br>-: Toward inlet direction |
| | Use case | When the skew occurs on paper stack larger than A4 size |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| TRM-CUT1 | | Trimming position adjust (small size) |
| Lv.1 | Details | To adjust the trimming position of A4 size or smaller paper stack on Finisher Trimmer.<br>As the value is incremented by 1, the paper stack stop position moves by 0.1mm.<br>+: Toward delivery direction<br>-: Toward inlet direction |
| | Use case | When the trimming position is displaced on A4 or smaller paper stack |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |

| SORTER > ADJUST | | |
|---|---|---|
| TRM-CUT2 | | Trimming position adjust (large size) |
| Lv.1 | Details | To adjust the trimming position of the paper stack larger than A4 size on Finisher Trimmer.<br>As the value is incremented by 1, the paper stack stop position moves by 0.1mm.<br>+: Toward delivery direction<br>-: Toward inlet direction |
| | Use case | When the trimming position is displaced on the paper stack larger than A4 size |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| BFF-SFT2 | | Paper displace amount on buffer |
| Lv.1 | Details | To adjust the paper displacement amount on Finisher Buffer Assembly.<br>As the value is incremented by 1, the paper position moves by 0.1mm. |
| | Use case | When the paper displacement occurs on the 2nd to 3rd sheets of the 2nd sets (B5/A4/LTR) and later |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| SDL-STP | | Adj of Saddle Stitcher staple position |
| Lv.1 | Details | To adjust the staple position of Saddle Stitcher.<br>As the value is incremented by 1, the staple position moves by mm. |
| | Use case | When the staple position of the Saddle Stitcher is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |
| SDL-FLD | | Adj of Saddle Stitcher fold position |
| Lv.1 | Details | To adjust the fold position of Saddle Stitcher.<br>As the value is incremented by 1, the fold position moves by mm. |
| | Use case | When the fold position of the Saddle Stitcher is displaced |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| SDL-ALG | | Adj of Saddle Stitcher alignment width |
| Lv.1 | Details | To adjust the alignment width of Saddle Stitcher.<br>As the value is incremented by 1, the alignment width is increased by mm. |
| | Use case | When the misalignment occurs within a paper stack on the Saddle Stitcher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |
| SDL-RLPT | | Adj Sddl Sttch Diseng Roll diseng amount |
| Lv.1 | Details | To adjust the disengagement amount of Saddle Stitcher Disengagement Roller.<br>As the value is incremented by 1, the disengagement amount is increased by mm. |
| | Use case | When the feed failure (with thin paper, etc.) occurs on the Saddle Stitcher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |
| SDL-RLFD | | Adj Sddl Sttch Diseng Roller feed amount |
| Lv.1 | Details | To adjust the feed amount of Saddle Stitcher Disengagement Roller.<br>As the value is incremented by 1, the feed amount is increased by mm. |
| | Use case | When the feed failure (with thin paper, etc.) occurs on the Saddle Stitcher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |
| SDL-RLHD | | Adj Sddl Sttch Diseng Roll fold position |
| Lv.1 | Details | To adjust the fold position of Saddle Stitcher Disengagement Roller.<br>As the value is incremented by 1, the fold position moves by mm. |
| | Use case | When the feed failure (with thin paper, etc.) occurs on the Saddle Stitcher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -20 to 20 |
| | Unit | -mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| BFR-UPA4 | | Adj Swng Roll rise tmg for A4:Fin-N1/P1 |
| Lv.1 | Details | To adjust the Swing Roller rise timing when A4 size paper is waited in the buffer path.<br>As the value is incremented by 1, the rise timing becomes early by 1 msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in A4 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1msec |
| BFR-UPB5 | | Adj Swng Roll rise tmg for B5:Fin-N1/P1 |
| Lv.1 | Details | To adjust the Swing Roller rise timing when B5 size paper is waited in the buffer path.<br>As the value is incremented by 1, the rise timing becomes early by 1 msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in B5 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1msec |
| BFR-UPLT | | Adj Swng Roll rise tmg for LTR:Fin-N1/P1 |
| Lv.1 | Details | To adjust the Swing Roller rise timing when LTR size paper is waited in the buffer path.<br>As the value is incremented by 1, the rise timing becomes early by 1 msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in LTR size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1msec |

| SORTER > ADJUST | | |
|---|---|---|
| RTR-DWA4 | | Adj Ppr Rtn Roll fall tmg (A4):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller fall timing when A4 size paper is waited in the buffer path.<br>As the value is incremented by 1, the fall timing becomes early by 1msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in A4 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -21 to 41 |
| | Unit | 1msec |
| RTR-DWB5 | | Adj Ppr Rtn Roll fall tmg (B5):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller fall timing when B5 size paper is waited in the buffer path.<br>As the value is incremented by 1, the fall timing becomes early by 1msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in B5 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -21 to 41 |
| | Unit | 1msec |
| RTR-DWLT | | Adj Ppr Rtn Roll fall tmg(LTR):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller fall timing when LTR size paper is waited in the buffer path.<br>As the value is incremented by 1, the fall timing becomes early by 1msec.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in LTR size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -21 to 41 |
| | Unit | 1msec |

| SORTER > ADJUST | | |
|---|---|---|
| BF-SB-A4 | | Adj switchback position for A4:Fin-N1/P1 |
| Lv.1 | Details | To adjust the paper switchback position when A4 size paper is waited in the buffer path.<br>As the value is incremented by 1, the switchback amount is increased by 1mm.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in A4 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1mm |
| BF-SB-B5 | | Adj switchback position for B5:Fin-N1/P1 |
| Lv.1 | Details | To adjust the paper switchback position when B5 size paper is waited in the buffer path.<br>As the value is incremented by 1, the switchback amount is increased by 1mm.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in B5 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1mm |
| BF-SB-LT | | Adj swback position for LTR: Fin-N1/P1 |
| Lv.1 | Details | To adjust the paper switchback position when LTR size paper is waited in the buffer path.<br>As the value is incremented by 1, the switchback amount is increased by 1mm.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in LTR size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 50 |
| | Unit | 1mm |

| SORTER > ADJUST | | |
|---|---|---|
| RTR-UPA4 | | Adj Ppr Rtn Roll rise angl(A4):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller rise angle when processing is performed to A4 size paper.<br>As the value is incremented by 1, the roller rise angle is increased by 1 degree.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in A4 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 44 |
| | Unit | 1deg C |
| RTR-UPB5 | | Adj Ppr Rtn Roll rise angl(B5):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller rise angle when processing is performed to B5 size paper.<br>As the value is incremented by 1, the roller rise angle is increased by 1 degree.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in B5 size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 44 |
| | Unit | 1deg C |
| RTR-UPLT | | Adj Ppr Rtn Rol rise angl(LTR):Fin-N1/P1 |
| Lv.1 | Details | To adjust the Paper Return Roller rise angle when processing is performed to LTR size paper.<br>As the value is incremented by 1, the roller rise angle is increased by 1 degree.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When misalignment occurs in LTR size buffer paper |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 44 |
| | Unit | 1deg C |

| SORTER > ADJUST | | |
|---|---|---|
| PUNCH-SB | | Adj Punch Unit ppr swback amnt:Fin-N1/P1 |
| Lv.1 | Details | To adjust the paper switchback amount in the high accuracy punch mode of Finisher.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When the punch accuracy deteriorates in the paper feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 4 |
| | Unit | 1mm |
| ST-ALG1 | | Adj Stacker A4 size align pstn |
| Lv.1 | Details | To adjust the A4 size paper alignment position of the Process Tray.<br>As the value is incremented by 1, the Alignment Plate moves inward by 0.1 mm. |
| | Use case | When misalignment occurs in A4 size paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |
| | Default value | 0 |
| ST-ALG2 | | Adj Stacker LTR size align pstn |
| Lv.1 | Details | To adjust the LTR size paper alignment position.<br>As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42 mm. |
| | Use case | When misalignment occurs in LTR size paper |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.42mm |
| | Default value | 0 |
| DW-CL | | ON/OFF of downward curl alleviation mode |
| Lv.1 | Details | Set 1 when a stacking failure occurs due to downward curl on the paper delivered to the tray. |
| | Use case | When a stacking failure due to downward curl on the paper occurs |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| PRT-DWN | | Ad stack retaining port time:Fin-N1 |
| Lv.1 | Details | To adjust the time the Stack Retainer in the Processing Tray moves down. |
| | Use case | When misalignment in feed direction occurs with papers in the Processing Tray |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 1 to 60 |
| | Unit | 1msec |

| SORTER > ADJUST | | |
|---|---|---|
| PF-LGL41 | | Adj of LGL 4-fold position (1st): PFU |
| Lv.1 | Details | To adjust the 1st fold position of LGL paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5 mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 120 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PF-LGL42 | | Adj of LGL 4-fold position (2nd): PFU |
| Lv.1 | Details | To adjust the 2nd fold position of LGL paper 4-fold position on Paper Folding Unit.<br>As the value is incremented by 1, the fold position moves by 0.5 mm. |
| | Use case | When the fold position adjustment in user mode is inadequate |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -128 to 127 |
| | Unit | 0.5mm |
| | Default value | 0 |
| PNC-SBTN | | Thin swbck amnt: Hi accurcy punch,Fin-N1 |
| Lv.1 | Details | To adjust the switchback amount of thin paper in the high accuracy punch mode.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When the punch accuracy of thin paper is low in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 4 |
| | Unit | 1mm |
| | Default value | 1 |
| SBFD-SPL | | Adj small plain ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking small size plain papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of small size plain paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| SBFD-LPL | | Adj large plain ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking large size plain papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of large size plain paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |
| SBFD-SHV | | Adj small heavy ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking small size heavy papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of small size heavy paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |
| SBFD-LHV | | Adj large heavy ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking large size heavy papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of large size heavy paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| SBFD-STN | | Adj small thin ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking small size thin papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of small size thin paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |
| SBFD-LTN | | Adj large thin ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking large size thin papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of large size thin paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |
| SBFD-SCT | | Adj small coated ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking small size coated papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of small size coated paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| SBFD-LCT | | Adj large coated ppr swback pstn: Fin-N1 |
| Lv.1 | Details | To adjust the switchback position when stacking large size coated papers on the Process Tray.<br>As the value is incremented by 1, the switchback amount is increased by 1mm. |
| | Use case | When alignment condition of large size coated paper is poor in feed direction |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -10 to 10 |
| | Unit | 1mm |
| | Default value | 0 |
| NST-SPD | | Adj delivery speed at non-collate:Fin-N1 |
| Lv.1 | Details | To adjust the delivery speed in non-collate mode.<br>As the value is incremented by 1, the delivery speed is increased by 20 mm/sec. |
| | Use case | When the stacking condition in non-collate mode is poor |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 5 |
| | Unit | 20mm |
| | Default value | 0 |
| NST-SPTN | | Adj thin ppr dvry SPD:non-collate,Fin-N1 |
| Lv.1 | Details | To adjust the delivery speed of thin paper in non-collate mode.<br>As the value is incremented by 1, the delivery speed is increased by 20 mm/sec. |
| | Use case | When the stacking condition of thin paper in non-collate mode is poor |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -5 to 5 |
| | Unit | 20mm |
| | Default value | 0 |
| RTNRL-SP | | Adj Return Roller rotation speed: Fin-N1 |
| Lv.1 | Details | To adjust the Return Roller rotation speed.<br>As the value is incremented by 1, the delivery speed is increased by 50 mm/sec. |
| | Use case | When alignment condition is poor |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | -6 to 0 |
| | Unit | 50mm |
| | Default value | 0 |

| SORTER > ADJUST | | |
|---|---|---|
| SW-ADJ | | Adjustment of Swing Guide height |
| Lv.1 | Details | To adjust the height of the Swing Guide at the time of nip.<br>As the value is incremented by 1, the height of the Swing Guide changes by 0.23 mm.<br>+: Height is increased<br>-: Height is decreased |
| | Use case | When an image is scratched at the Swing Guide due to friction of papers |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -10 to 4 |
| | Unit | 0.23mm |
| GRP-ALG | | Adjustment of Gripper standby point |
| Lv.1 | Details | To adjust the timing that the Gripper grabs a paper stack by changing the standby point of the Gripper.<br>As the value is incremented by 1, the standby position moves by 0.12 mm.<br>+: Timing becomes earlier<br>-: Timing is delayed |
| | Use case | When adjusting the timing that the Gripper grabs a paper stack |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -40 to 40 |
| | Unit | 0.12mm |
| PRTN-ALG | | Adjustment of Paper Retainer fall amount |
| Lv.1 | Details | To adjust the fall amount of the Paper Retainer.<br>As the value is incremented by 1, the fall amount is increased by 0.65 degree.<br>+: Move down<br>-: Move up |
| | Use case | When adjusting the position the Paper Retainer moves down to the Process Tray |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -12 to 12 |
| | Unit | 0.65deg C |
| BFF-SFT3 | | Paper displacement amount adj 3: buffer |
| Lv.1 | Details | To adjust the paper displacement amount on the 3rd and 4th sheets on Finisher Buffer Assembly.<br>As the value is incremented by 1, the paper position moves by 0.1 mm.<br>+: Increase<br>-: Decrease |
| | Use case | When the paper displacement occurs on the 3rd to 4th sheets of the 2nd sets (B5/A4/LTR) and later |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |

| SORTER > ADJUST | | |
|---|---|---|
| BFF-SFT4 | | Paper displacement amount adj 4: buffer |
| Lv.1 | Details | To adjust the paper displacement amount on the 4th and 5th sheets on Finisher Buffer Assembly.<br>As the value is incremented by 1, the paper position moves by 0.1 mm.<br>+: Increase<br>-: Decrease |
| | Use case | When the paper displacement occurs on the 4th to 5th sheets of the 2nd sets (B5/A4/LTR) and later |
| | Adj/set/operate method | Enter the setting value, and then press OK key. |
| | Display/adj/set range | -50 to 50 |
| | Unit | 0.1mm |

T-8-101

# FUNCTION

| SORTER > FUNCTION | | |
|---|---|---|
| FN-SENS1 | | Adj Punch Side Rgst Sensr output: Fin-N1 |
| Lv.1 | Details | To automatically adjust the output of the Side Registration Sensor 1 to 5 of the Puncher Unit in sequence.<br>Side Registration Sensor 1: A3/A4, 2: LDR/LTR, 3: B4/B5, 4: A4R/LTRR/LGL, 5: B5R |
| | Use case | • When installing/replacing the Puncher Unit<br>• When replacing the Punch Waste Full Detection PCB<br>• When replacing the Finisher Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| FN-SENS2 | | Adjust Punch Waste Sensor output |
| Lv.1 | Details | To automatically adjust the output of Punch Waste Full Detection Sensor (Punch Waste Full Detection PCB) on the Puncher Unit. |
| | Use case | • When installing/replacing the Puncher Unit<br>• When replacing the Punch Waste Full Detection PCB<br>• When replacing the Finisher Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| CLEAR | | [Not used] |
| FIN-BK-R | | Finisher backup data saving: HDD |
| Lv.1 | Details | To read the backup data from Finisher Controller PCB and save in HDD. |
| | Use case | When replacing the Finisher Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> FIN-BK-W |
| FLD-BK-W | | Controller PCB backup data write: PFU |
| Lv.1 | Details | To write the backup data saved in HDD to the DC Controller PCB of the Paper Folding Unit. |
| | Use case | When replacing the DC Controller PCB of the Paper Folding Unit |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> FLD-BK-R |
| PIU-BK-R | | Controller PCB backup data read: IFU |
| Lv.1 | Details | To read the backup data from the DC Controller PCB of the Professional Puncher Integration Unit and save in HDD. |
| | Use case | When replacing the DC Controller PCB of the Professional Puncher Integration Unit |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> PIU-BK-W |

| SORTER > FUNCTION | | |
|---|---|---|
| INS-BK-R | | Controller PCB backup data read:Inserter |
| Lv.1 | Details | To read the backup data from the DC Controller PCB of the Inserter and save in HDD. |
| | Use case | When replacing the DC Controller PCB of the Inserter |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> INS-BK-W |
| FIN-BK-W | | Fin Controller PCB backup data write |
| Lv.1 | Details | To write the backup data saved in HDD to Finisher Controller PCB. |
| | Use case | When replacing the Finisher Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> FIN-BK-R |
| FLD-BK-R | | Controller PCB backup data read: PFU |
| Lv.1 | Details | To read the backup data from the DC Controller PCB of the Paper Folding Unit and save in HDD. |
| | Use case | When replacing the DC Controller PCB of the Paper Folding Unit |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> FLD-BK-W |
| INS-BK-W | | Controller PCB bckup data write:Inserter |
| Lv.1 | Details | To write the backup data saved in HDD to DC Controller PCB of the Inserter. |
| | Use case | When replacing the DC Controller PCB of the Inserter |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> INS-BK-R |
| PIU-BK-W | | Controller PCB backup data write: IFU |
| Lv.1 | Details | To write the backup data saved in HDD to DC Controller PCB of the Professional Puncher Integration Unit. |
| | Use case | When replacing the DC Controller PCB of the Professional Puncher Integration Unit |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | In processing: ACTIVE, at normal termination: OK, at abnormal termination: NG |
| | Related service mode | SORTER> FUNCTION> PIU-BK-R |

| SORTER > FUNCTION | | |
|---|---|---|
| VR1-A4R | | Adj Upr Tray width volume (A4R):Inserter |
| Lv.1 | Details | To adjust the paper minimum width (A4R) of Inserter Upper Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray |
| | Adj/set/operate method | 1) Set the A4R paper on the Inserter Upper Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR1-A4 | | Adj Upr Tray width volume (A4): Inserter |
| Lv.1 | Details | To adjust the paper maximum width (A4) of Inserter Upper Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray |
| | Adj/set/operate method | 1) Set the A4 paper on the Inserter Upper Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR1-LTRR | | Adj Upr Tray width vol (LTRR): Inserter |
| Lv.1 | Details | To adjust the paper minimum width (LTRR) of Inserter Upper Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray |
| | Adj/set/operate method | 1) Set the LTRR paper on the Inserter Upper Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR1-LTR | | Adj Upr Tray width vol (LTR): Inserter |
| Lv.1 | Details | To adjust the paper maximum width (LTR) of Inserter Upper Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray |
| | Adj/set/operate method | 1) Set the LTR paper on the Inserter Upper Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |

| SORTER > FUNCTION | | |
|---|---|---|
| VR2-A4R | | Adj Lower Tray width vol (A4R): Inserter |
| Lv.1 | Details | To adjust the paper minimum width (A4R) of Inserter Lower Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray |
| | Adj/set/operate method | 1) Set the A4R paper on the Inserter Lower Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR2-A4 | | Adj Lower Tray width vol (A4): Inserter |
| Lv.1 | Details | To adjust the paper maximum width (A4) of Inserter Lower Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray |
| | Adj/set/operate method | 1) Set the A4 paper on the Inserter Lower Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR2-LTRR | | Adj Lower Tray width vol (LTRR):Inserter |
| Lv.1 | Details | To adjust the paper minimum width (LTRR) of Inserter Lower Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray |
| | Adj/set/operate method | 1) Set the LTRR paper on the Inserter Lower Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |
| VR2-LTR | | Adj Lower Tray width vol (LTR): Inserter |
| Lv.1 | Details | To adjust the paper maximum width (LTR) of Inserter Lower Tray automatically.<br>The item can be also set with DIP switch of the Inserter (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray |
| | Adj/set/operate method | 1) Set the LTR paper on the Inserter Lower Tray and align it with the width of Slide Guide.<br>2) Select the item, and then press OK key. |

| SORTER > FUNCTION | | |
|---|---|---|
| FIN-CON | | Controller PCB RAM clear |
| Lv.1 | Details | To execute the RAM clear of Finisher Controller PCB to delete all the adjustment contents and counter information. |
| | Adj/set/operate method | 1) Select the item, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting values.<br>• The RAM data is cleared after the main power switch is turned OFF/ON. |
| | Related service mode | COPIER> FUNCTION> MISC-P> P-PRINT |
| PF-CON | | Controller PCB RAM clear: PFU |
| Lv.1 | Details | To execute the RAM clear of Inserter/Folder Controller PCB on Paper Folding Unit to delete all the adjustment contents and counter information. |
| | Adj/set/operate method | Select the item, and then press OK key. |
| PF-SENS1 | | Adj Slowdown Timing Sensor output: PFU |
| Lv.1 | Details | To adjust the output of Slowdown Timing Sensor on Paper Folding Unit automatically. |
| | Use case | • When replacing the Slowdown Timing Sensor<br>• When replacing the Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| PF-SENS2 | | Adj Release Timing Sensor output: PFU |
| Lv.1 | Details | To adjust the output of Release Timing Sensor on Paper Folding Unit automatically. |
| | Use case | • When replacing the Release Timing Sensor<br>• When replacing the Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| PF-SENS3 | | Adj Fold Position Sensor output: PFU |
| Lv.1 | Details | To adjust the output of Fold Position Sensor on Paper Folding Unit automatically. |
| | Use case | • When replacing the Fold Position Sensor<br>• When replacing the Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| PF-SENS4 | | Adj Upper Stopper Path Sensor output:PFU |
| Lv.1 | Details | To adjust the output of Upper Stopper Path Sensor on Paper Folding Unit automatically. |
| | Use case | • When replacing the Upper Stopper Path Sensor<br>• When replacing the Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |
| TRM-SENS | | Adjust of Trimmer Dust Sensor output |
| Lv.1 | Details | To adjust the output of Saddle Dust Sensor on Saddle Unit automatically. |
| | Use case | • When installing the Trimmer<br>• When replacing the Trimmer Dust Sensor<br>• When replacing the Saddle Controller PCB |
| | Adj/set/operate method | Select the item, and then press OK key. |

| SORTER > FUNCTION | | |
|---|---|---|
| IS-CON | | DC Controller PCB RAM clear: Inserter |
| Lv.1 | Details | To execute the RAM clear of Inserter DC Controller PCB to delete all the adjustment contents and counter information. |
| | Adj/set/operate method | Select the item, and then press OK key. |

T-8-102

# OPTION

| SORTER > OPTION | | |
|---|---|---|
| BLNK-SW | | Set Saddle Finisher fold position margin |
| Lv.1 | Details | To set the margin width of fold position on Saddle Finisher. |
| | Use case | When changing the margin width of fold position |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Normal, 1: Wider, 2: Entire image (no margin) |
| | Default value | 2 |
| MD-SPRTN | | Restricted operation at Finisher error |
| Lv.1 | Details | To set whether to stop the machine when an error occurs at Finisher. |
| | Use case | When preferring to run the machine at Finisher error occurrence |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When “1” is set, staple operation or alignment operation is not executed. Set “0” normally. |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Restricted operation |
| | Default value | 0 |
| CNTR-OUT | | Set of center positn delivery at stacker |
| Lv.2 | Details | To set whether to use the center position delivery when the stacker is used.<br>When 1 is set, shift delivery is not executed but the center position delivery is excited. |
| | Use case | Upon user’s request (when they do not want to execute shift delivery.) |
| | Caution | This can be enabled when the stacker is connected. |
| | Display/adj/set range | 0 to 1<br>0: Not execute, 1: execute |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| SDL-PRS | | Press operatn in saddle stitcher: Fin-Q1 |
| Lv.1 | Details | To set the press operation in saddle stitcher<br>When wrinkle occurs, press operation is not executed.<br>If stack is bulky in saddle-stitching result with 21 sheets or more, time to stop the press operation is extended.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | • When troubles (wrinkle etc) at press operation occur. Especially, in the location of high-humid environment or thin paper is used.<br>• In case of saddle-stitching with 21 sheets or more, if stack is bulky due to the failure of folding accuracy. |
| | Adj/set/operate method | 1) Enter the setting value and press OK.<br>2) Turn OFF/ON the main power switch. |
| | Caution | If wrinkle occurs at press operation, do not execute the press operation. |
| | Display/adj/set range | 0 to 3<br>0: With press operation (one way only)<br>1: Without press operation<br>2: With press operation (both way)<br>3: Extend the time to stop the press operation in stack with 21 sheets or more (one way only) |
| | Default value | 0 |
| BUFF-SW | | ON/OFF of finisher buffer opertn: Fin-Q1 |
| Lv.1 | Details | To set ON/OFF of buffer operation in the Finisher.<br>When misalignment occurs, set 1 to 4.<br>When 1 is set, buffer operation is not performed for all jobs. Alignment performance is improved, but productivity decreases.<br>When 2 is set, buffer operation is not performed only for non-binding jobs. Since buffer operation is performed for binding jobs, productivity improves, but alignment performance decreases.<br>When 3 is set, buffer operation is not performed only for binding jobs.<br>When 4 is set, it is not performed only for binding jobs with coated papers.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the misalignment of paper stack occurs (either lowest 3 sheets in side-stitching are displaced or center 3 sheets in saddle-stitching are displaced.) |
| | Adj/set/operate method | Enter the setting value and press OK. |
| | Caution | When the buffer operation is set to OFF, productivity is decreased. |
| | Display/adj/set range | 0 to 4<br>0: ON, 1: OFF, 2: OFF for non-binding job only, 3: OFF for binding job only, 4: OFF for binding job with coated paper only |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| TRY-EJCT | | Delivery control for thin paper: Fin-Q1 |
| Lv.1 | Details | To set the delivery control (delivery speed) for thin paper.<br>When this is specified, all the jobs are delivered in the thin paper delivery speed regardless of media.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When the stack failure of thin paper occurs. |
| | Adj/set/operate method | 1) Enter the setting value and press OK.<br>2) Turn OFF/ON the main power switch. |
| | Caution | Priority is given to this setting over the upward curl mode setting in CURL-SW. |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Delivery control for thin paper |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> CURL-SW |
| | Supplement/memo | Same setting can also be specified on the service-purposed DIP switch on the finisher.<br>Same setting value is applied to the finisher side and the host machine side. |
| PN-SKEW | | Position accuracy of punch hole: Fin-Q1 |
| Lv.1 | Details | Set of punch hole position accuracy due to skew: Fin-Q1<br>To set the accuracy of punch hole when the punch hole is displaced due to paper skew. |
| | Use case | If the punch hole is displaced by 2mm (approx) or more and also skew appears on the paper fed to the finisher. |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Caution | As the greater value is set, skew is corrected more accurately; however, productivity is decreased. |
| | Display/adj/set range | 0 to 2<br>0: Normal mode, 1: skew tolerance increase mode, 2: skew tolerance decrease mode |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| CURL-SW | | Set of curl mode |
| Lv.1 | Details | To set the delivery speed according to the curl direction (upward/downward curl).<br>To improve the stack failure due to paper curl.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When stack failure occurs due to paper curl. |
| | Adj/set/operate method | 1) Enter the setting value and press OK.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: Normal operation<br>1: Upward curl mode setting (accelerate the delivery speed at upper delivery/lower delivery)<br>2: Downward curl mode setting (decelerate the delivery speed at lower delivery) |
| | Default value | 0 |
| | Supplement/memo | Same setting can be specified at the service-specific DIP switch on the finisher. Same setting value is applied to the finisher side and the host machine side. |
| TRY-OVER | | Set of fold ppr stack limit: Fin-N1 |
| Lv.1 | Details | To set the limit of stack capacity for half fold paper and Z-fold paper.<br>When clearing the limit of stack capacity, paper can be stacked beyond the maximum stack capacity.<br>The item can be also set with DIP switch of the Finisher (with common setting range and setting value). The latest setting value is enabled regardless of service mode/DIP switch. |
| | Use case | When stacking the paper beyond the maximum stack capacity of the Tray. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Normal operation, 1: Clearing limit of stack capacity |
| | Default value | 0 |
| TRM-LMT | | Fore-edge minimum trim amount: trimmer |
| Lv.1 | Details | According to the number of paper stack and the grammage, whether to set the limit of fore-edge minimum trimming amount of the booklet trimmer. |
| | Use case | When the fore-edge trimming amount is set to small on the thick paper stack and if trimming failure occurs. |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Caution | Actual trimming amount may be larger than the setting value. |
| | Display/adj/set range | 0 to 1<br>0: Fixed (normal), 1: limited |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| PUCH-SW | | High-prdctvty/accurcy punch mod:Fin-N1 |
| Lv.1 | Details | To switch the high-productivity punch mode or high-accuracy punch mode of Finisher. |
| | Use case | When switching the high-productivity punch mode or high-accuracy punch mode |
| | Adj/set/operate method | Select the item, and then press OK key. |
| | Display/adj/set range | 0 to 1 |
| | Default value | 0 |
| ALG-IMPR | | Set Finisher alignment mode: Fin-N1 |
| Lv.1 | Details | To set the special mode for improving the alignment condition. |
| | Use case | When using the special mode for improving the alignment condition |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 20 |
| | Default value | 0 |
| BUFF-SW2 | | Set Finisher buffer operation: Fin-N1 |
| Lv.1 | Details | To set ON/OFF of buffer operation in the Finisher.<br>When 1 is set, the alignment condition of the paper delivered from the lower path may be improved. However, productivity decreases. |
| | Use case | When misalignment occurs in the buffer paper delivered from the lower path |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When the buffer operation is set to OFF, productivity decreases. |
| | Display/adj/set range | 0 to 1<br>0: ON, 1: OFF |
| | Default value | 0 |
| 1SHT-SRT | | Set of 1-sheet Offset&Collate: Fin-N1 |
| Lv.1 | Details | To set ON/OFF of Offset&Collate for 1-sheet document.<br>When 1 is set, Offset&Collate for 1-sheet document is enabled, but the paper is not appropriately stacked. |
| | Use case | When preferring to execute 1-sheet Offset&Collate |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| SD-LMTLS | | Sddl delivery limitless oprtn: Fin-N1 |
| Lv.1 | Details | To set ON/OFF of the Finisher Saddle Assembly limitless delivery operation.<br>When 1 is set, “stack over” does not occur and saddle operation can be performed continuously, but the stacking condition decreases. |
| | Use case | When preferring to perform saddle operation continuously |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When limitless operation is set to ON, the saddle stacking condition decreases. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| SD-STCNB | | Sddl delivery stack quantity: Fin-N1 |
| Lv.1 | Details | To increase the number of sets to be stacked to the Saddle Finisher.<br>When 1 is set, the number of sets to be stacked to the Saddle Finisher is increased. |
| | Use case | When preferring to increase the number of sets to be stacked to the Saddle Finisher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0:<br>Common to small/large sizes<br>17 to 20 sheets booklet: 5 sets, 11 to 16 sheets booklet: 10 sets, 6 to 10 sheets booklet: 15 sets, 1 to 5 sheets booklet: 25 sets<br>1:<br><Small size><br>17 to 20 sheets booklet: 20 sets, 11 to 16 sheets booklet: 30 sets, 6 to 10 sheets booklet: 40 sets, 1 to 5 sheets booklet: 50 sets<br><Large size><br>17 to 20 sheets booklet: 10 sets, 11 to 16 sheets booklet: 20 sets, 6 to 10 sheets booklet: 30 sets, 1 to 5 sheets booklet: 40 sets |
| | Default value | 0 |
| BUFF-THK | | Set buffer oprtn for heavy paper: Fin-N1 |
| Lv.1 | Details | To set ON/OFF of buffer operation for heavy paper (181 to 220g/m2).<br>When 1 is set, productivity of sort and staple mode of Finisher is improved, but the stacking condition decreases. |
| | Use case | When improving productivity of sort and staple mode for heavy paper (181 to 220g/m2) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> PRD-PRTY |

| SORTER > OPTION | | |
|---|---|---|
| PRCS-SP1 | | Set stacking speed at Hvy sort: Fin-N1 |
| Lv.1 | Details | When stacking heavy paper (181g/m2 or more) on the Finisher Process Tray, the speed is normally decreased.<br>When 1 is set, the stacking speed at sort mode does not decrease and productivity is improved, but the stacking condition may decrease. |
| | Use case | When improving productivity of sort mode for heavy paper (181g/m2 or more) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: Speed is decreased, 1: Speed is not decreased |
| | Default value | 0 |
| PRCS-SP2 | | Set stack SPD at Hvy sort/staple: Fin-N1 |
| Lv.1 | Details | When stacking heavy paper (181g/m2 or more) on the Finisher Process Tray, the speed is normally decreased.<br>When 1 is set, the stacking speed at sort and staple mode does not decrease and productivity is improved, but the stacking condition may decrease. |
| | Use case | When improving productivity of sort and staple mode for heavy paper (181g/m2 or more) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: Speed is decreased, 1: Speed is not decreased |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> PRD-PRTY |
| BUFF-MX1 | | Buffer oprtn at mixed weight sort:Fin-N1 |
| Lv.1 | Details | To set ON/OFF of buffer operation when mixing papers which weights are different.<br>When 1 is set, productivity of sort mode of Finisher is improved, but the stacking condition decreases. |
| | Use case | When improving productivity of sort mode in the case of mixing papers which weights are different |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| BUFF-MX2 | | Buffer at mix weight sort/staple:Fin-N1 |
| Lv.1 | Details | To set ON/OFF of buffer operation when mixing papers which weights are different.<br>When 1 is set, productivity of sort and staple mode of Finisher is improved, but the stacking condition decreases. |
| | Use case | When improving productivity of sort and staple mode in the case of mixing papers which weights are different |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> PRD-PRTY |
| PRCS-MX1 | | Set stck SPD at mix ppr type sort:Fin-N1 |
| Lv.1 | Details | The speed is decreased when stacking papers on the Finisher Process Tray in the case of mixing papers which the paper types (paper weight or paper material) differ.<br>When 1 is set, the stacking speed at sort mode does not decrease and productivity is improved, but the stacking condition may decrease. |
| | Use case | When improving productivity of sort mode in the case of mixing papers which the paper types differ |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: Speed is decreased, 1: Speed is not decreased |
| | Default value | 0 |
| PRCS-MX2 | | Stck SPD at mix ppr sort/staple:Fin-N1 |
| Lv.1 | Details | The speed is decreased when stacking papers on the Finisher Process Tray in the case of mixing papers which the paper types (paper weight or paper material) differ.<br>When 1 is set, the stacking speed at sort and staple mode does not decrease and productivity is improved, but the stacking condition may decrease. |
| | Use case | When improving productivity of sort and staple mode in the case of mixing papers which paper types differ |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | When improving productivity, the stacking condition may decrease. |
| | Display/adj/set range | 0 to 1<br>0: Speed is decreased, 1: Speed is not decreased |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> PRD-PRTY |

| SORTER > OPTION | | |
|---|---|---|
| BUF-THK1 | | Set No. of buffer for hvy ppr 1: Fin-N1 |
| Lv.1 | Details | To set the number of heavy paper 1 (91 to 180g/m2) for buffer.<br>When 1 is set, productivity of staple mode of Finisher is improved. |
| | Use case | When prioritizing productivity of staple mode of Finisher using heavy paper 1 |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: 2 sheets, 1: 3 sheets |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> PRD-PRTY |
| PRD-PRTY | | Prdctvty prrty btch at sort/staple:FinN1 |
| Lv.1 | Details | To simultaneously set productivity priority for BUFF-THK, PRCS-SP2, BUFF-MX2, PRCS-MX2, and BUF-THK1.<br>When 1 is set, productivity of sort and staple mode of Finisher's corresponding items is improved. |
| | Use case | When prioritizing productivity of sort and staple mode of Finisher |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Normal, 1: Priority on productivity |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> BUFF-THK, PRCS-SP2, BUFF-MX2, PRCS-MX2, BUF-THK1 |
| FIN-SP1 | | Finisher special settings 1 |
| Lv.2 | Details | Execute the Finisher special settings 1. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use this at the normal service.<br>• Take necessary action in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |
| FIN-SP2 | | Finisher special settings 2 |
| Lv.2 | Details | Execute the Finisher special settings 2. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | • Do not use this at the normal service.<br>• Take necessary action in accordance with the instructions from the Quality Support Division. |
| | Display/adj/set range | 00000000 to 11111111 |
| | Default value | 00000000 |

| SORTER > OPTION | | |
|---|---|---|
| SLD-BCK | | Setting of bleed-thru prev mode: Fin-N1 |
| Lv.1 | Details | When the back of the coated paper as the cover is soiled, set 1/2. |
| | Use case | When the back of paper is soiled while coated paper is used as cover |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 2<br>0: OFF, 1: ON (coated paper + recycled paper), 2: ON (coated paper + plain paper) |
| | Default value | 0 |
| STP-MAX | | Set max number of sheets for staple: Fin |
| Lv.1 | Details | To set the maximum number of sheets to be stapled in the Finisher. |
| | Use case | • Upon user's request (to increase the number of sheets to be stapled)<br>• When decreasing the number of sheets to be stapled at the time of staple failure occurrence due to the paper type or use environment |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | If the setting value is larger than the default (upper limit on the specification), staple failure may occur. |
| | Display/adj/set range | 2 to 200 |
| | Default value | 100 |
| SDL-MAX | | Set max No. of sht for staple:Saddle Fin |
| Lv.1 | Details | To set the maximum number of sheets to be stapled in the Saddle Finisher. |
| | Use case | • Upon user's request (to increase the number of sheets to be stapled)<br>• When decreasing the number of sheets to be stapled at the time of staple failure occurrence due to the paper type or use environment |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Caution | If the setting value is larger than the default (upper limit on the specification), staple failure may occur. |
| | Display/adj/set range | 2 to 50 |
| | Default value | 25 |
| VFLD-MAX | | Set max No. of sheets for Saddle V-fold |
| Lv.1 | Details | To set the maximum number of sheets to be folded in V-shape in the Saddle. |
| | Use case | • Upon user's request (to increase the number of sheets to be folded in V-shape in the Saddle) |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Caution | If the setting value is larger than the default (upper limit on the specification), Saddle V-fold failure may occur. |
| | Display/adj/set range | 1 to 16 |
| | Default value | 5 |

| SORTER > OPTION | | |
|---|---|---|
| NEAT-MIX | | ON/OFF ppr align func:mixed ppr wid dvry |
| Lv.1 | Details | To set whether to enable paper alignment function when delivering papers which widths are different.<br>When 0 is set, the setting of NEAT-SW is disabled. When 1 is set, paper alignment is performed. |
| | Use case | When not performing paper alignment at the time of delivering paper which widths are different |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> NEAT-SW |
| NEAT-SW | | Set ppr align cndtn: mixed ppr wid dvry |
| Lv.1 | Details | To set the conditions for performing paper alignment when delivering papers which widths are different.<br>When the specified condition (paper type) is satisfied while NEAT-MIX is ON, paper alignment is performed. |
| | Use case | When performing paper alignment with a specific paper type (neat alignment) |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Display/adj/set range | 0 to 2 |
| | Default value | 0 |
| | Related service mode | SORTER> OPTION> NEAT-MIX |
| TRM-CNT | | Set of number of trim: Fore Edge Trimmer |
| Lv.1 | Details | To set the number of trimming by the Fore Edge Trimmer. |
| | Use case | When preferring to perform trimming precisely |
| | Adj/set/operate method | Enter the setting value and press OK key. |
| | Caution | Productivity may decrease. |
| | Display/adj/set range | 0 to 2 |
| | Default value | 0 |
| 2STP-PTC | | Set 2-point stapling staple pitch:Fin-N1 |
| Lv.1 | Details | To set the staple pitch for 2-point stapling,.<br>When prioritizing productivity, set 0. |
| | Use case | Upon user's request (to improve productivity) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: 145 mm, 1: 120 mm |
| | Default value | 0 |

| SORTER > OPTION | | |
|---|---|---|
| THN-SW | | ON/OFF thin ppr stck cpcty increase mode |
| Lv.1 | Details | To set whether to increase the stack capacity of thin paper on the Delivery Tray.<br>When 1 is set, the stack capacity is changed from the number of large size sheets to be stacked to the number of the small size sheets to be stacked. |
| | Use case | Upon user's request (to increase the stack capacity of thin paper) |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: OFF, 1: ON |
| | Default value | 0 |
| THN-STK | | Set thin paper stacking method: Low Tray |
| Lv.1 | Details | To set the method for stacking thin papers on the Lower Tray.<br>When 1 is set, the method is changed from normal delivery to the delivery method with which papers are delivered as a paper stack so stacking condition improves. |
| | Use case | Upon user's request (to improve stacking condition of thin papers on the Lower Tray) |
| | Adj/set/operate method | Select the item and press OK key. |
| | Display/adj/set range | 0 to 1 |
| | Default value | 0 |

T-8-103

# BOARD

## OPTION

| BOARD > OPTION | | |
|---|---|---|
| MENU-1 | | Hide/dspl of printer set menu level 1 |
| Lv.2 | Details | To set whether to display or hide the level 1 of printer setting menu. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| MENU-2 | | Hide/dspl of printer set menu level 2 |
| Lv.2 | Details | To set whether to display or hide the level 2 of printer setting menu. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| MENU-3 | | Hide/dspl of printer set menu level 3 |
| Lv.2 | Details | To set whether to display or hide the level 3 of printer setting menu. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| MENU-4 | | Hide/dspl of printer set menu level 4 |
| Lv.2 | Details | To set whether to display or hide the level 4 of printer setting menu. |
| | Use case | Upon user's request |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |
| FONTDL | | ON/OFF of font setting screen display |
| Lv.1 | Details | To set whether to display the service-purposed setting screen of fonts which are listed using PS Kanji Font Downloader. |
| | Adj/set/operate method | 1) Enter the setting value, and then press OK key.<br>2) Turn OFF/ON the main power switch. |
| | Display/adj/set range | 0 to 1<br>0: Hide, 1: Display |
| | Default value | 0 |

T-8-104

# 9 Installation


- Checking before Installation
- Table of Options Combination
- Checking the Contents
- Unpacking
- Installation
- When Relocating the Machine
- Printer Cover -B1
- Reader Heater Unit
- Cassette Heater Unit
- Paper Deck Heater Unit-A1
- Utility Tray-A2
- Card Reader-C1/Copy Card Reader-F1
- Voice Guidance Kit-F1/F2
- Installation Procedure for Expansion Bus-F1/F2, IPSec Board-B2 and Wireless LAN Board-B1
- Additional Memory Type B (512MB)
- Combination of HDD Options

# Checking before Installation

Following shows requirements for the installation site.
Therefore, it is desirable to see the installation site in advance before bringing in the machine to the user's site.

## Checking Power Supply

1) There must be a properly grounded source of power that can be used exclusively by the following machines:
- EUR: 200V/10A
- USA: 120V/16A

## Checking the Installation Environment

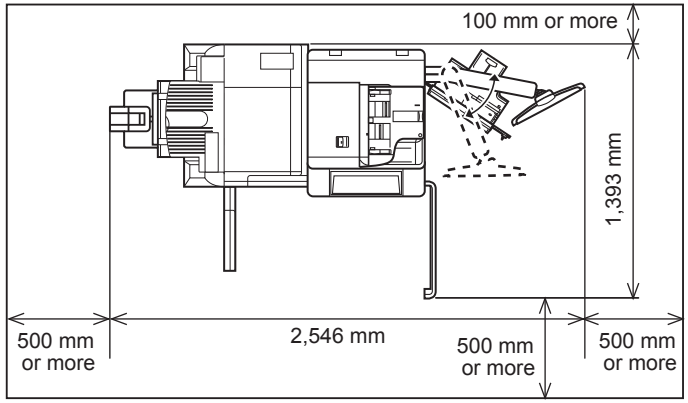
1) The environment of the installation site must be in the range as shown below. Avoid installation near the faucet, water boiler, humidifier or refrigerator.
Guaranteed range for operation/image Temperature: 10.0 to 30.0 deg C, Humidity: 20 to 80%
2) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas. If the area is exposed to direct rays of the sun, provide curtains to the window.
3) Be sure to provide adequate ventilation of the room to keep the work environment comfortable. Room odor can be bothering when running the machine for a long time in a poorly-ventilated room although the ozone amount generated while running this equipment does not harm human health.

## Checking Installation Space

1) The foot of this equipment should be in contact with the floor. This equipment should be kept on the level.

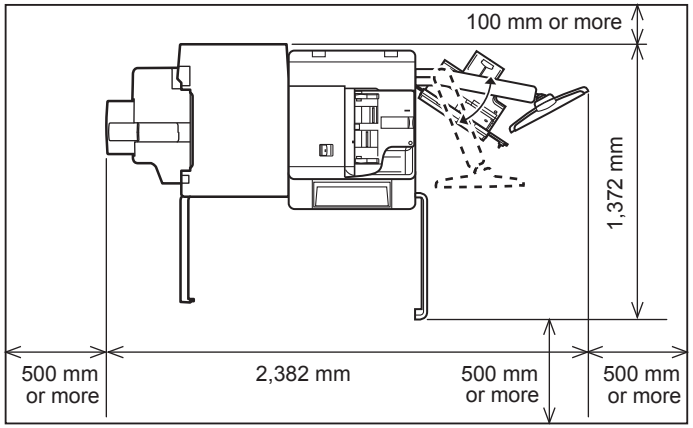
2) The machine must be away from the wall by 100mm or more to secure a sufficient space to operate the machine.

<For the iR-ADV 8205/8295:>
- When the Booklet Finisher-Q1 PRO and Duplex Color Image Reader Unit-G1 are attached:




F-9-1

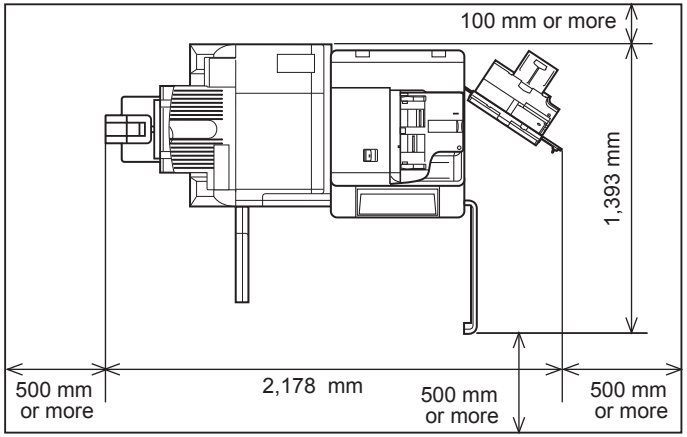
- When the Booklet Finisher-N1 and Duplex Color Image Reader Unit-G1 are attached:




F-9-2

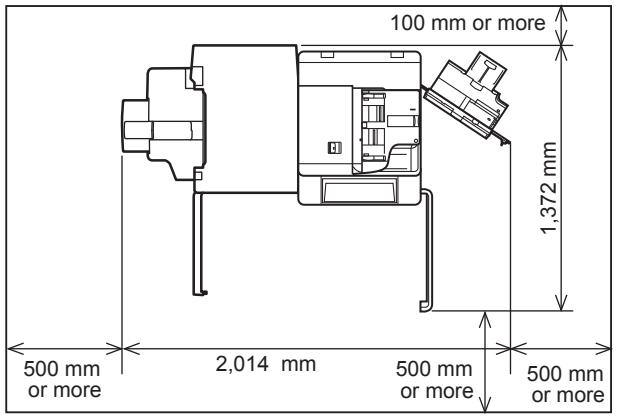
<For the iR-ADV 8285:>

- When the Booklet Finisher-Q1 PRO and Duplex Color Image Reader Unit-G1 are attached:




F-9-3

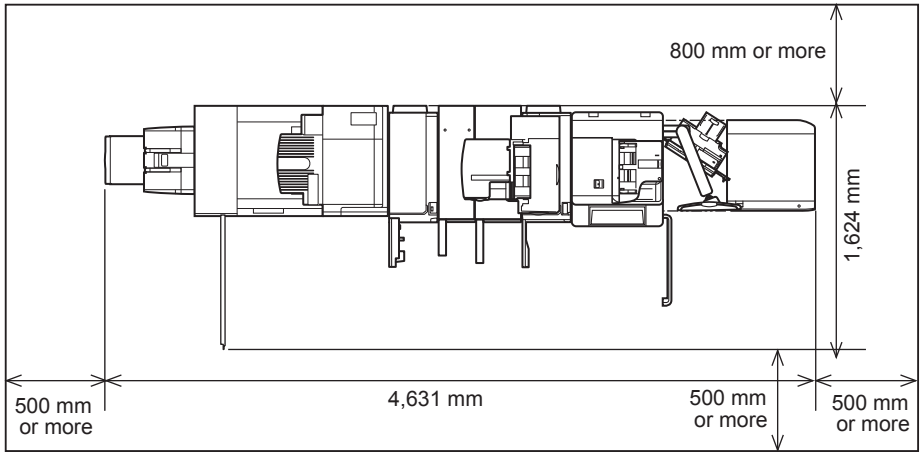
- When the Booklet Finisher-N1 and Duplex Color Image Reader Unit-G1 are attached:




F-9-4

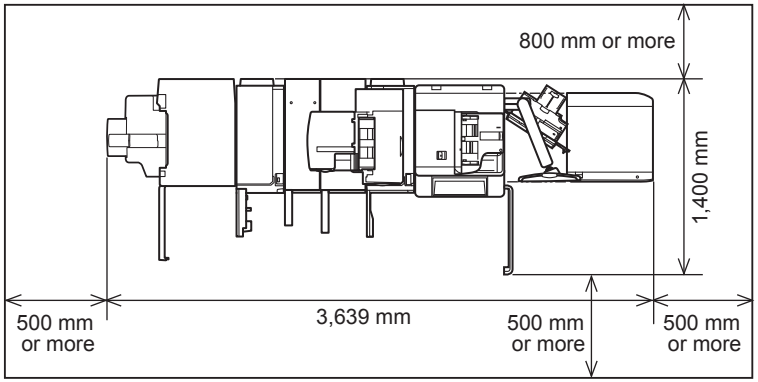
<For the iR-ADV 8205/8295/8285:>

- When the Booklet Trimmer-D1, Booklet Finisher-Q1 PRO, Paper Folding Unit-H1, Professional Puncher Integration Unit-B1, Professional Puncher-C1, Document Insertion Unit-K1, Duplex Color Image Reader Unit-G1, and POD Deck Lite-A1 are attached:




F-9-5

- When the Booklet Finisher-N1, Paper Folding Unit-H1, Professional Puncher Integration Unit-B1, Professional Puncher-C1, Document Insertion Unit-K1, Duplex Color Image Reader Unit-G1, and POD Deck Lite-A1 are attached:




F-9-6

NOTE: Securing Space for Servicing
The space required behind the machine differs according to whether any of the following options is installed or not.
Be sure to make necessary space in accordance with the conditions.

- Paper Folding Unit-H1
- Document Insertion Unit-K1
- Professional Puncher-C1
- Booklet Trimmer-D1

<Space required behind the machine>

- When any of the foregoing options is installed: 800mm or more
- When any of the foregoing options is not installed: 100mm or more

3) To install the host machine, install it in a well-ventilated place. Especially when there are multiple host machine s, be sure to locate the machine where the machine is free from direct exhaust of other machines. Be sure to keep the machine away from the air-inlet duct which is used for ventilation of the room.

## Points to Note at Installation Work

Take note of the following points when installing the host machine.

1) Moving the host machine from a cool place to a warm place can generate condensation, causing moisture beads on the metal surface. Using the host machine while the machine is condensed can cause image failure. Therefore, when moving the machine from a cool place to a warm place to install, unpack the host machine and leave it for 2 hours or more before the installation work so that the machine becomes used to the room temperature.
2) Be sure to work with a group of 4 or more people to install the host machine.

# Table of Options Combination

NOTE:
Following table shows the combination of options to be installed at the right side of the host machine.
Refer to the table below to install the options described in the table. Be sure to check the combination before the installation work.

| | Utility Tray | Voice Guidance Kit | Card Raeader | Voice Operation Kit |
|---|---|---|---|---|
| Utility Tray | - | No | Yes | No |
| Voice Guidance Kit | No | - | Yes | No |
| Card Reader | Yes | Yes | - | Yes |
| Voice Operation Kit | No | No | Yes | - |

T-9-1

Yes: installation is available, No: installation is not available

# Order to Install the Host machine and the Options

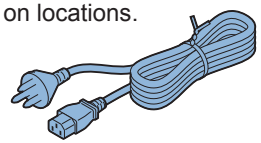
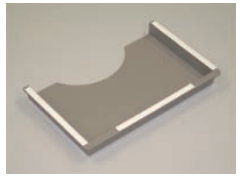
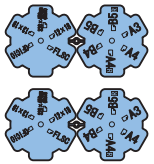
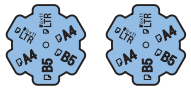
NOTE:
In the case of installing the host machine and the other options at the same time, follow the order as described below to install the options first so that the installation operability is improved.

1. Checking before Installation
2. Unpacking
3. Installation of the Upright Control Panel (Only for iR-ADV 8205/8295)
4. Installation of the Reader Unit or the Printer Cover
5. Installation of the Developing Assembly
6. Installation of the Pickup Assembly
7. Installing the Fixing Assembly
8. Installation of Toner Container
9. Installing the Exhaust Filter
10. Installing the Terminal Connector
11. Setting the Environment Heater Switch
12. Turning ON the Main Power
13. Installation of the Host machine
14. Other Installation Work
15. Setting the Deck and Paper Cassette
16. Auto Adjust Gradation
17. Image Position Adjustment

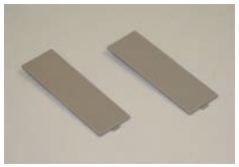
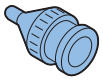
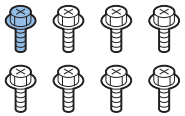
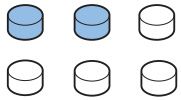
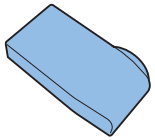
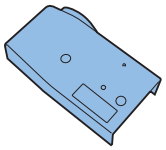
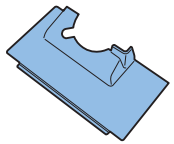
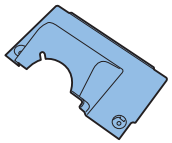
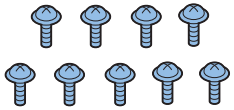
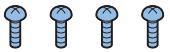
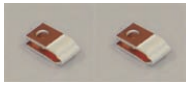
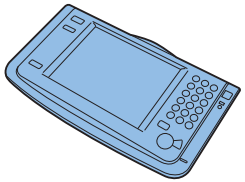
# Checking the Contents

<Parts to Be Used to Install the Host Machine - For the iR-ADV 8250/8295>

NOTE:
- The Touch Pen is attached with the Control Panel.
- [4]: Use the correct power code to mach the location/area of installation. Make sure not to leave unused power code at the site.
- The [13], [14] and [15] are used both at installation of the host machine and at installation of the Reader Unit/Printer Cover.

| | | |
|---|---|---|
| [1] Developing Assembly X 1 | [2] Toner Container X 1 AUS only | [3] Exhaust Filter X 1 |
| [4] Power Code X 1 230V region only The connector has a different shape depending on locations.  | [5] Service Book Holder X 1  | [6] Size Plate R X 2  |
| [7] Size Plate L X 1  | [8] Connection Seal (Middle) X 1 | [9] Connection Seal (Front) X 1 |

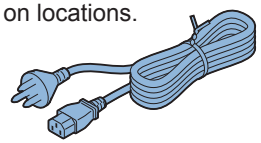
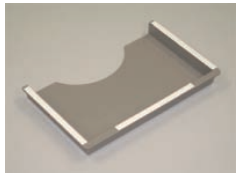
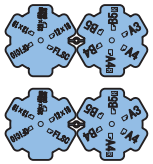
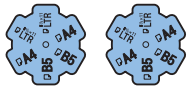
F-9-7

| | | |
|---|---|---|
| [10] Finisher Connector Cover X 2  | [11] Cleaning Tool X 1 | [12] Terminal Connector X 1  |
| [13] Screw (Binding; M4x6) X 3 Use 1 of them | [14] Screw (RS Tightening ; M4x10) X 8 Use 1 of them  | [15] Rubber Cap X 6 Use 2 of them  |
| [16] Case Sheet (EU) X1 EUR only | [17] Hook-and-Loop Fastener X1 EUR only | [18] Base Cover (Front) X 1  |
| [19] Base Cover (Rear) X 1  | [20] Joint Cover L X 1  | [21] Joint Cover R X 1  |
| [22] Screw (TP; M4x8) X 9  | [23] Screw (P Tightening; M3x8) X 4  <br> [24] Cable Clamp X 2  | [25] Upright Control Panel X 1  |

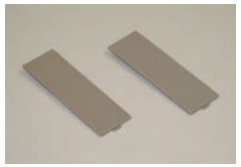
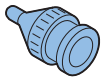
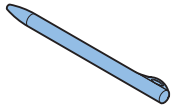
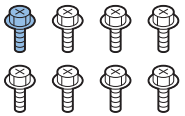
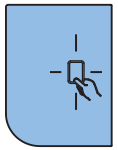
F-9-8

<Parts to Be Used to Install the Host Machine - For the iR-ADV 8285>

NOTE:
- The Touch Pen is attached with the Control Panel.
- [4]: Use the correct power code to mach the location/area of installation. Make sure not to leave unused power code at the site.
- The [14] and [15] are used both at installation of the host machine and at installation of the Reader Unit/Printer Cover.

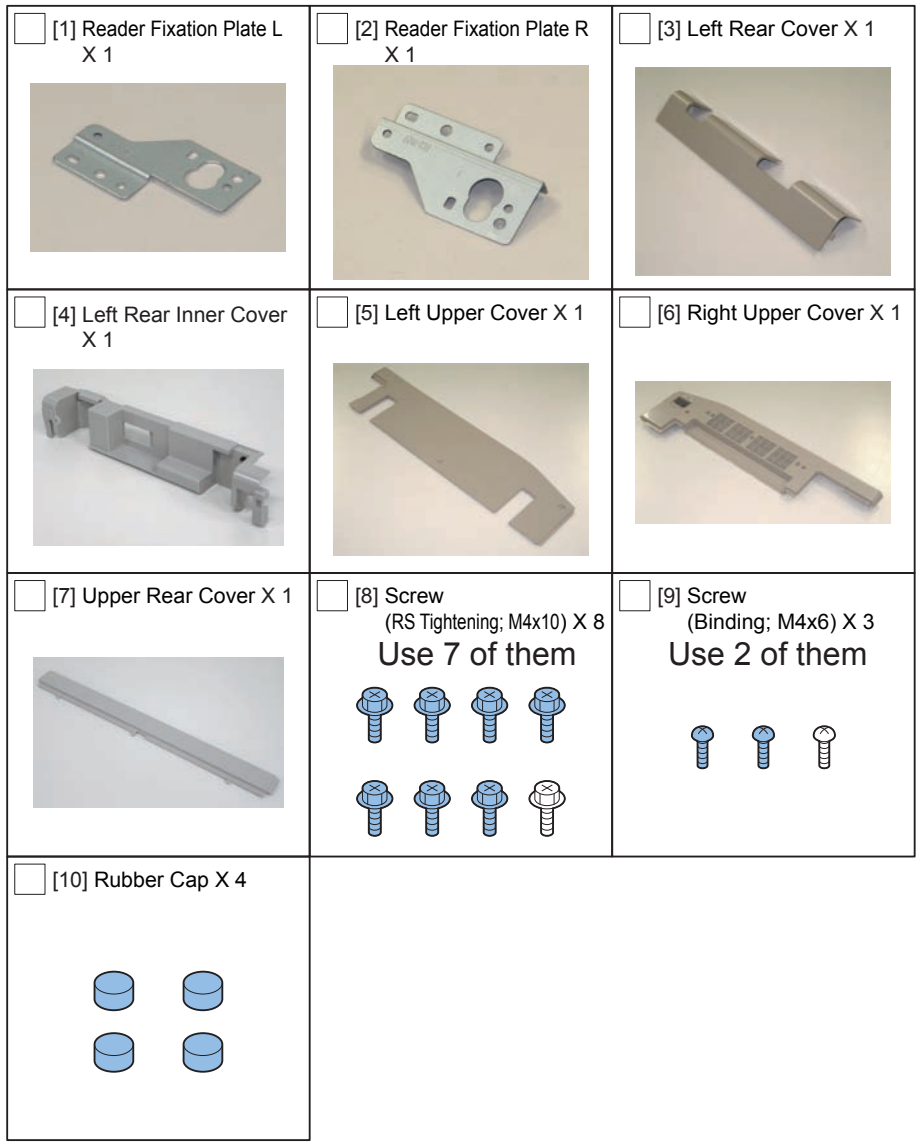
| | | |
|---|---|---|
| ☐ [1] Developing Assembly X 1 | ☐ [2] Toner Container X 1 AUS only | ☐ [3] Exhaust Filter X 1 |
| ☐ [4] Power Code X 1 230V region only The connector has a different shape depending on locations.  | ☐ [5] Service Book Holder X 1  | ☐ [6] Size Plate R X 2  |
| ☐ [7] Size Plate L X 1  | ☐ [8] Connection Seal (Middle) X 1 | ☐ [9] Connection Seal (Front) X 1 |

F-9-9

| | | |
|---|---|---|
| ☐ [10] Finisher Connector Cover X 2  | ☐ [11] Cleaning Tool X 1 | ☐ [12] Terminal Connector X 1  |
| ☐ [13] Touch Pen X 1  | ☐ [14] Screw (Binding; M4x6) X 3 Use 1 of them | ☐ [15] Screw (RS Tightening ; M4x10) X 8 Use 1 of them  |
| ☐ [16] Case Sheet (EU) X1 EUR only  | ☐ [17] Hook-and-Loop Fastener X1 EUR only | |

F-9-10

<Parts to Be Used to Install the Reader Unit or the Printer Cover- Common>




F-9-11

<CD/GUIDES>

| CD/GUIDES | North America | EUR | ASIA / AUS |
|---|---|---|---|
| e-Manual | 1 | 2 (UK, FRA/SPA, ITA/GER) | 1 |
| Users Guide | - | 1 | - |
| Setup Guide | 1 | - | 1 |
| Basic Operation Guide | 1 | - | 1 |
| Before Using This Machine | 1 | - | 1 |
| Drum Unit Warranty | 1 | - | - |
| UFR II User Software | 1 | 1 | 1 |
| iW Enterprise Management Console | 1 | - | - |
| iW Management Console | - | 1 (UKE/F/S/G/I) | 1 (SG) |
| Points to Note when Installing the Developing Assembly (Instruction Sheet) | 1 | 1 | 1 |
| AMS KIT Software / Manual CD | 1 | - | - |
| Features of AMS | 1 | - | - |
| Notification of Correction (Thin paper User mode) | 1 | 1 | 1 |
| Notification of Staple Finisher-Q1 PRO/Booklet Finisher-Q1 PRO | 1 | 1 | 1 |

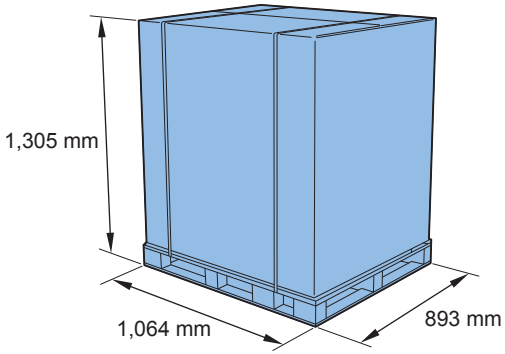
T-9-2

# Unpacking

CAUTION:

- The host machine weighs about 240kg. For safety, be sure to work carefully to move and install the machine.
- Be sure to work with a group of 4 or more people to install the host machine.

NOTE:
- The dimension of the host machine and the transport container is as shown in the figure.
- Be sure to secure a space to unpack, and then start the installation work.

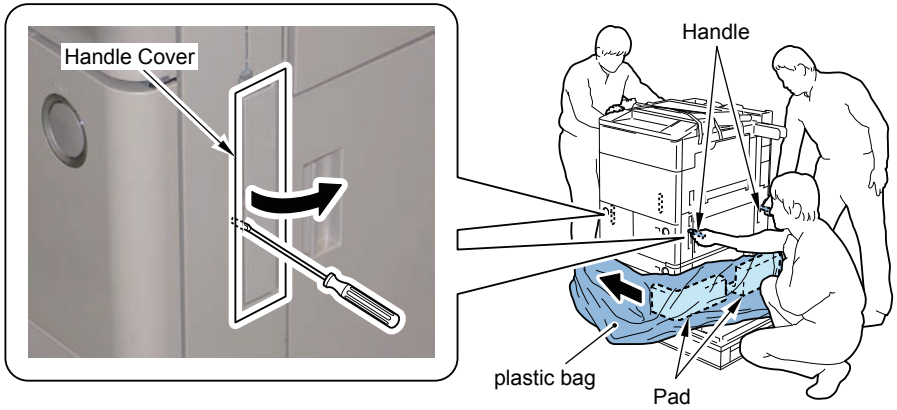



F-9-12

1) Pull the plastic bag all the way down.
2) Open 4 Handle Covers.
- 1 Claw each

3) Hold the handles at the right side of the host machine and lift the host machine to remove the pad. Put the plastic bag aside in the direction of the arrow.

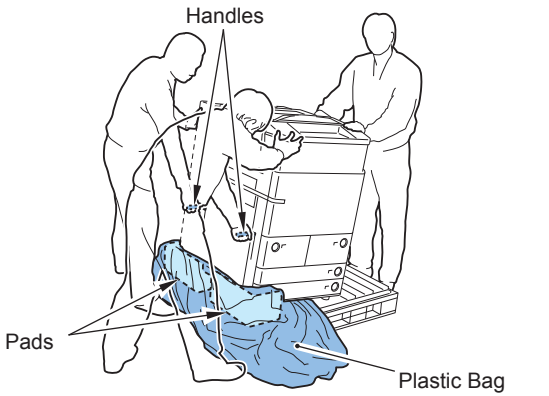
CAUTION:
Be sure not to lift the host machine too much. Otherwise, it will lose the balance.




F-9-13

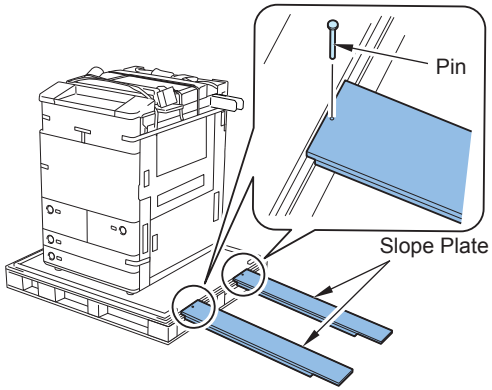
4) Hold the handles at the left side of the host machine and lift the host machine to remove the pad and the plastic bag.

CAUTION:
Be sure not to lift the host machine too much. Otherwise, it will lose the balance.




F-9-14

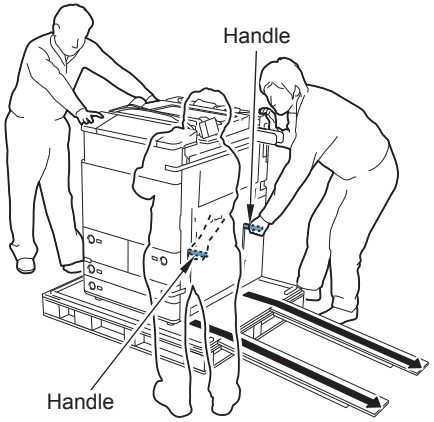
□
5) Take out the 2 Slope Plates stored at the right side of the Pallet and remove the 2 pins which are secured at the back of the Slope Plate with tape.
6) Turn around the 2 Slope Plates to install as shown in the figure, and then fit the pin-holes of the pallet with the pin-holes of the Slope Plates to put the 2 pins into the holes.




F-9-15

□
7) Hold the handles at the right side of the host machine, and then, while supporting the corner of the host machine, fit the casters to the center of the Slope Plate to slowly bring the machine down.

CAUTION:
Be careful not to make the casters off from the Slope Plate.




F-9-16

□
8) Remove tapes on the exterior surface of the host machine.

NOTE:
Do not remove 2 tapes for tags and a tape for the Filter Cover at this step. These tapes will be removed later on.

F-9-17

□
9) Close 4 Handle Covers.

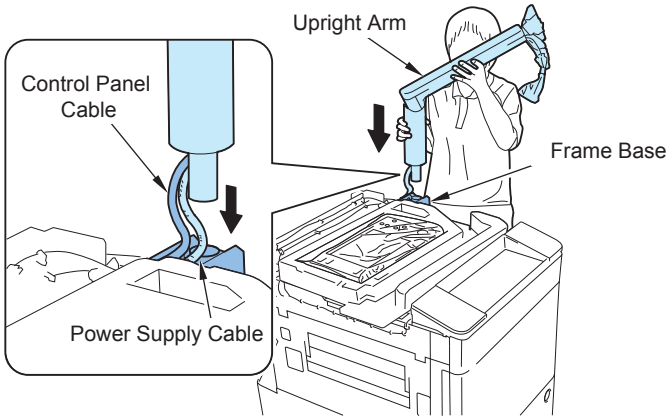
# Installation

## Installation of the Upright Control Panel

□

1) Put the Upright Arm straight into the round hole of the Frame Base.

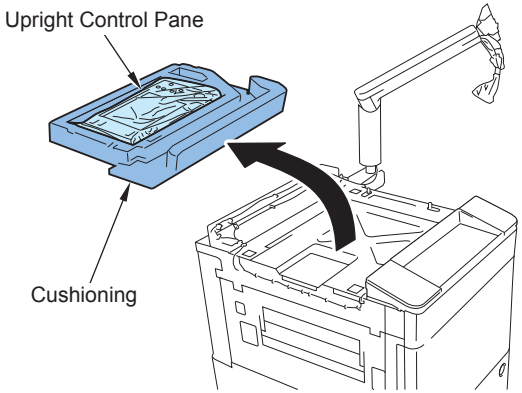
CAUTION:
Be sure to place the cables as indicated in the figure below.
Be careful not to get the cables caught.




F-9-18

□

2) Bring down the Upright Control Panel together with the cushioning materials from the host machine.

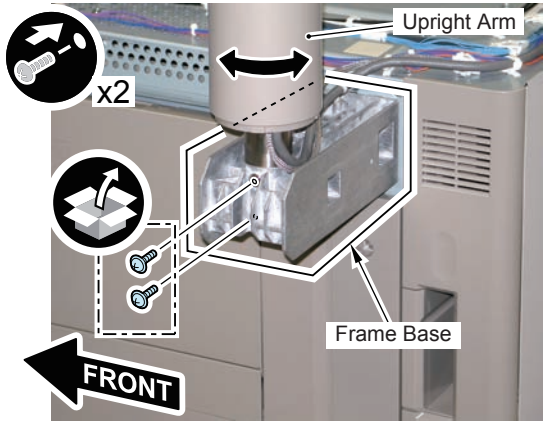



F-9-19

□

3) Align the hole on the Upright Arm and the hole on the Frame Base, and secure the Upright Arm in place.

- 2 screws (TP; M4x8)



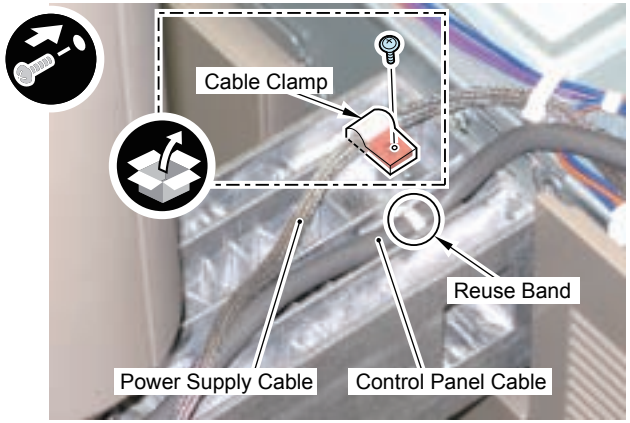

F-9-20

☐

4) Fix the Control Panel Cable with the Reuse Band.

5) Fix the Power Supply Cable with the Cable Clamp.

- 1 screw (TP; M4x8)

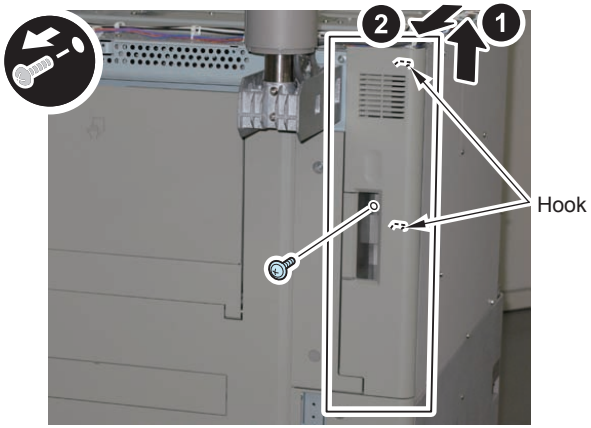



F-9-21

☐

6) Remove the Side Cover.

- 1 Screw
- 2 Hooks

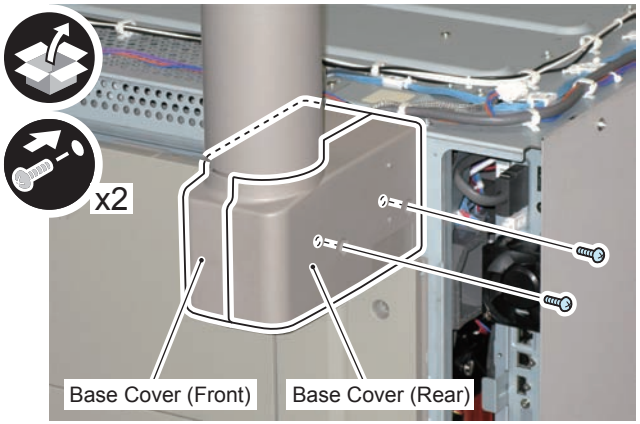



F-9-22

☐

7) Install the Base Cover (Front) and the Base Cover (Rear).

- 2 Screws (P Tightening; M3 x 8)

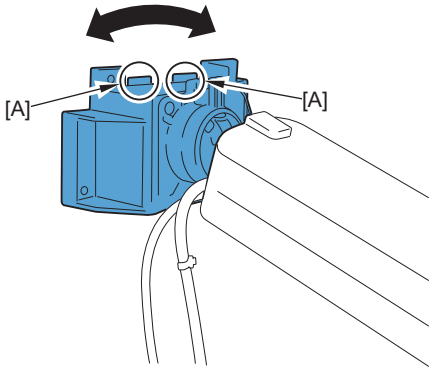



F-9-23

☐

8) Install the Side Cover.

9) Turn the Panel Base to make the [A] part with protrusion come to the upper side.



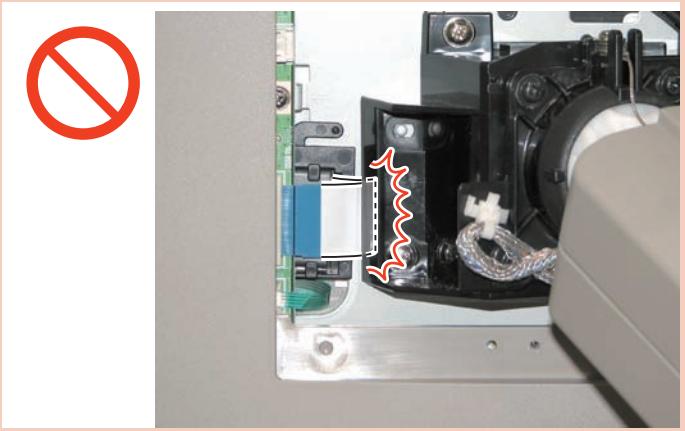

F-9-24

☐
10) Install the Upright Control Panel to the Upright Arm.

- 2 Protrusions
- 2 Bosses
- 4 Screws (TP; M4 x 8)

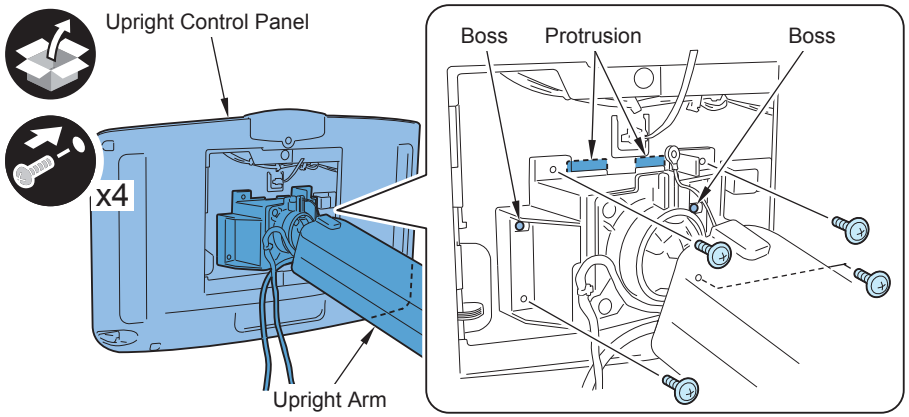
CAUTION:

Be careful not to trap the Flexible Cable with the Panel Base.



F-9-25

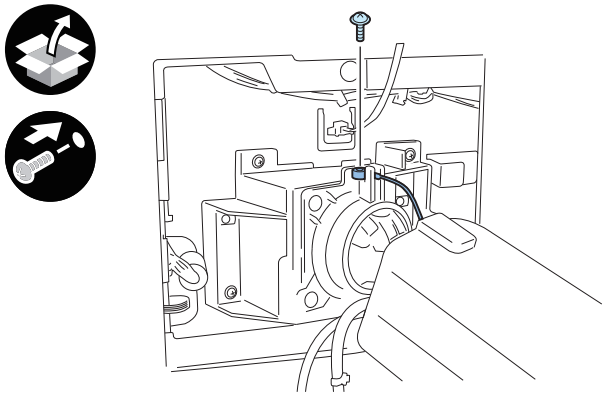
NOTE:
Be sure to tighten from the upper screw when installing the Upright Control Panel.




F-9-26

☐
11) Install the wire.

- 1 Screw (TP; M4 x 8)



F-9-27

☐

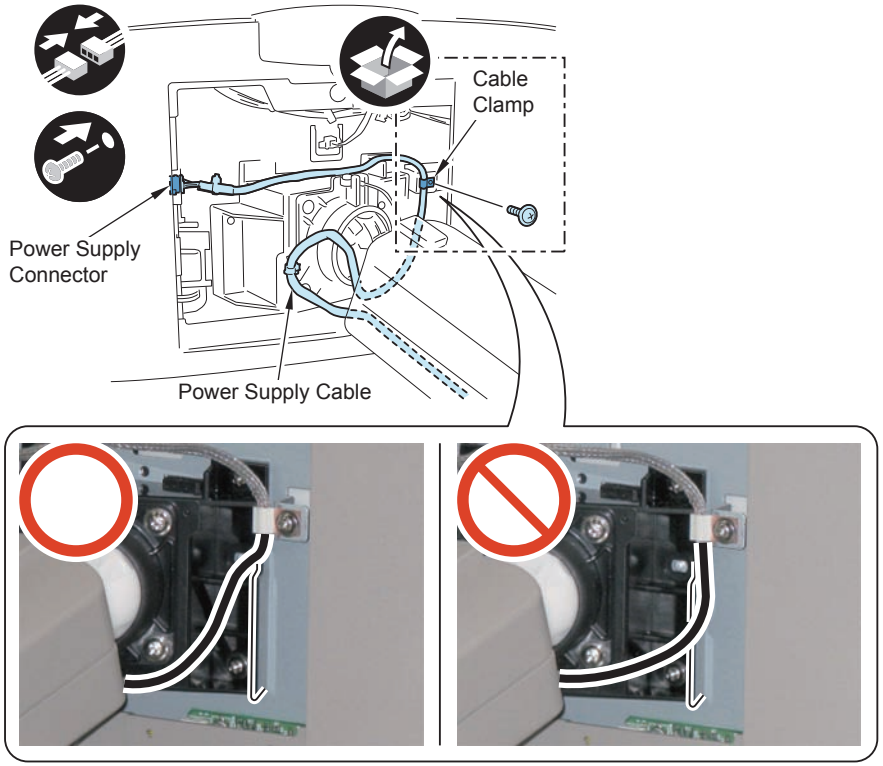
12) Route the Power Supply Cable as shown in the figure and connect the Power Supply Connector.

13) Fix the cable with the Cable Clamp.

- 1 Screw (TP; M4 x 8)

CAUTION:

- Be sure not to route the Power Supply Cable in clockwise direction.
- Route the Power Supply Cable at the bottom of the Cable Clamp to place inside the black guide.




F-9-28

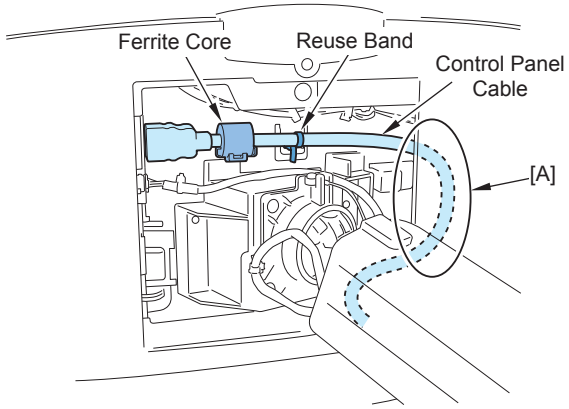
☐

14) Route the Control Panel Cable as shown in the figure and connect the Control Panel Connector.

15) Secure the cable with the Reuse Band and cut the extra part.

CAUTION:

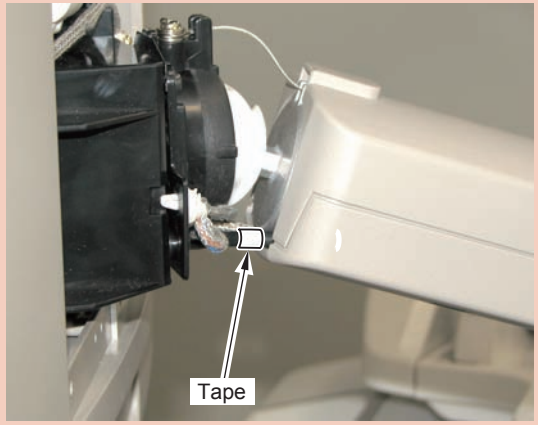
- Be sure not to route the Power Supply Cable in clockwise direction.
- Be sure that the Ferrite Core is located as shown in the figure.
- Be sure to store the slack [A] of the Control Panel Cable inside the cover.




F-9-29

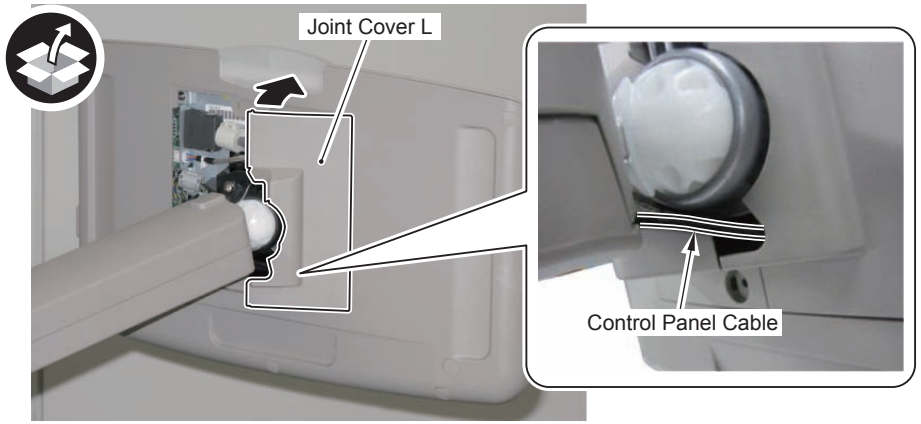
CAUTION:

- Check that the tape of the Control Panel Cable is outside the Pipe Cover.
- If not, be sure to adjust cable so that the tape can be seen.




F-9-30

☐
16) Install the Joint Cover L.



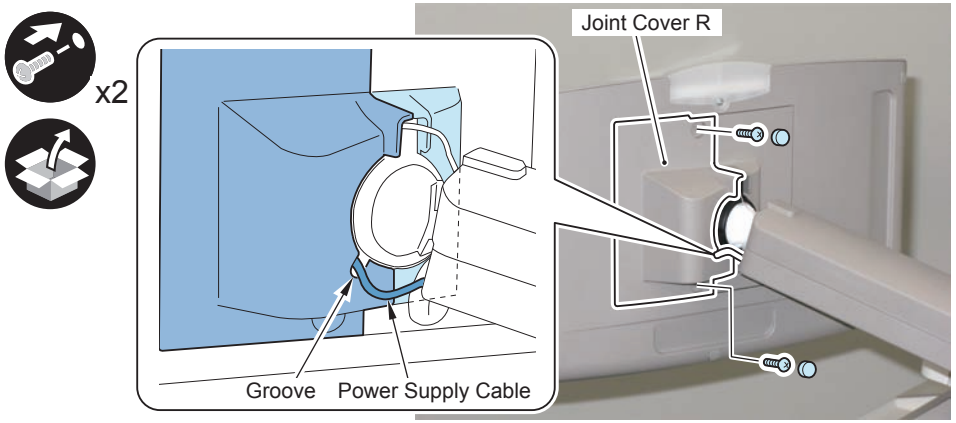

F-9-31

☐
17) Install the Joint Cover R.

- 2 screws (P tightening: M3x8)
- 2 rubber caps

CAUTION:

Be sure to put the Power Cable through groove on the Joint Cover R.




F-9-32

☐
18) When installing the Reader or the Printer Cover at the same time, install it after installing the Control Panel.

- For Copier Model: Refer to "Installation Procedure" included in the Reader Unit.
- For Printer Model: Refer to "Printer Cover B1" in this document.

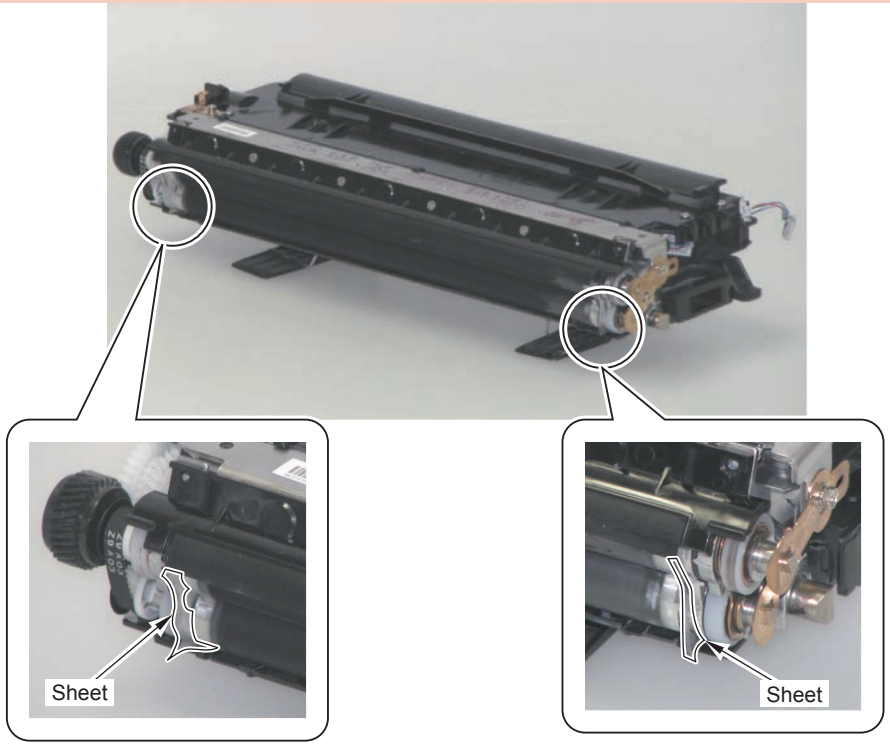
# Installing the Developing Assembly

□

1) Unpack the Developing Assembly.

CAUTION: Points to Caution when Installing the Developing Assembly

Be sure not to remove the Toner Blocking Sheet by mistake.



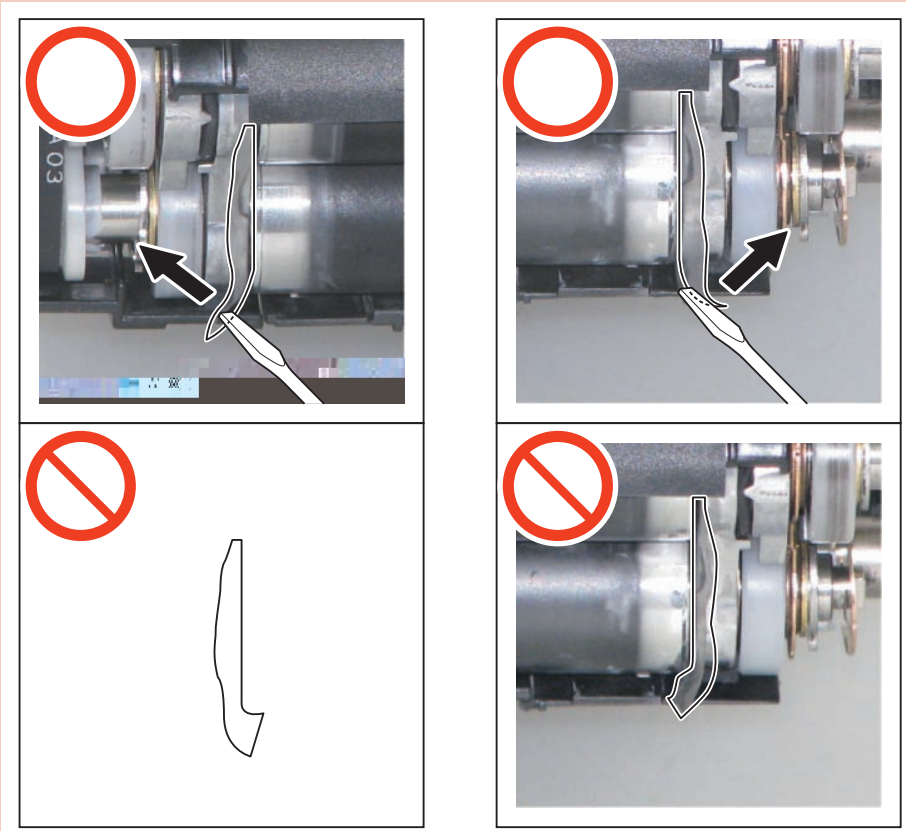

F-9-33

CAUTION: Checking and Adjusting the Direction of the Toner Blocking Sheet

Be sure to check the direction of the Toner Blocking Sheet before installing the Developing Assembly to the host machine.

If the Toner Blocking Sheet turns inward, image error due to toner scattering will occur, so adjust it to turn outward with a flat-blade screwdriver.

Be careful not to damage the Developing Assembly when adjusting the sheet.

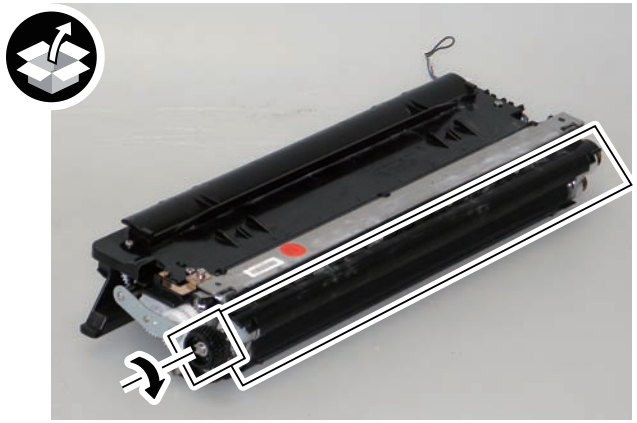


F-9-34

2) Check if there are any scratches on the cylinder while rotating the gear manually in the direction of the arrow.

CAUTION:

- Do not damage and touch the cylinder.
- Do not turn the gear inversely.

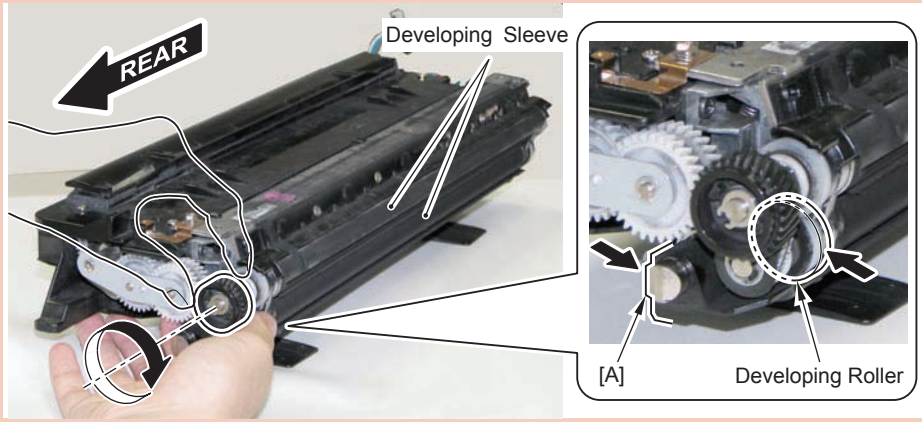


F-9-35

CAUTION: How to Check Scratches or Foreign Particles on the Developing Sleeve

While engaging the Developing Lower Sleeve with the inside of the Developing Assembly by pushing the Developing Roller at lower side, rotate the gear a full turn or more clockwise by viewing it from front side and check whether there are any scratches or foreign particles in the Developing Sleeve.

- When pushing the Developing Roller, be sure to hold the Developing Roller at lower side and [A] part of the Developing Assembly.
- Be sure to rotate the gear clockwise, and be careful not to rotate it counterclockwise.
- If rotating the gear without pushing the Developing Roller, toner will be accumulated between the Developing Lower Sleeve and the seal (Toner clusters) If pushing the Developing Assembly against the drum in this condition, the Developing Lower Sleeve does not move to the appropriate position because of the toner clusters. As a result, the gap between the Developing Upper Sleeve and the drum (SD gap) will be widened. It causes low density at rear or deterioration of developer because it becomes hard to deposit toner onto the drum.

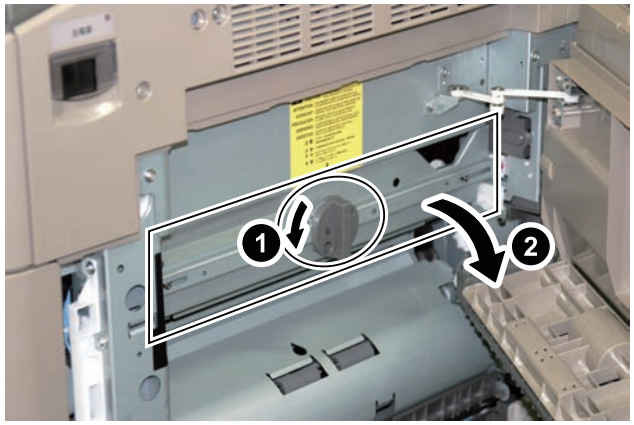



F-9-36

□

3) Open the Right Cover.

4) Turn the Lock Lever, and open the Developing Assembly Pressure Cover.

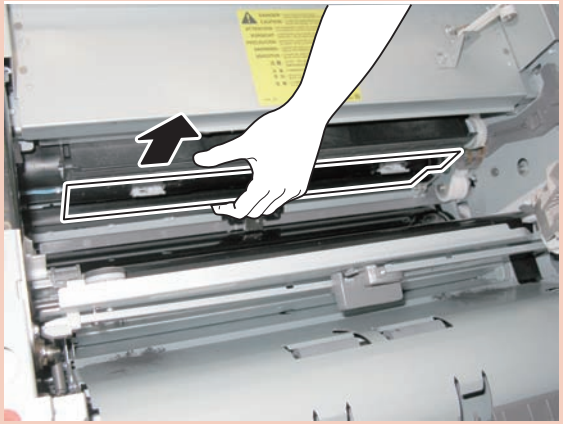



F-9-37

CAUTION:

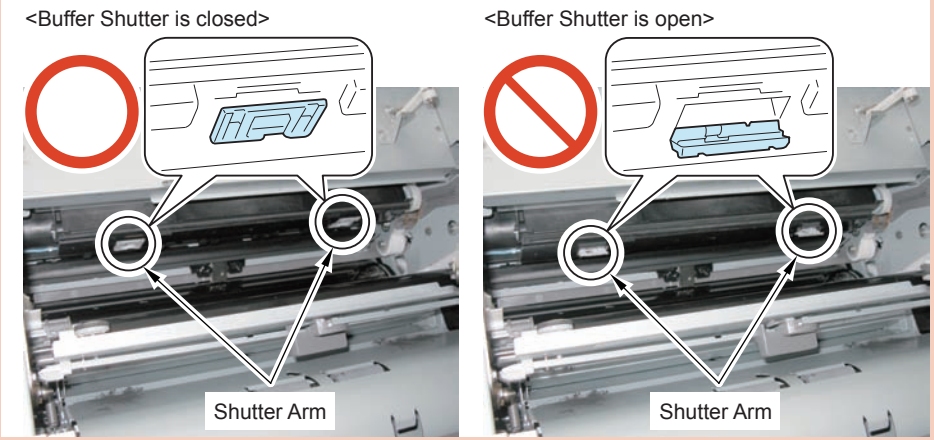
Before installing the Developing Assembly, be sure to check that the Buffer Shutter is not opened.

If forcedly inserting the Developing Assembly while the Buffer Shutter is open, the Buffer Shutter may get damage. When the Buffer Shutter is open, be sure to close it by pulling it toward the front.



F-9-38

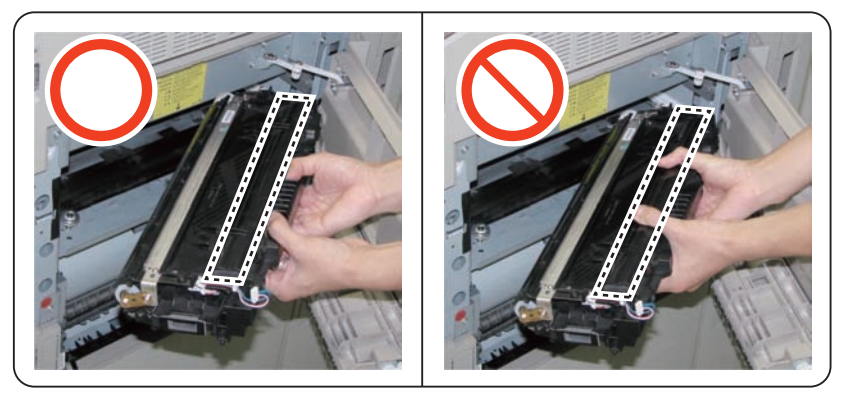
Whether the Developing Assembly is installed properly can be checked with the Shutter Arm.




F-9-39

CAUTION: How to Hold the Developing Assembly

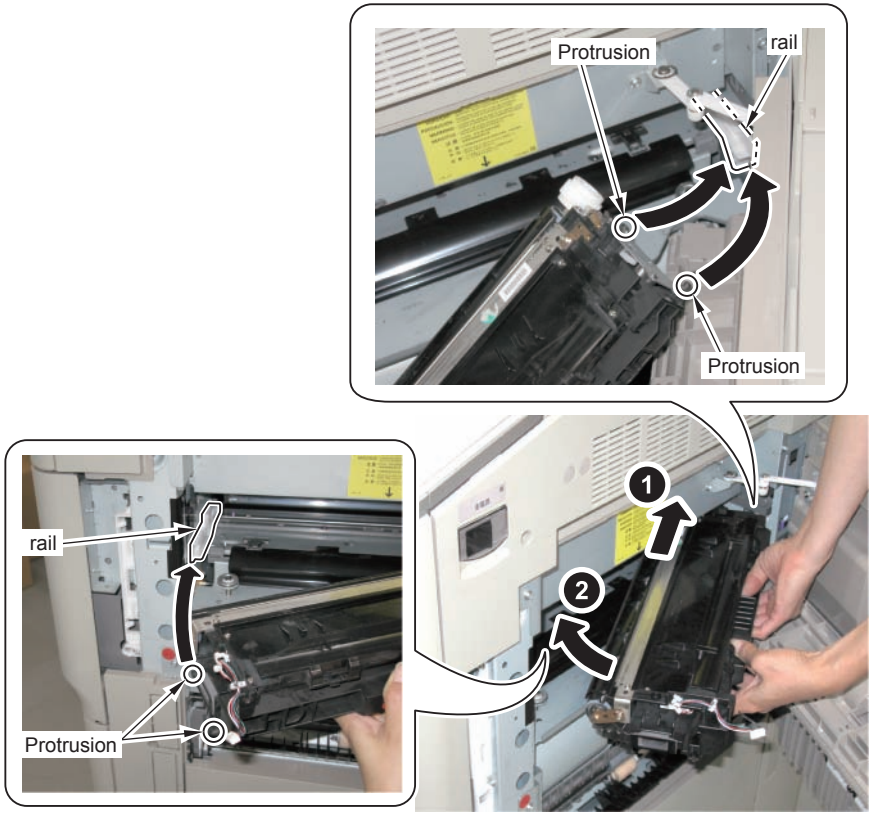
- When holding the Developing Assembly, be sure to hold the handle of the Developing Assembly as shown in the figure.
- Do not touch the shutter area of the Developing Assembly. The shutter area is slippery, so it may cause a fall of the assembly.



F-9-40

☐

5) Hold the Developing Assembly as shown in the figure, and align the protrusions at both sides of the assembly with the rails on the host machine.

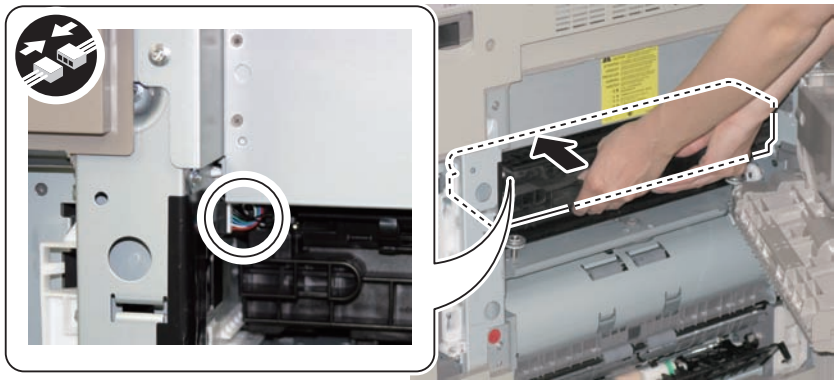



F-9-41

□

6) Along the rails, insert the Developing Assembly horizontally.

- 1 Connector

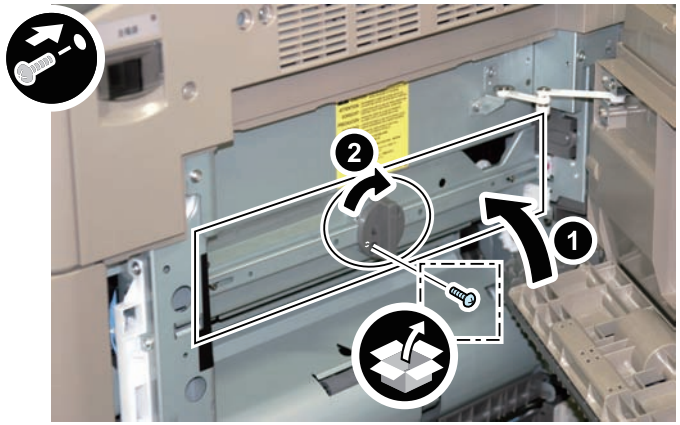


F-9-42

□

7) Close the Developing Assembly Pressure Cover and return the Lock Lever to the original position.

8) Secure with the Screw (Binding; M4x6).




F-9-43

□

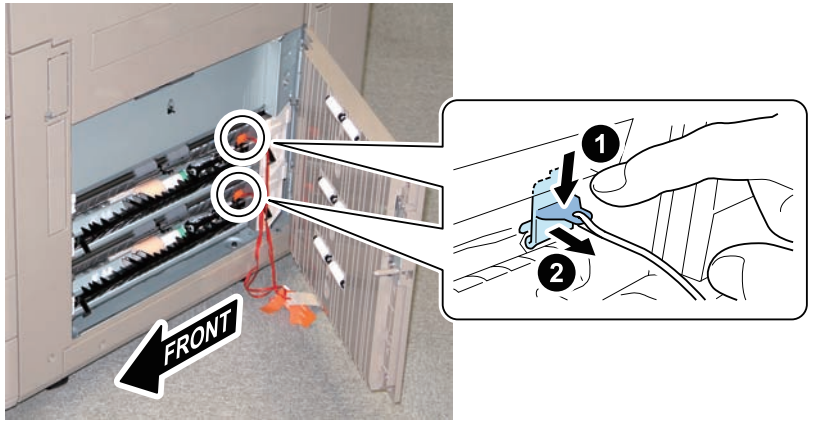
9) Close the Right Cover.

## Installing the Pickup Assembly

□

1) Remove tapes securing tags from the Vertical Path Cover.

2) Open the Vertical Path Cover and remove 2 Pressure Release Spacers at pickup slot for each cassette.




F-9-44

□

3) Close the Vertical Path Cover.

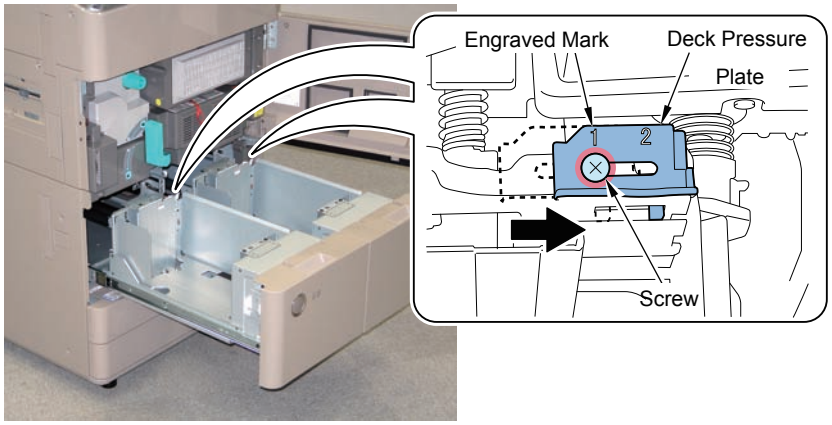
4) Open the Front Cover.

5) Press the Release Button to open the Left and Right Decks, and remove the tape.

NOTE:
Be sure to release the Release button slowly because it may not come out if releasing it abruptly.

□

6) Loosen the screw and slide the Deck Pressure Plate in the direction of the arrow. Check that the screw position is at the engraved mark [1], and then tighten the screw.




F-9-45

□

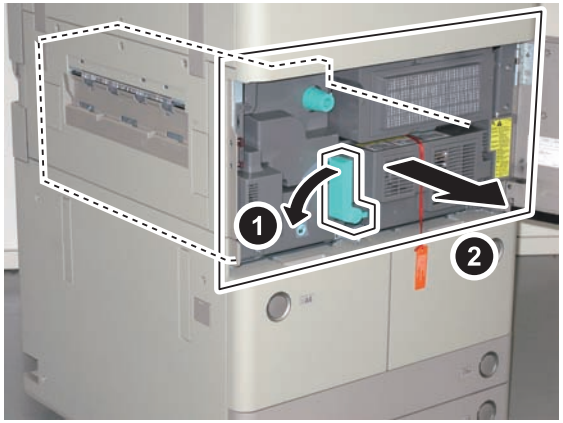
7) Close the Left and Right Decks.

## Installing the Fixing Assembly

□

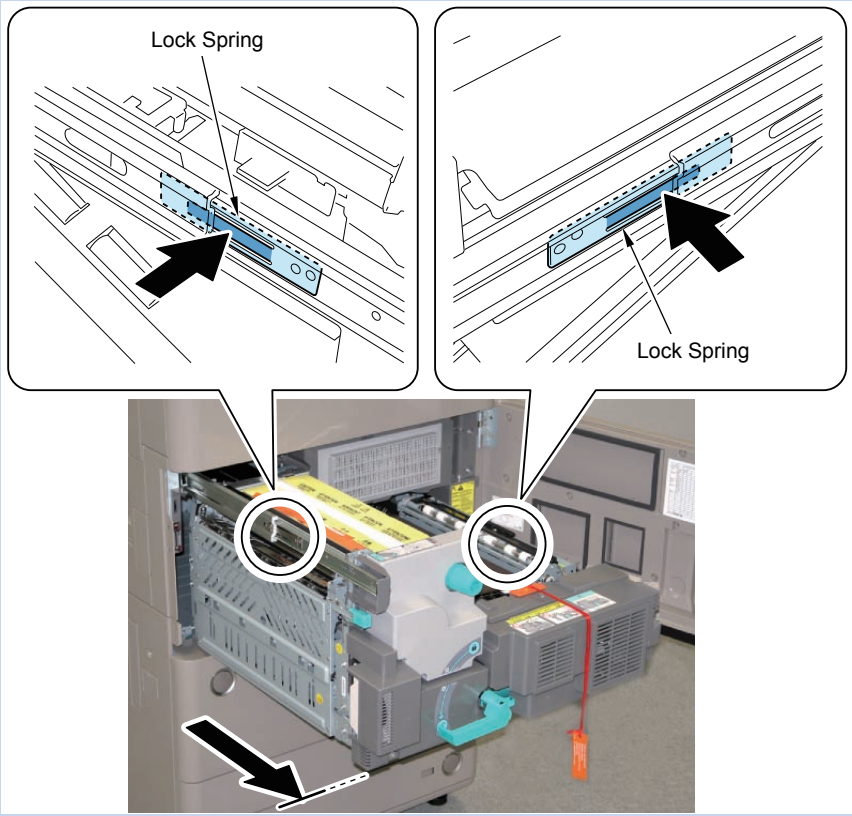
1) Remove the tapes securing the tag.

2) Turn the Fixing Feed Unit Release Lever in the direction of the arrow and pull the Fixing Feed Unit all the way out.



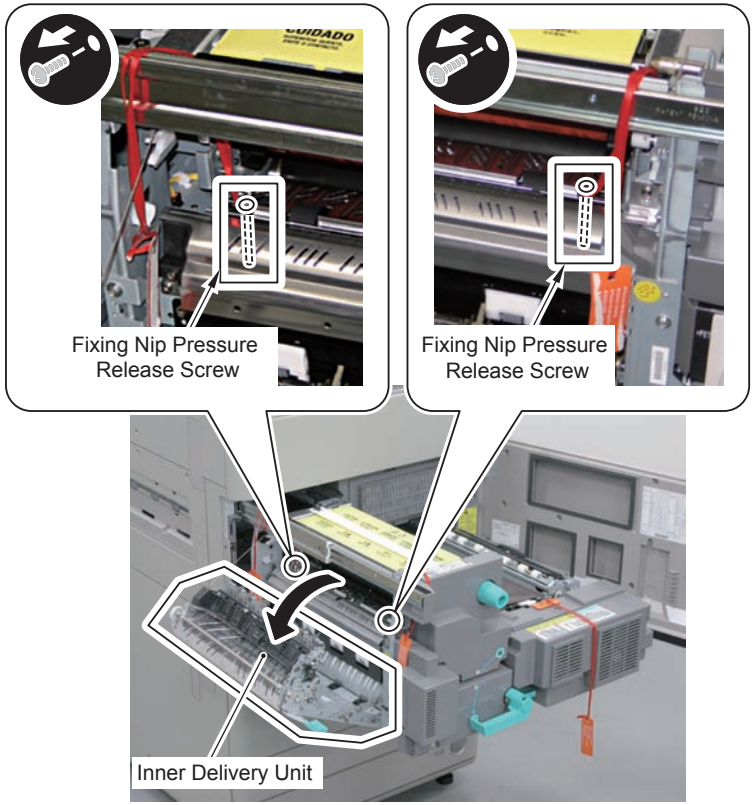

F-9-46

NOTE:
In the case that the Fixing Nip Pressure Release Screw is hard to be removed, release the lock by pressing the Lock Springs at both rails, and pull out the Fixing Feed Unit further until it stops.



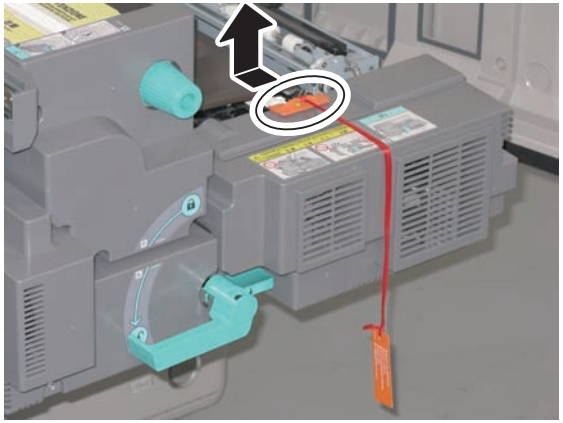

F-9-47

□
3) Remove the tape securing a tag on the Fixing Upper Cover.
4) Open the Inner Delivery Unit, and remove the 2 Fixing Nip Pressure Release Screws.




F-9-48

□
5) Close the Inner Delivery Unit.
6) Remove the ETB Spacer.



F-9-49

□
7) Return the Fixing Feed Unit and lock the Fixing Feed Unit Release Lever.

NOTE:
In the case of pulling out the Fixing Feed Unit further, be sure to return the Fixing Feed Unit while releasing the Lock Spring.

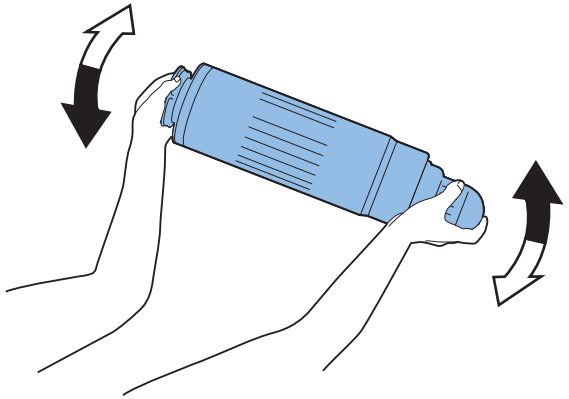
8) Close the Front Cover.

## Installing the Toner Container

□
1) Open the Toner Exchange Cover, and turn the Lock Lever in the direction of the arrow to release.

F-9-50

□
2) Unpack the Toner Container and shake it approx. 10 times horizontally.



F-9-51

□
3) Remove the cap of the Toner Container.
4) Set the Toner Container to the Main Body, and turn the Lock Lever in the direction of the arrow to secure the Toner Container in place.

F-9-52

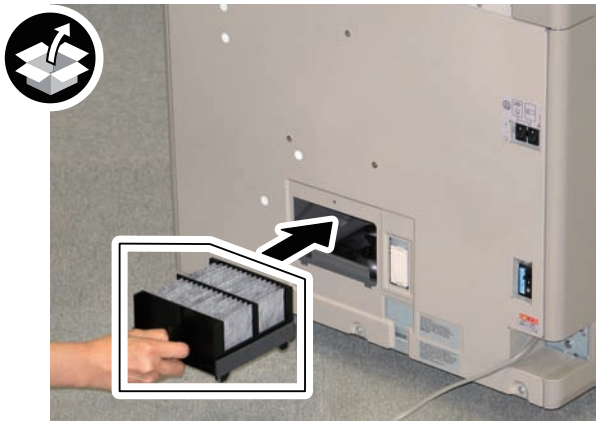
□
5) Close the Toner Exchange Cover.

## Installing the Exhaust Filter

□
1) Remove the tape, and remove the Filter Cover.

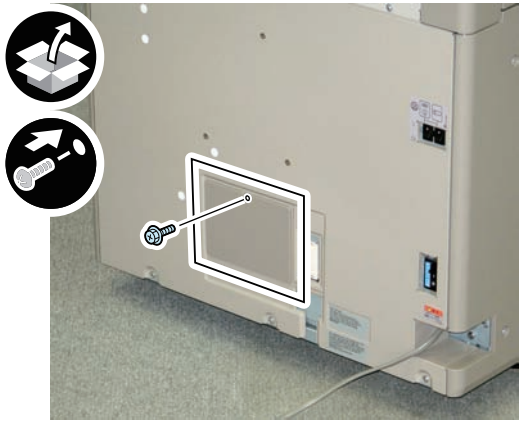
F-9-53

□
2) Hold the Exhaust Filter as shown in the figure, and install it to the Main Body.



F-9-54

□
3) Install the Filter Cover.
- 1 Screw (RS Tightening; M4x10)



F-9-55

## Installing the Terminal Connector

□

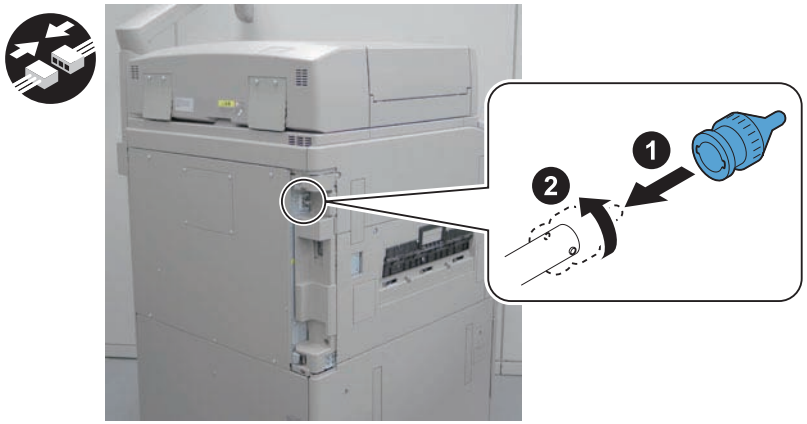
1) Insert the Terminal Connector into the terminal of the Host machine and turn it in the direction of the arrow to install it.

NOTE:

- In the case of installing Staple Finisher or Booklet Finisher simultaneously, it is not necessary to connect the Terminal Connector to the machine.
- When connecting the Terminal Connector to the Finisher side, refer to the Installation Procedure included in the package of each finisher.

CAUTION:

Be sure to turn the knob of the ARCNET cable all the way to connect otherwise it can cause unstable electrical contact.




F-9-56

## Installing the USB Device Port (only with the products designed for Europe)

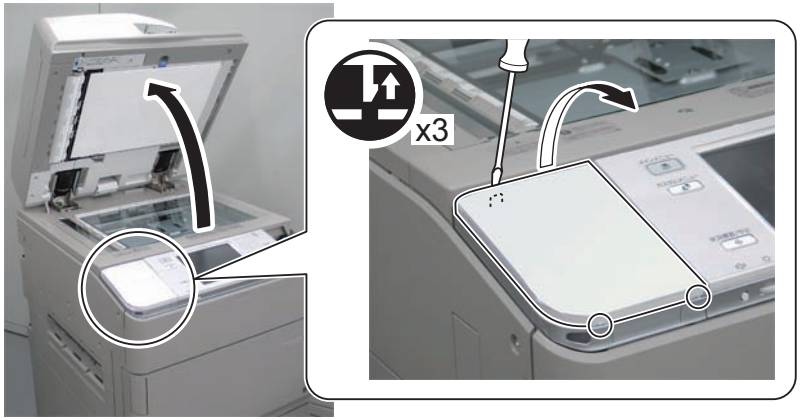
CAUTION:

- Use the Card Reader prepared by each sales company.
- When installing the Multimedia Reader/Writer-A2, refer to "Installation" > "USB Device Port-A2/Multimedia Reader/Writer-A2 (p. 9-323)" > "Install the Multimedia Reader/Writer (p. 9-9)" of this Service Manual.

□

1) Open the DADF, and remove the Transparent Cover and the Device Port Sheet of the Upper Left Cover.

- 3 Claws




F-9-57

□

2) Connect the Card Reader to the PCB, and store the cable inside the Upper Cover by rolling it up.

F-9-58

□

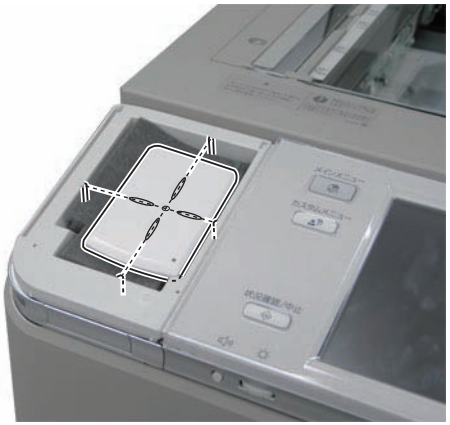
3) Put 4 cushions by piling them up.

NOTE:
Be sure to adjust the number of cushions according to how the cable of the Card Reader is stored.

F-9-59

□

4) Place the Card Reader by aligning it with the position where the cover is installed.



F-9-60

□

5) Replace the Device Port Sheet with the Case Sheet.
6) Install the Transparent Cover and the Case Sheet.

F-9-61

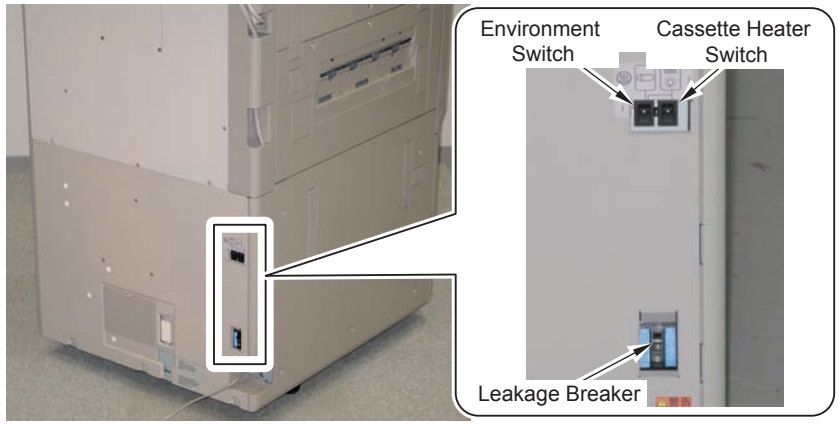
□

7) Close the DADF.

## Setting the Environment Heater Switch

□

1) Check that the Leakage Breaker is ON.
2) Turn ON the Environment Heater Switch and the Cassette Heater Switch in accordance with the installation environment.
   Set the environment switches in accordance with the installation environment.
   In the case of high humidity environment, turn ON the Environment Switch. (The Drum Heater is turned ON regardless of the main switch status).




F-9-62

## Turning ON the Main Power

□

<In the Case of Copier Model>

1) Connect the power plug of the host machine to the power outlet.
2) Remove the protection sheet on the control panel.
3) Open the switch cover and turn ON the main power switch.

CAUTION:
If "E732-8888" is displayed after turning ON the main power switch, turn OFF and then ON the main power switch, and then perform the following steps.

4) Check that the following service mode (Level 1) value is set to "1".
- COPIER > OPTION > CUSTOM > SCANTYPE

5) Exit the Service Mode.
6) Change the operation panel screen to "Scan and Send", and press "Other Function".
7) Press "Finished Stamp" in the second page of the "Other Function" screen.
8) Set to the feeder and conduct transmission test to check that the originals are stamped.

□

<In the Case of Printer Model>

1) Connect the power plug of the host machine to the power outlet.
2) Remove the protection sheet on the control panel.
3) Open the switch cover and turn ON the main power switch.
4) A message is displayed prompting to check that the Reader Unit Cable is connected properly.
5) Select the following service mode (Level 1) and enter “0” to the setting value.
   COPIER > OPTION > FNC-SW > W/SCNR
6) Exit the Service Mode.
7) Turn OFF and then ON the main power switch.

NOTE: Turning OFF the Main Power
1) Open the Switch Cover and turn OFF the main power switch.
2) Check that the control panel display and the main power lamp are OFF, and then disconnect the power plug.

## Toner Stirring

□

1) Check that "Check the developer" is displayed in the following service mode (Level 1).
   COPIER > FUNCTION > INSTALL > TONER-S
2) Press “OK” after checking the installation of the Developing Assembly and the Developing Assembly Pressure Plate.
3) Toner supply is executed. (For approx. 12 minutes. Countdown is shown on the screen)

NOTE:
While stirring toner,"Installation of the Host Machine", "Other Installation Work", "Setting the Deck" and "Setting the Paper Cassette" can be executed.

## Installation of the Host Machine

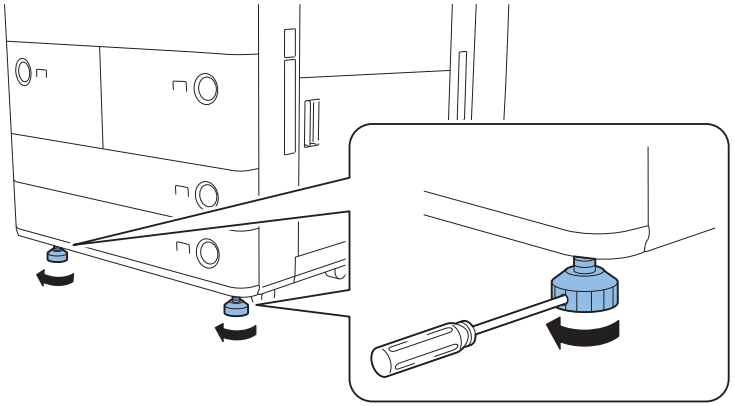
□

1) Confirm the position to install the Host Machine and turn the 2 adjusters with your hand until they closely contact the floor.

NOTE:
If you failed to turn the adjusters with your hand, use a screwdriver so that they can be turned by your hand.

2) Use a screwdriver to turn the adjusters in the direction of the arrow to make them secured.

NOTE:
Securing of the adjuster is not earthquake resistant.



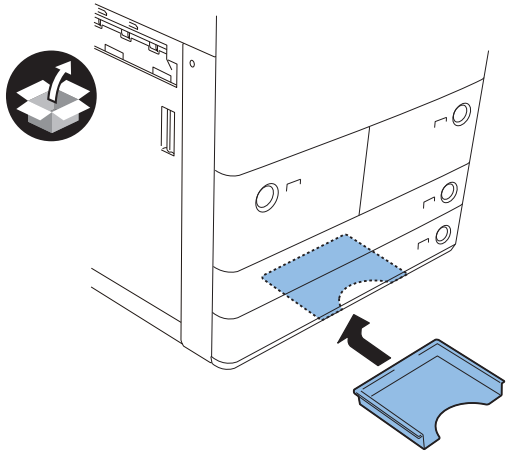
F-9-63

## Other Installation Work

<Service Book Holder>

□

Remove the double-sided tape on back side of the Service Book Holder, and affix the holder on the Base Plate of the host machine.



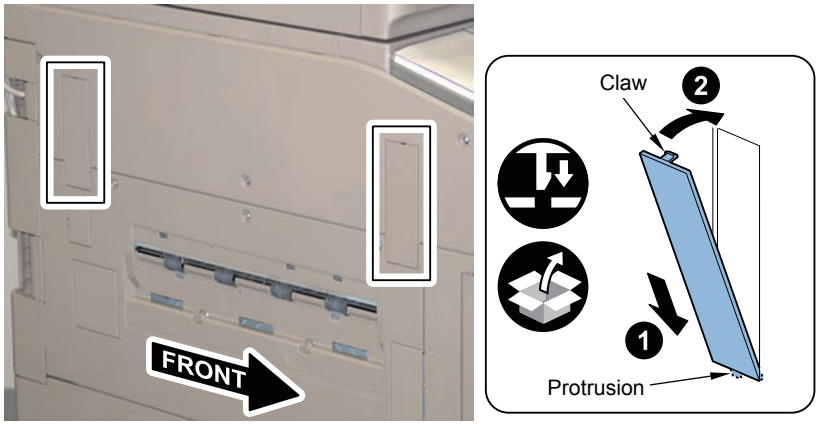
F-9-64

<Finisher Connector Cover>

□

Install the 2 Finisher Connector Covers to the left side of the host machine.

- 1 Protrusion each
- 1 Claw each

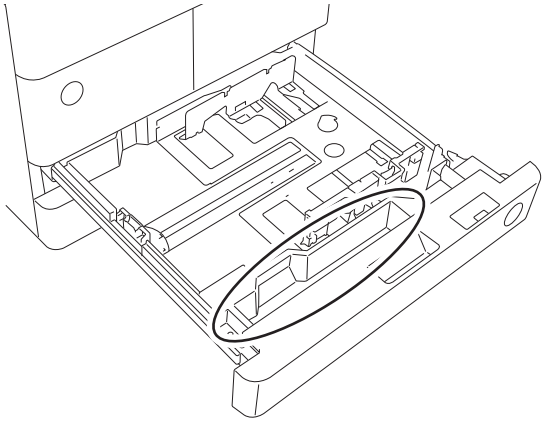



F-9-65

<Cleaning Tool>

□

Store in an empty space at front side of the Cassette 3 to use for maintenance.



F-9-66

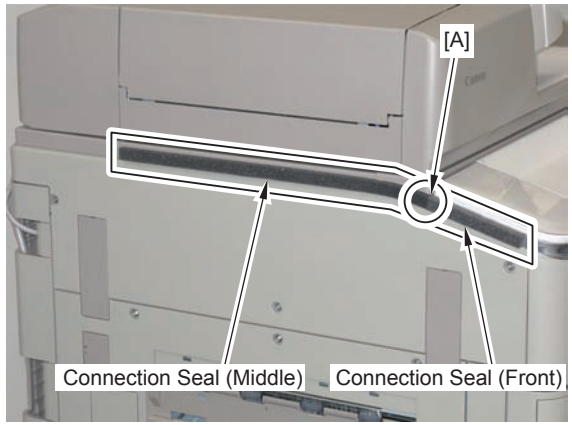
<Connection Seal>

□

Affix the Connection Seal (Front) and the Connection Seal (Middle) to the position on the left side of the Main Body as shown in the figure.

CAUTION:

Be sure that there is no gap between [A] the Connection Seal (Front) and the Connection Seal (Middle).



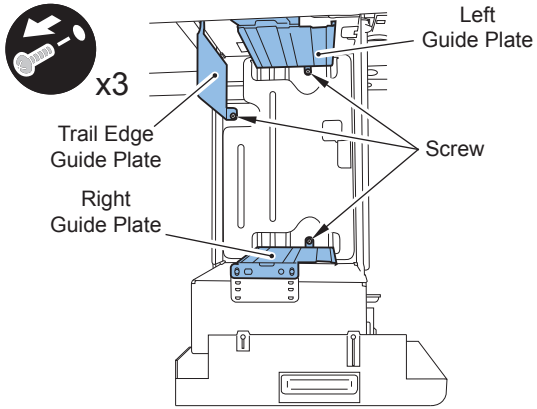

F-9-67

## Setting the Deck

□

1) Push the Deck Release Button to pull out the Left and the Right Decks to the front.
2) Remove the 3 screws fixing the Trailing Edge Guide Plate, Left Guide Plate, and Right Guide Plate in place, and fix each of the guide plates at user's desired size.

NOTE:
Setting at the time of shipment: A4 size



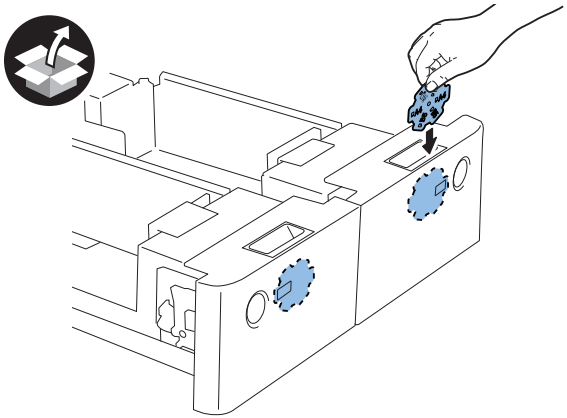

F-9-68

□

3) Put the specified size of papers in the Left/Right Deck.

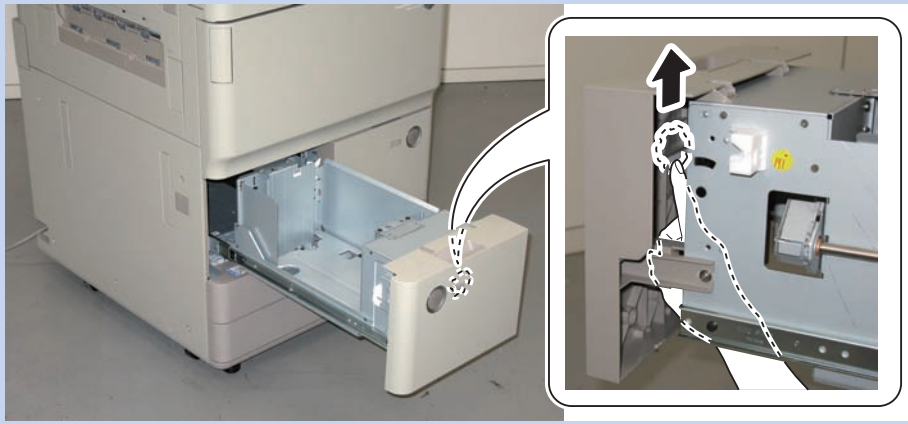
☐

4) Following the paper size, put the Size Plate L in the Right and Left Deck through the clearance at the handle area.



F-9-69

NOTE:
When taking out the size plate, access it from back side of the Deck Cover and push it out upward.



F-9-70

☐

5) Push the Left/Right Deck in.

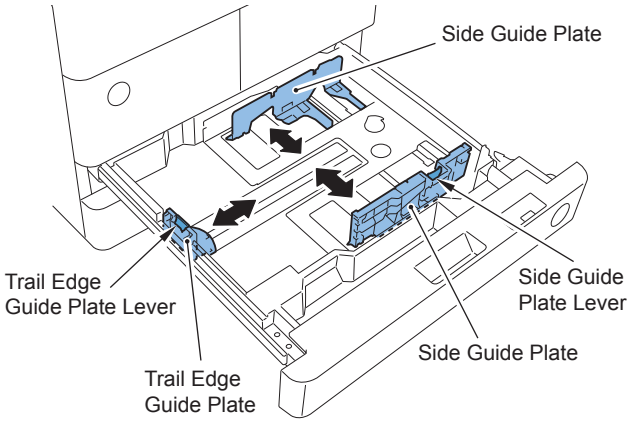
6) When the size is switched, register paper size for the Front Deck in service mode (Level 1).
Right Deck: COPIER > OPTION > CST > P-SZ-C1
Left Deck: COPIER > OPTION > CST > P-SZ-C2
A4=0, B5=1, LTR=2

7) Exit from the service mode.

## Setting the Paper Cassette

☐

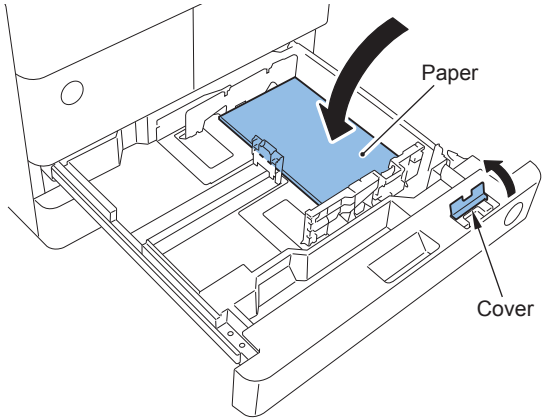
1) Push the Cassette Release Button to pull out the Cassette to the front.
2) Hold the Lever of the Side Guide Plate to set the Side Guide Plate to the specified size.
3) Hold the Lever of the Trail Edge Guide Plate to set the Trail Edge Guide Plate to the specified size.




F-9-71

☐

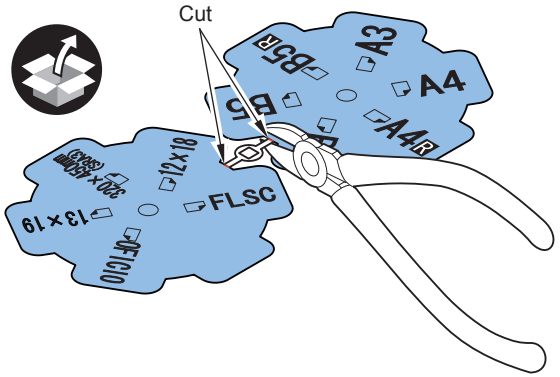
4) Set paper and open the cover at the insertion area of the Size Plate.




F-9-72

☐

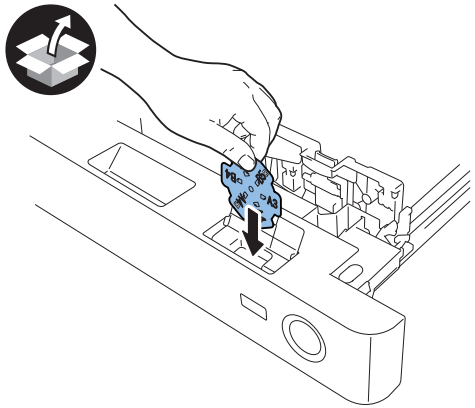
5) Cut the 2 points of the Size Plate R with nippers.




F-9-73

☐

6) Following the paper size, set the Size Plate R (unused size plates should be put together).



F-9-74

☐

7) Close the cover at the insertion area of the Size Plate and push in the Cassette.
8) Set another cassette as well.

NOTE:
Paper size is set to be automatically recognized.

## Auto Adjust Gradation

<In the Case of Copier Model>

□

1) Clean the Copyboard Glass surface of the host machine.
2) Set A3, A4, 11x17, or LTR size papers in a cassette. (Refer to the cassette settings.)
3) Select [Settings/Registration] > [Adjustment /Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Full Adjustment].
4) Select the source of paper for test print, and press [OK].
5) From this point on, follow the instruction on UI.

<In the Case of Printer Model>

□

1) Set A3, A4, 11x17, or LTR size papers in a cassette. (Refer to the cassette settings.)
2) Select [Settings/Registration] > [Adjustment /Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation], and execute the item.

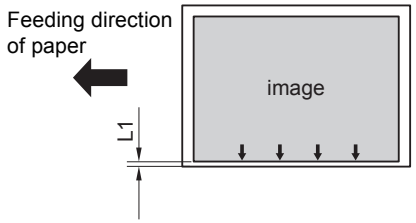
## Image Position Adjustment

### Left Edge Margin Adjustment (1st side)

Adjustment of Cassette/Deck

Print from each cassette/deck, and check that the left edge margin of the image (L1) is within 2.5 +/- 1.5mm.

If it is not within the range, execute adjustment by following the procedure below.




F-9-75

□

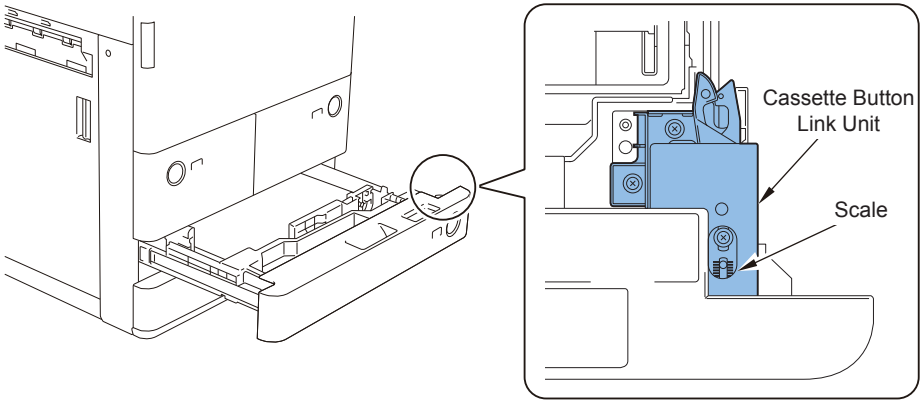
1) Adjust the image position in service mode (Level 1).
- Right Deck: COPIER > ADJUST > FEED-ADJ > ADJ-C1
- Left Deck: COPIER > ADJUST > FEED-ADJ > ADJ-C2
- Cassette 3: COPIER > ADJUST > FEED-ADJ > ADJ-C3
- Cassette 4: COPIER > ADJUST > FEED-ADJ > ADJ-C4

NOTE:
<Setting Range>
-20 to 20 (0.1mm per unit)
As the value is incremented by 1, the left edge margin is increased by 0.1mm.

2) When the setting value was changed in step 1), write down the new numerical value in the service label.
3) Exit from the service mode.
4) Print from the cassette/deck, and check that the left edge margin of the image is within 2.5 +/- 1.5mm.

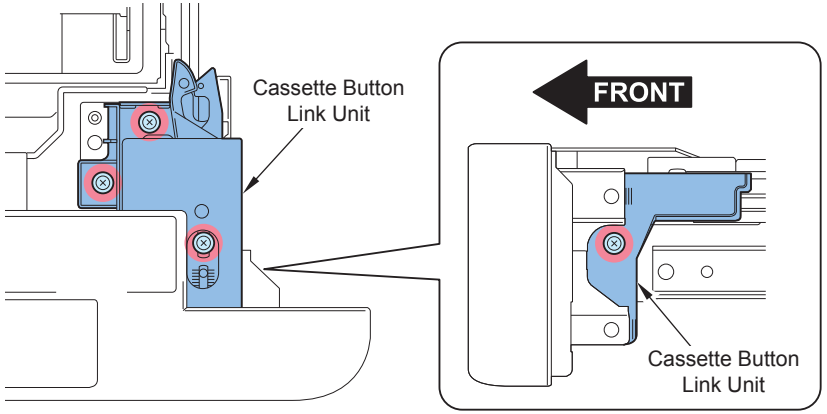
NOTE:
If the adjustment cannot be made with the setting value of -20 to 20 (adjustment amount: -2.0 to 2.0mm), execute step 5) and later steps.

☐
5) Pull out the Cassette.
6) Check the Cassette position by the scale of the Cassette Button Link Unit.



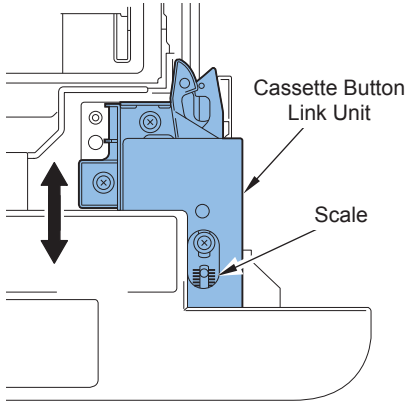

F-9-76

☐
7) Loosen the 4 screws of the Cassette Button Link Unit.




F-9-77

☐
8) According to the scale in which the position was checked in step 6), adjust the position of the Cassette Button Link Button.
- In the case of larger margin at the rear side, move the Cassette Button Link Unit to the rear side.
- In the case of larger margin at the front side, move the Cassette Button Link Unit to the front side.




F-9-78

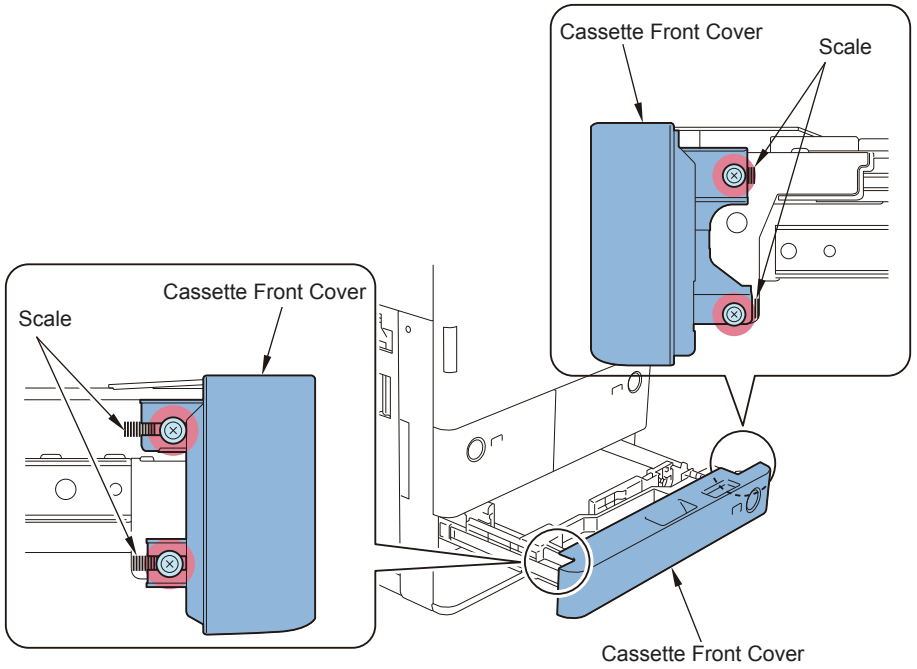
☐
9) Tighten the 4 screws (which have been loosened in step 7)).

□

NOTE:
If you concern alignment of the Cassette Front Cover, adjust the left and right sides of the cover as necessary.

10) Loosen the 4 screws and adjust the position of the Cassette Front Cover by referring to the scale.

11) When moving the Cassette Button Link Unit, adjust the left side of the Cassette Front Cover by shifting it with the same shifting amount of the unit.




F-9-79

□

12) Once the position of the Cassette Front Cover is confirmed, tighten the 4 screws (which have been loosened in step 10)).

13) Print from the cassette/deck, and check that the left edge margin of the image is within 2.5 +/- 1.5mm.

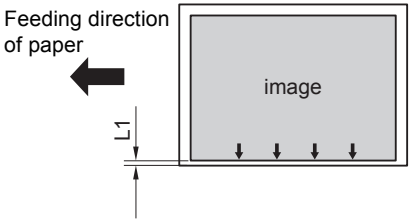
NOTE:
When a mechanical adjustment was made, be sure to execute the service mode in step 1) again.

## Left Edge Margin Adjustment (2nd side)

NOTE:
By executing the margin adjustment (2nd side) for the Cassette 3, the adjustment is applied to all source of paper.

Execute duplex printing from the Cassette 3, and check that the left edge margin is within 2.5 +/- 1.5mm.

If it is not within the range, execute adjustment by following the procedure below.




F-9-80

□

1) Adjust the image position in service mode (Level 1).
- COPIER > ADJUST > FEED-ADJ > ADJ-REFE
  As the value is incremented by 1, the left edge margin is increased by 0.1mm.

2) Execute duplex printing from the Cassette 3, and check that the left edge margin is within 2.5 +/- 1.5mm.

3) When the setting value was changed in step 1), write down the new numerical value in the service label.

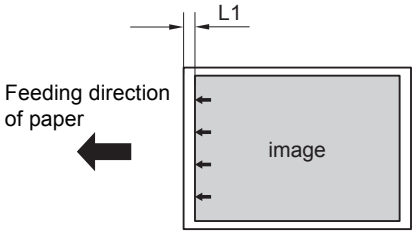
4) Exit from the service mode.

## Leading Edge Margin Adjustment (1st side)

NOTE:
By executing the leading edge margin adjustment for the Cassette 3, the adjustment is applied to all source of paper.

Execute printing from the Cassette 3, and check that the leading edge margin is within L1 2.5 +1.5/- 0.5mm.

If it is not within the range, execute adjustment by following the procedure below.




F-9-81

□

1) Adjust the image position in service mode (Level 1).
- COPIER > ADJUST > FEED-ADJ > REGIST

  As the value is incremented by 1, the leading edge margin is decreased by 0.1mm.

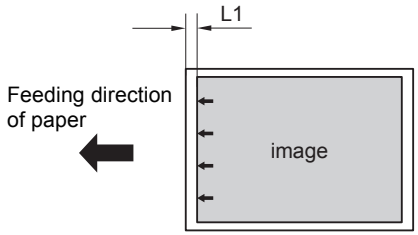
2) Execute duplex printing from the Cassette 3, and check that the leading edge margin is within 2.5 +1.5/- 0.5mm.
3) When the setting value was changed in step 1), write down the new numerical value in the service label.
4) Exit from the service mode.

## Leading Edge Margin Adjustment (2nd side)

NOTE:
By executing the leading edge margin adjustment for the Cassette 3, the adjustment is applied to all source of paper.

Execute duplex printing from the Cassette 3, and check that the leading edge margin on the 2nd side is within L1=2.5 +1.5/- 0.5mm.

If it is not within the range, execute adjustment by following the procedure below.




F-9-82

□

1) Adjust the image position in service mode (Level 1).
- COPIER > ADJUST > FEED-ADJ > REG-DUP1

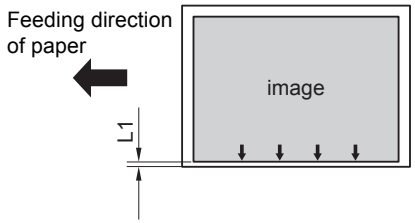
  As the value is incremented by 1, the leading edge margin is decreased by 0.1mm.

2) Execute duplex printing from the Cassette 3, and check that the leading edge margin is within 2.5 +1.5/- 0.5mm.
3) When the setting value was changed in step 1), write down the new numerical value in the service label.
4) Exit from the service mode.

## Adjusting margin of Multi-purpose Pickup Tray

Print from the Multi-purpose Tray Pickup, and check that the left edge margin of the image is within 2.5 +/- 1.5mm.

If it is not within the range, execute adjustment by following the procedure below.




F-9-83

□

1) Adjust the image position in service mode (Level 1).

- COPIER > ADJUST > FEED-ADJ > ADJ-MF

NOTE:
<Setting Range>
-20 to 20 (0.1mm per unit)
As the value is incremented by 1, the left edge margin is increased by 0.1mm.

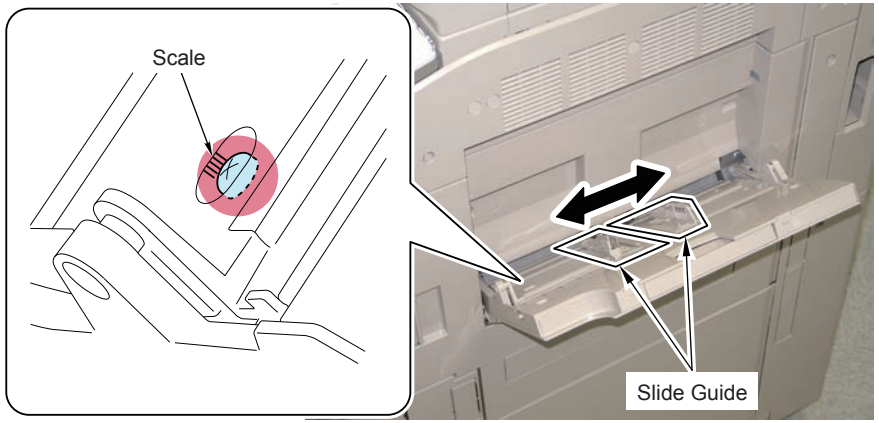
2) When the setting value was changed in step 1), write down the new numerical value in the service label.
3) Exit from the service mode.
4) Print from the Multi-purpose Tray Pickup, and check that the left edge margin of the image is within 2.5 +/- 1.5mm.

NOTE:
If the adjustment cannot be made with the setting value of -20 to 20 (adjustment amount: -2.0 to 2.0mm), execute step 5) and later steps.

□

5) Open the MP Pickup Tray.
6) Loosen the screw and adjust the position of the Slide Guide by referring to the scale.

- In the case of larger margin at the rear side, move the Slide Guide to the front side.
- In the case of larger margin at the front side, move the Slide Guide to the rear side.




F-9-84

□

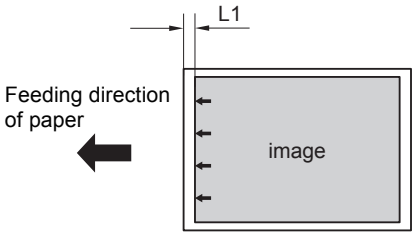
7) Tighten the screw loosened in step 6).
8) Print from the Multi-purpose Tray Pickup, and check that the left edge margin of the image is within 2.5 +/- 1.5mm.

NOTE:
When a mechanical adjustment was made, be sure to execute the service mode in step 1) again.

## Leading Edge Margin Adjustment (Multi-purpose Tray Pickup)

NOTE:
By executing the leading edge margin adjustment for the Multi-purpose Tray Pickup, the adjustment is applied to all source of paper.

Execute duplex printing from the Multi-purpose Tray Pickup, and check that the leading edge margin is within L12.5 +1.5/- 0.5mm.
If it is not within the range, execute adjustment by following the procedure below.




F-9-85

□

1) Adjust the image position in service mode (Level 1).
- COPIER > ADJUST > FEED-ADJ > RG-MF
  As the value is incremented by 1, the leading edge margin is decreased by 0.1mm.

2) Execute duplex printing from the Cassette 3, and check that the leading edge margin is within 2.5 +1.5/- 0.5mm.
3) When the setting value was changed in step 1), write down the new numerical value in the service label.
4) Exit from the service mode.

# Checking the Network Connection

## Overview

If the user's network environment is TCP/IP, use the Ping function to check that the network setting is properly performed.
If the user's network environment is IPX/SPX or Apple Talk, there is no need to check the network environment.

## Checking the Network Connection

CAUTION:
Be sure to use the network cable with Category 5e or higher. In addition, a sealed type (STP cable) is recommended.
Using the non-shield type can affect the peripheral electrical equipment through the network cable.

□

1) Turn OFF the main power switch.
2) Connect the network cable to the Host Machine and turn ON the main power switch.
3) Inform the system administrator at the installation site that installation of the Host Machine is complete, and then, ask for the network setting.

NOTE:
Network setting cannot be executed unless logging in as an administrator.
Factory default password is as follows.
- System administration division ID: 7654321
- System administration password: 7654321

CAUTION:
To perform the network setting, the following Additional Functions items must be set "ON".
- [Additional Functions] > [Configuration] > [Network] > [Change network settings/ check connection]
- [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Use IPv4]

4) Turn OFF and then ON the main power.

## Operation Procedure Using Ping

CAUTION:
To execute Ping command with the Windows Vista-installed PC, set OFF the firewall, or execute Ping command from the Windows Vista-installed PC to the Host Machine.

□

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP setting] > [IPv4 setting] > [PING command]
2) Enter the IP address with the numeric keypad on the Control Panel and press "Execute" key. "Response from the host" is displayed if Ping command is succeeded while "no response from the host" is displayed if failed.

## Checking by the Remote Host Address

Using the remote host address to execute Ping can check whether connection to the network is enabled or not.
Remote host address: IP address of PC terminal connected/running on TCP/IP network environment that connects to this equipment.

□

1) Inform the system administrator about checking of the network connection using Ping.
2) Confirm the remote host address with the system administrator.
3) Enter the remote host address to Ping.

- The network is properly connected if the message say "Response from the host".
- The network is not properly connected if the message say "No response from the host", therefore, execute the following troubleshooting.

# Network Troubleshooting

## Checking Connection of the Network Cable

□

To check whether the network cable is properly connected to the Ethernet Port.

## Operation Procedure Using Ping

□

1) Ask the network administrator at the user's site to write down the IP address of the PC that is connected to the network.
2) [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address of the PC with the numeric keypad and press Execute key.

- The network is properly connected if the message say "Response from the host".
- If the message say "No response from the host", check the following.

NOTE:
The IP address of the PC can be checked by the following procedure:
Select the following on a Windows PC: Start > Program > Accessory > Command Prompt; and enter "ipconfig" and press Enter key to display information of the IP address.

## Checking the Network Setting of the Host Machine

Check if the IP address specified in the Host Machine is correct.

□

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [IP address setting]; and write down the address in the IP address field.
2) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address.

- The IP address specified in the Host Machine is correct if the message say "Response from the host".
- If the message say "No response from the host", check the following.

NOTE:
When setting the address by manually input, set the Subnet Mask by following the instruction of the administrator.

## Checking Network Function on the Main Controller

Perform checking by the loopback address.

□

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address, "127.0.0.1" with the numeric keypad and enter Execute key.

- The network function of the Main Controller is working properly if the message say "Response from the host".
- If the message say "No response from the host", the network function of the Main Controller is faulty.

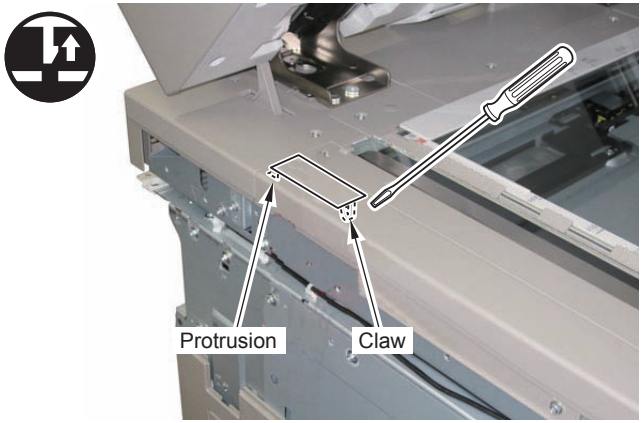
2) Replace with a Main Controller that works properly, and then check connection.

When moving the host machine to another place after installation, execute the operation shown below.

☐
1) Move the Scanner Unit to the position where it is going to be secured.
- Service Mode (Level 2) > COPIER > FUNCTION > MISC-R > RD-SHPOS

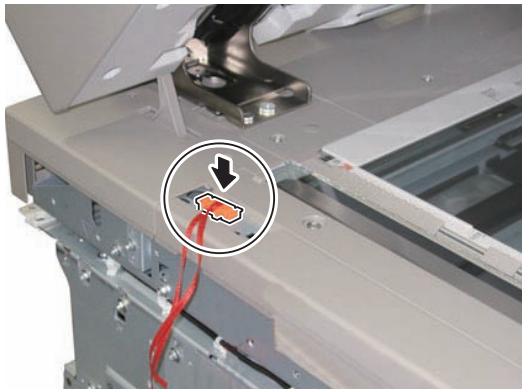
☐
2) Turn OFF the main power switch.
3) Check that the control panel display and the main power lamp are OFF, and then disconnect the power plug.

☐
4) Open the DADF, and remove the Left Upper Small Cover.
- 1 Protrusion
- 1 Claw




F-9-86

☐
5) Secure the Scanner Unit with the Scanner Fixation Tool that have been kept in a safe place since image Reader Unit installation.



F-9-87

☐
6) Close the DADF.

☐
7) Lower lifters inside the Pickup Decks and cassettes.
   7-1) Pull out all Pickup Decks and cassettes.
   7-2) Confirm that lifters are lowered and close all Pickup Decks and cassettes.

CAUTION:
- Make sure to turn the Main Power OFF and then perform these procedures. If the Main Power is ON, lifters may rise again after closing Pickup Decks and cassettes.
- If the machine is moved with lifters raised, the Lifter Drive Gear may be damaged due to the shaking.

☐
8) Lift the host machine off the floor by turning the 2 adjusters with a screwdriver.

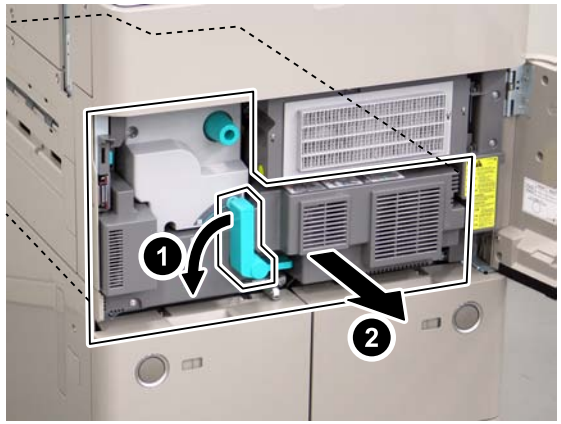
□

9) After moving the host machine, be sure that there is no toner scattering on the Registration Assembly and the Pre-transfer Charging Assembly. If there is any toner scattering, wipe off the toner.

<Registration Assembly Cleaning Procedure>

□

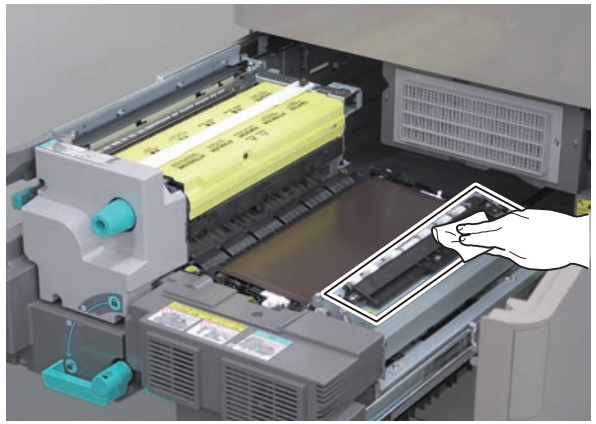
1) Open the Front Cover.
2) Turn the Fixing Feed Unit Pressure Release Lever in the direction of the arrow to pull out the Fixing Feed Unit.




F-9-88

□

3) Wipe the top surface of the Registration Assembly with lint-free paper.



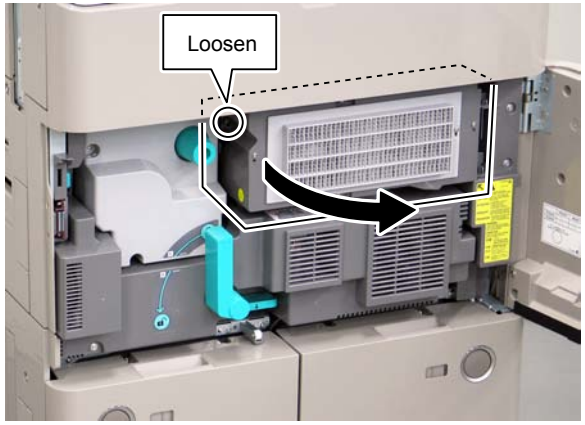
F-9-89

<Pre-transfer Charging Assembly Cleaning Procedure>

□

1) Open the Front Cover.
2) Open the Inner Cover.

- 1 Screw (to loosen)




F-9-90

CAUTION:

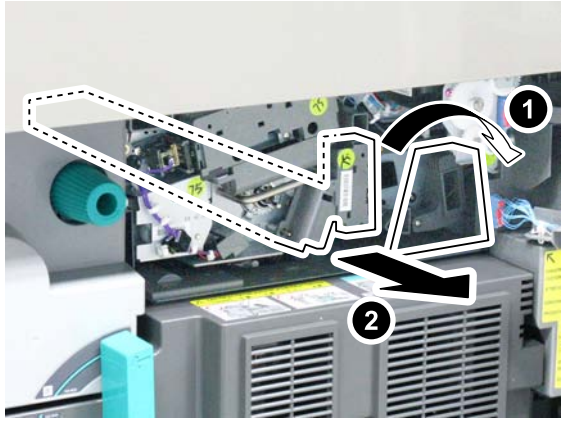
When removing the Primary Charging Assembly and the Pre-transfer Charging Assembly, go through the following procedure while the Charging Shutter is open.

- At sleep mode, press the Power Switch on the Control Panel, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.
- In the case that the condition of the Charging Shutter (open/close) is unknown while the power of the host machine is OFF, turn ON the power, check that the machine is in standby condition, turn OFF the Main Power, and then perform removing.

If the above operations are not performed, it may be possible to remove the assembly while the Charging Shutter is closed, which may damage the drum or the shutter.

□

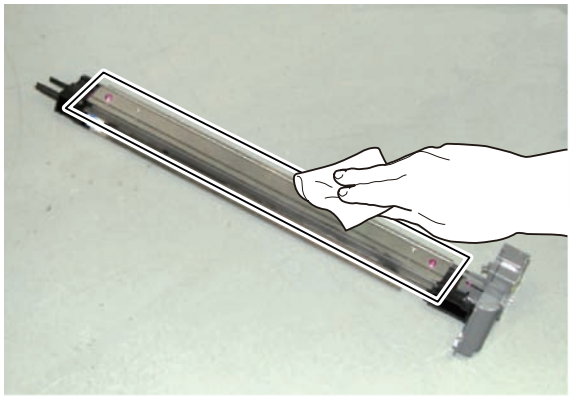
3) Turn the Lock Lever in the direction of the arrow to pull out the Pre-transfer Charging Assembly.




F-9-91

□

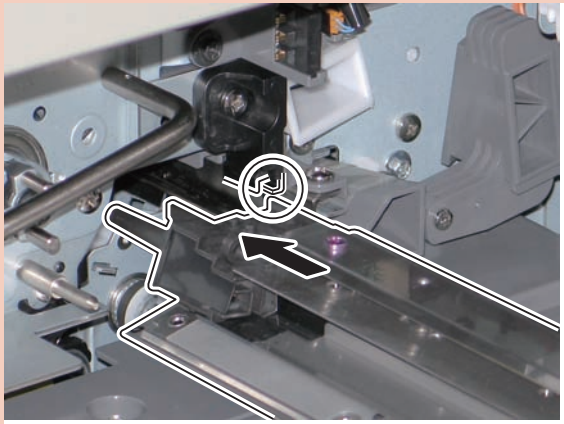
4) Wipe the top surface of the Pre-transfer Charging Assembly with lint-free paper.



F-9-92

CAUTION: Points to Caution at Installation

Be sure to fit the Transfer Charging Assembly to the groove on the host machine and install it horizontally.



F-9-93

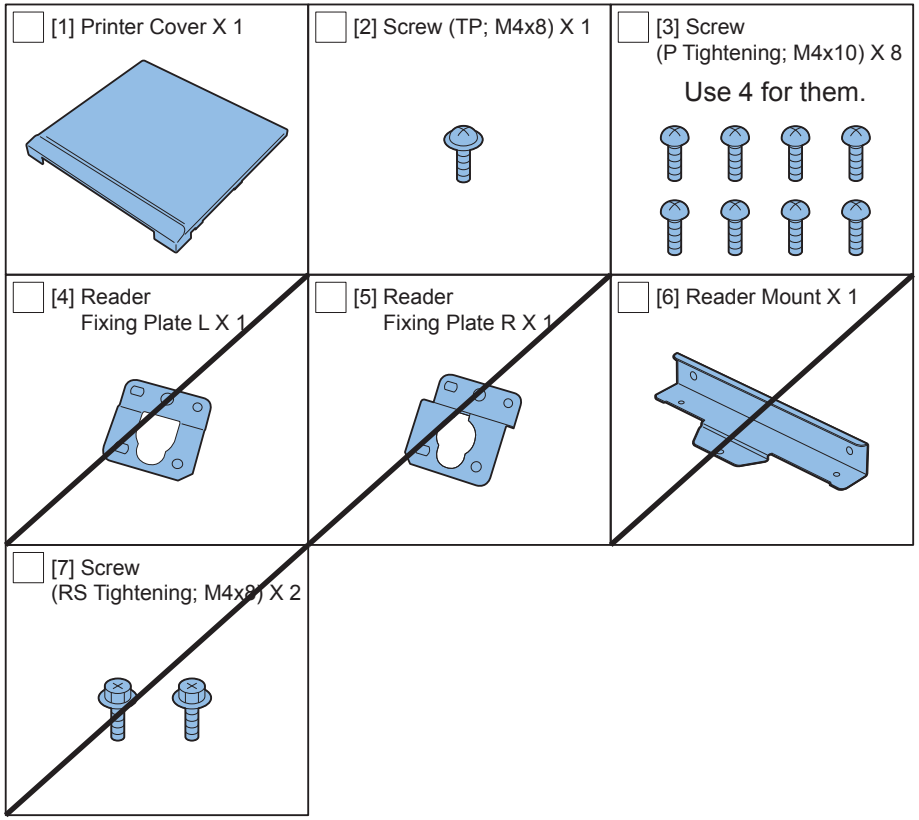
# Printer Cover -B1

## Points to Note at Installation

Be sure to install this equipment after installing the Upright Control Panel.

## Checking the Contents

NOTE:
Parts other than those shown in the figure below are included in the package of the host machine. Therefore, use the parts contained in the package of the host machine to install the equipment.



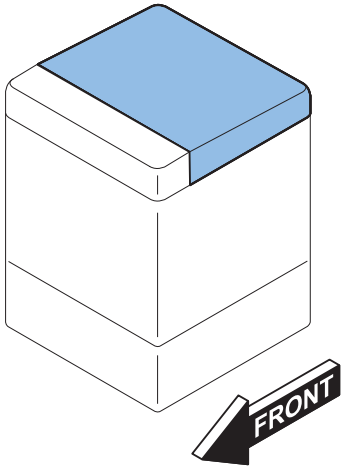

F-9-94

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing




F-9-95

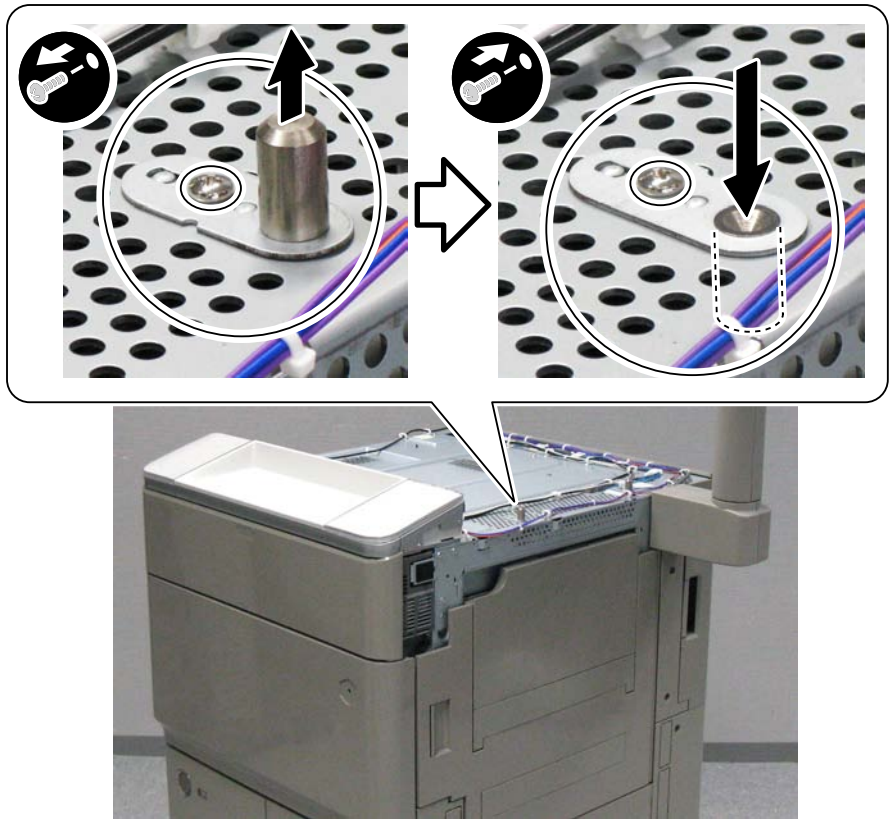
## Installation Procedure

NOTE:
Installation procedures for iR-ADV 8205PRO/8295PRO/8285PRO Series and iR-ADV 6275/6265/6255 Series are the same.
Subsequent illustrations and pictures are the case of iR-ADV 8205PRO/8295PRO/8285PRO Series.

□

1) Remove the Reader Positioning Shaft, and secure it in the hole as shown in the figure.

- 1 Screw

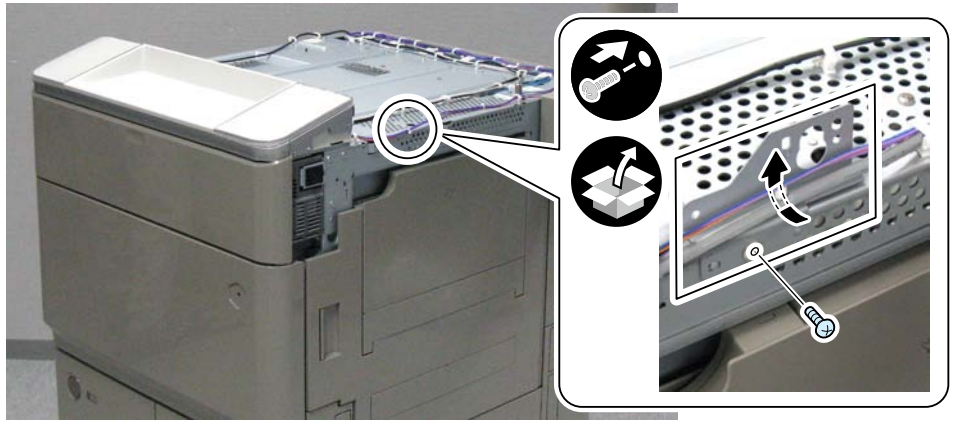


F-9-96

□

2) Install the Reader Fixation Plate R (Included in the host machine) to the installation position of front side.
Flat Control Panel model only: Install the Reader Fixation Plate R to make the Control Panel Cable and the Power Supply Cable over the plate.

- 2 Bosses
- 1 Screw (RS tight: M4x8) (Included in the host machine)

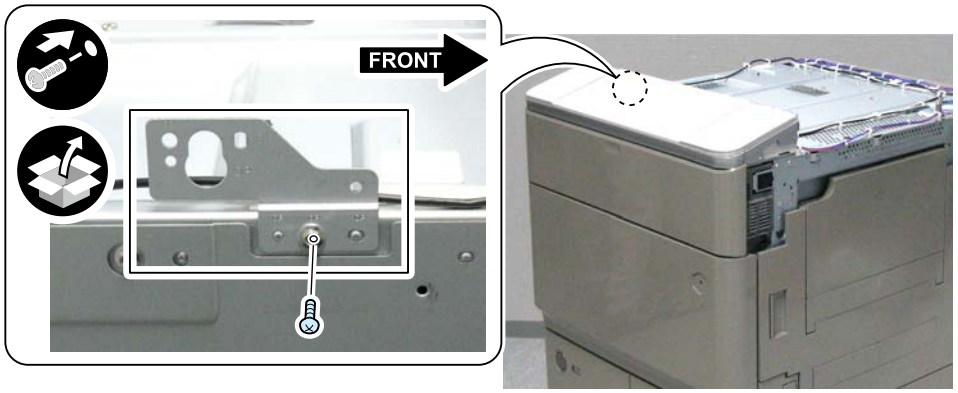


F-9-97

□

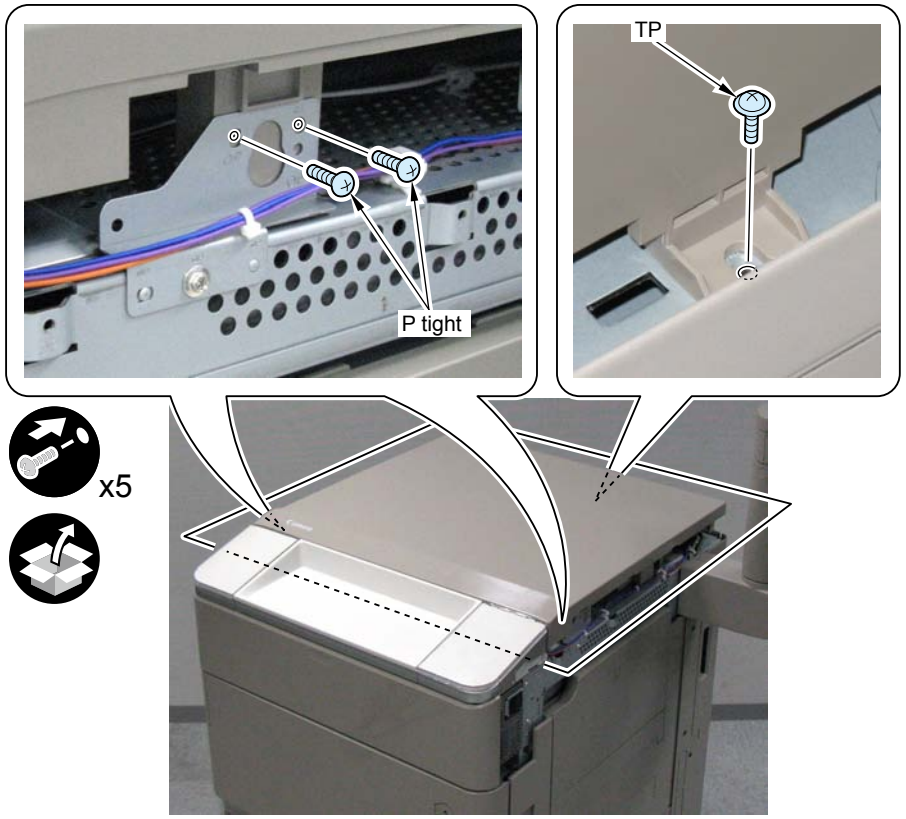
3) Install the Reader Fixation Plate L (Included in the host machine) to the installation position of front side.

- 2 Bosses
- 1 Screw (RS tight: M4x8) (Included in the host machine)



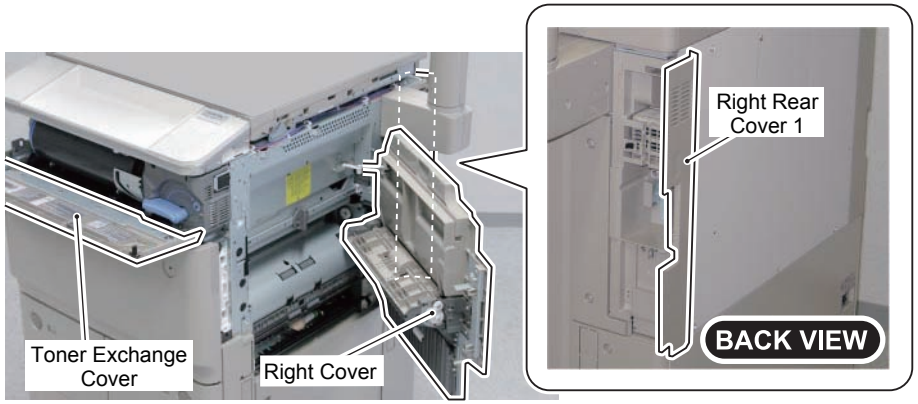

F-9-98

☐
4) Install the Printer Cover.
- 4 Screws (P tight: M4x10)
- 1 Screw (TP: M4x8)



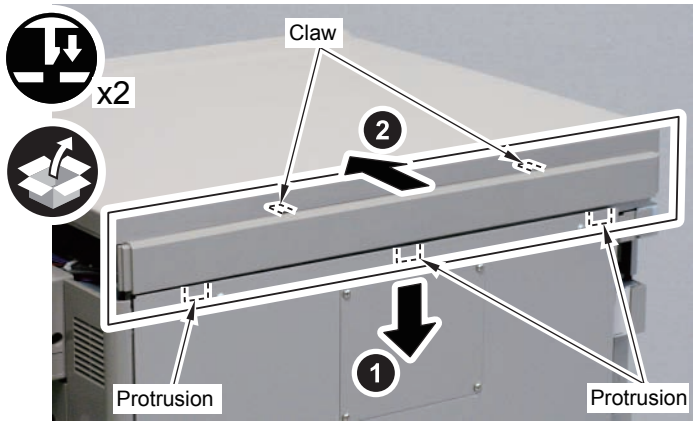

F-9-99

☐
5) Open the covers.
- Front Cover
- Right Door
- Box Cover



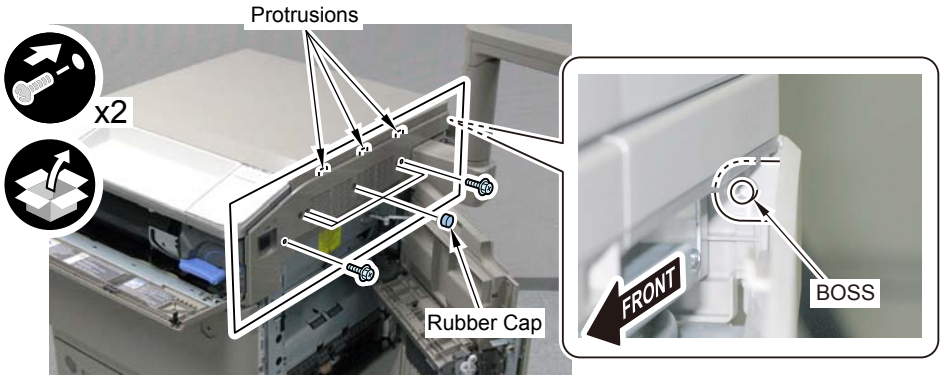

F-9-100

☐
6) Install the Upper Rear Cover (Included in the host machine).
- 3 Protrusion
- 2 Claws



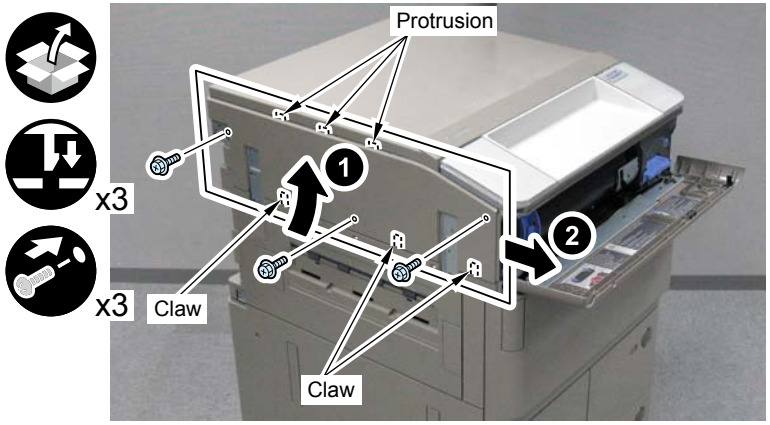

F-9-101

☐
7) Install the Right Upper Cover (Included in the host machine).
- 3 Protrusions
- 2 Screws (RS tight: M4x10) (Included in the host machine)
- 4 Rubber Caps (Included in the host machine)




F-9-102

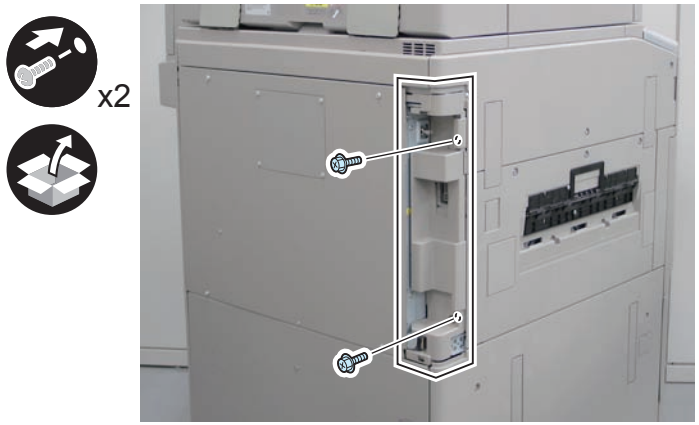
☐
8) stall the Left Upper Cover (Included in the host machine) in the direction of the arrow.
- 4 Protrusions
- 3 Claws
- 3 Screws (RS tight: M4x10) (Included in the host machine)




F-9-103

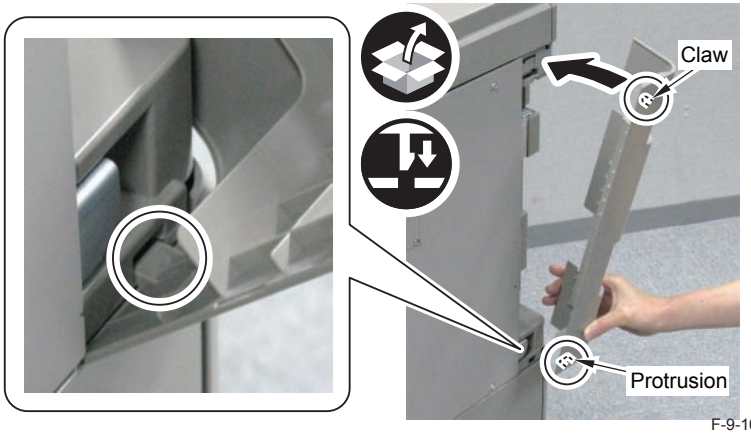
☐
9) Close the covers.
- Front Cover
- Right Door
- Box Cover

☐
10) Install the Left Rear Inner Cover (Included in the host machine).
- 2 Screws (RS tight: M4x10) (Included in the host machine)




F-9-104

☐
11) Install the Left Rear Cover (Included in the host machine).
- 1 Protrusion
- 1 Claw




F-9-105

## Operation Check

1) Connect the power plug of the host machine to the outlet.
2) Turn ON the main power switch.
3) A message is displayed prompting to check that the Reader Unit Cable is connected properly.
4) Select "0" for the following service mode (Level 1).
- COPIER > OPTION > FNC-SW > W/SCNR

5) Get out from service mode.
6) Turn OFF and then ON the main power switch..

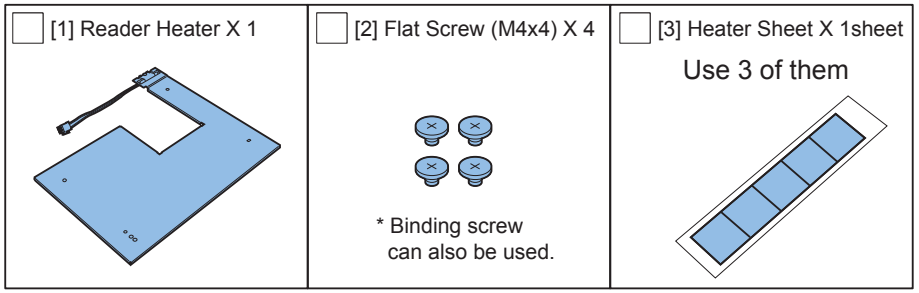
## Auto Adjust Gradation

1) Set A3, A4, 11x17, or LTR size papers in a cassette. (Refer to the cassette settings.)
2) Select [Settings/Registration] > [Adjustment /Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation], and execute the item.

# Reader Heater Unit

## Checking the Contents (ASIA only)

### Reader Heater Unit-G1




F-9-106

## Checking the Parts to be Installed (Europe only)

### Reader Heater Unit

Prepare the following parts because each part of the Cassette Heater Unit is assigned as service part.

| NO. | Parts name | Parts Number. | Q'ty |
|---|---|---|---|
| [1] | Reader Heater (200V) | FK2-7164-000 | 1 pc |
| [2] | Flat Screw (M4 x4) | XA9-1956-000 | 4 pc |
| [3] | Heater Sheet | FC8-6060-000 | 1 sheet |

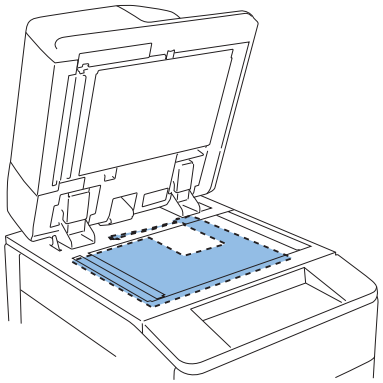
T-9-3

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing

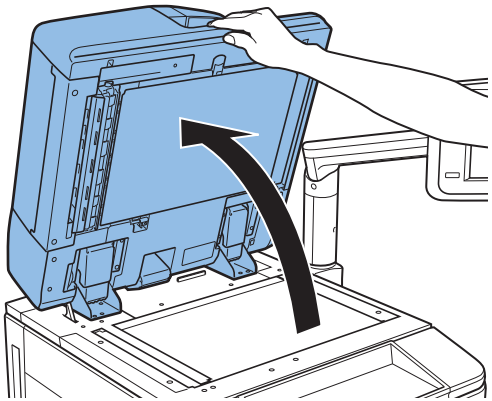


F-9-107

## Installation Procedure

□

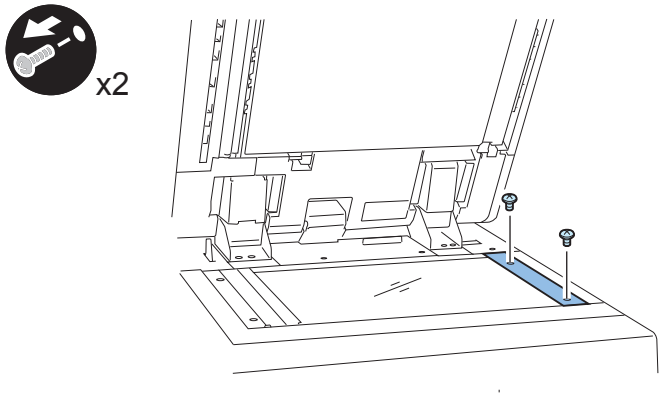
1) Open the DADF.



F-9-108

☐
2) Remove the Right Retainer Cover.

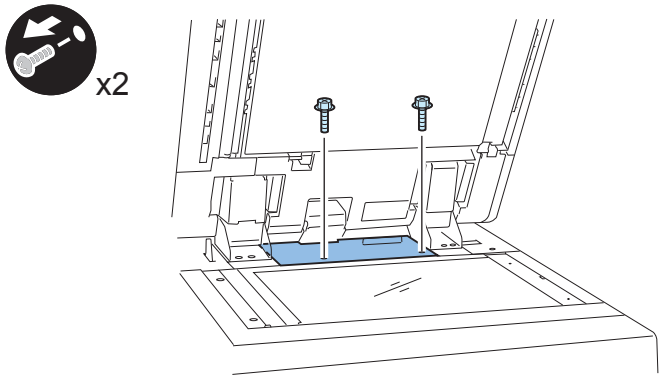
- 2 Screws




F-9-109

☐
3) Remove the DF Cable Cover.

- 2 Screws



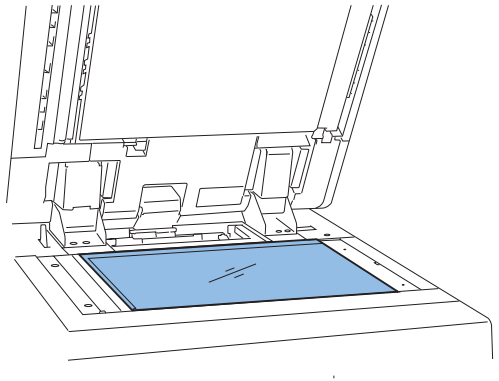

F-9-110

CAUTION:

When removing the copyboard glass, be sure not to get your fingers touched with the glass surface or the backside of the white plate.In case the glass is soiled, clean it with lint-free paper.

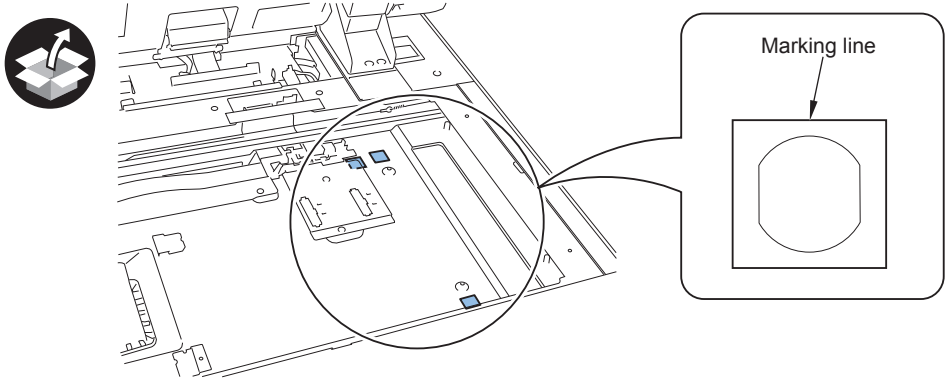
F-9-111

☐
4) Remove the Copyboard Glass.



F-9-112

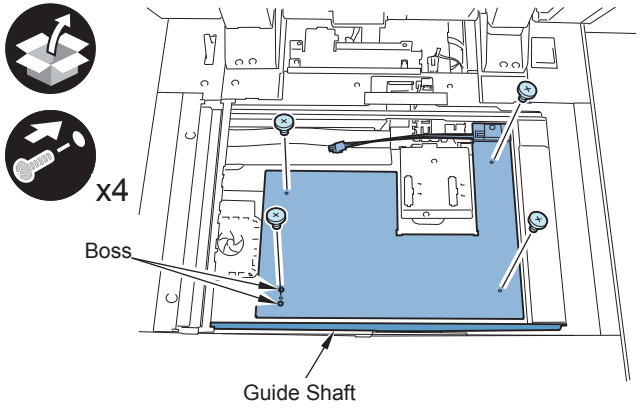
☐
5) Align the 5 Heater Sheets in the marking line and put them on.




F-9-113

☐
6) Install the Reader Heater.
- 4 Screws (flat-head ;M4X4)
- 2 Bosses

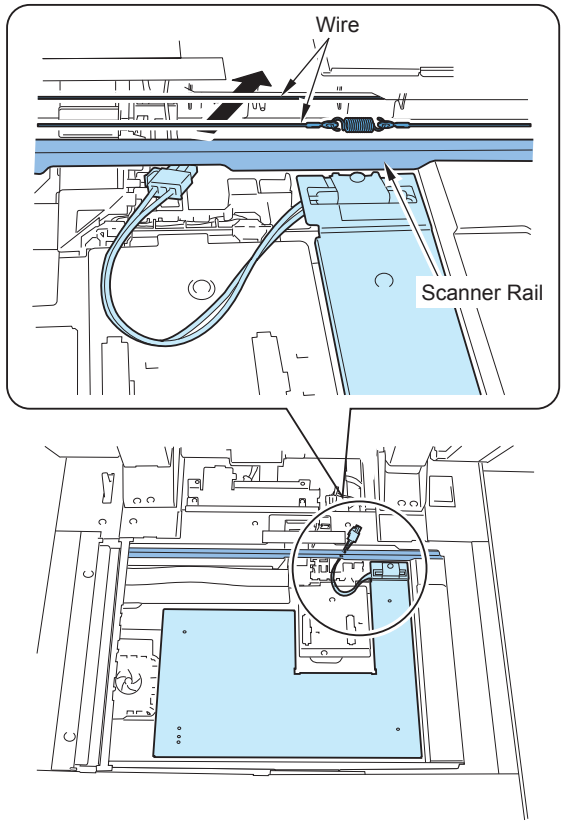
CAUTION:
Do not scratch surface of the wire and the Scanner Rail.




F-9-114

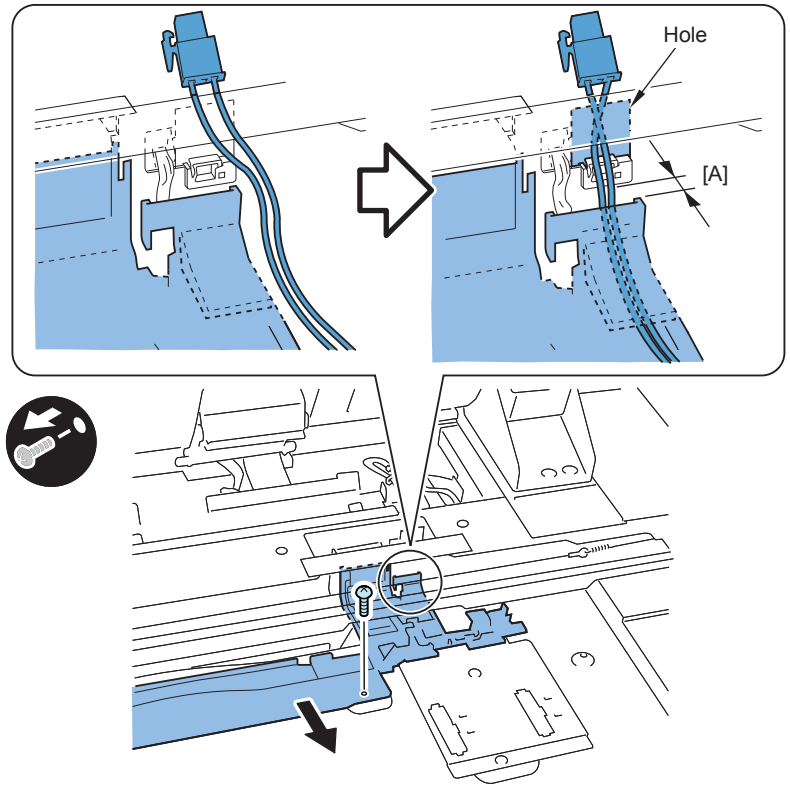
☐
7) Pass the connecter under the wire and the Scanner Rail.

CAUTION:
Do not scratch surface of the wire and the Scanner Rail.




F-9-115

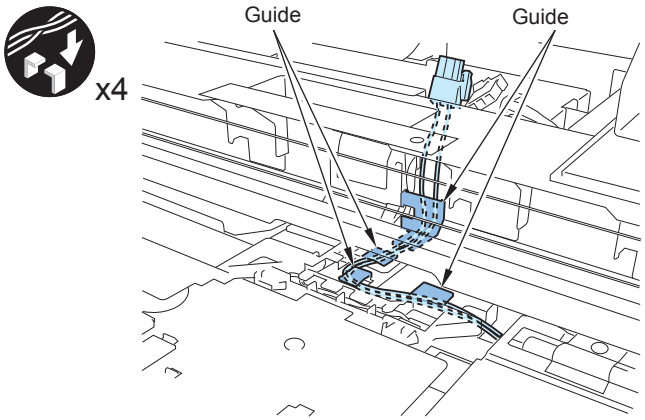
☐
8) To make a space [A] to put the harness through, remove the screw.




F-9-116

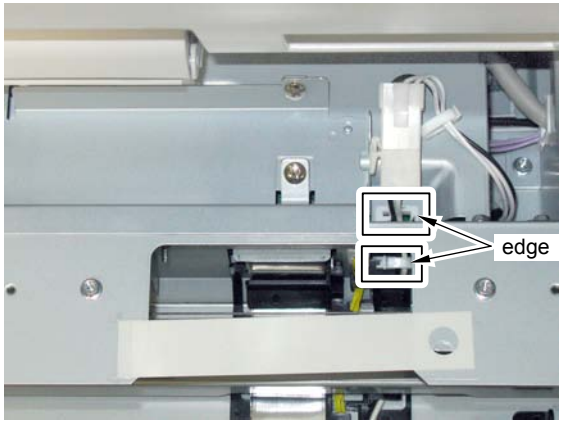
☐
9) Put the harness along the claws of FFC Guide in the 4 places.

NOTE:
Make sure to keep the harness tightly put.



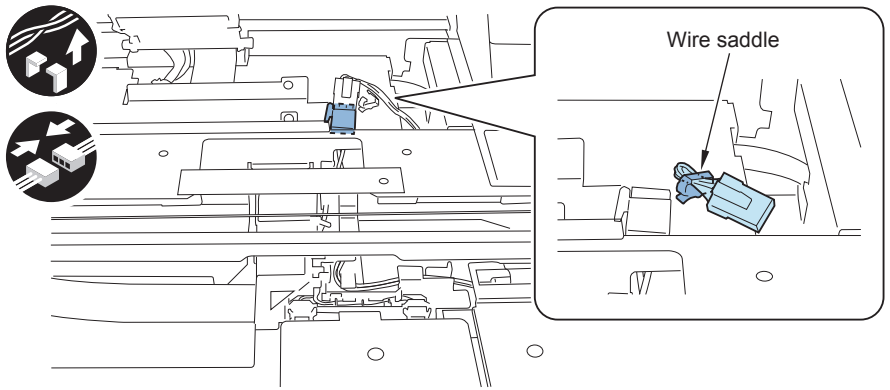

F-9-117

☐
10) Open the 2 Edge Saddles, put the connector through a hole of the plate, and then secure in place using the 2 Edge Saddles.



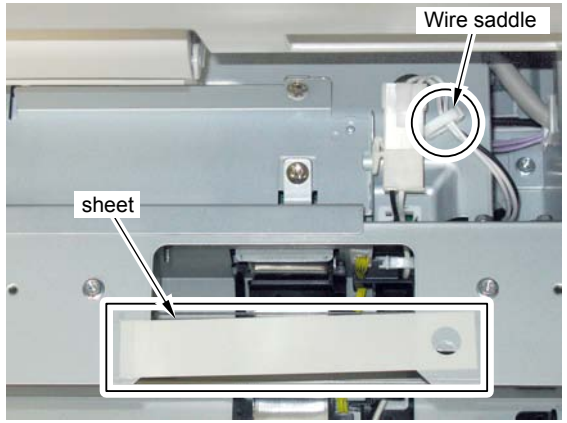

F-9-118

☐
11) Release the Wire Saddle and connect the Connector.



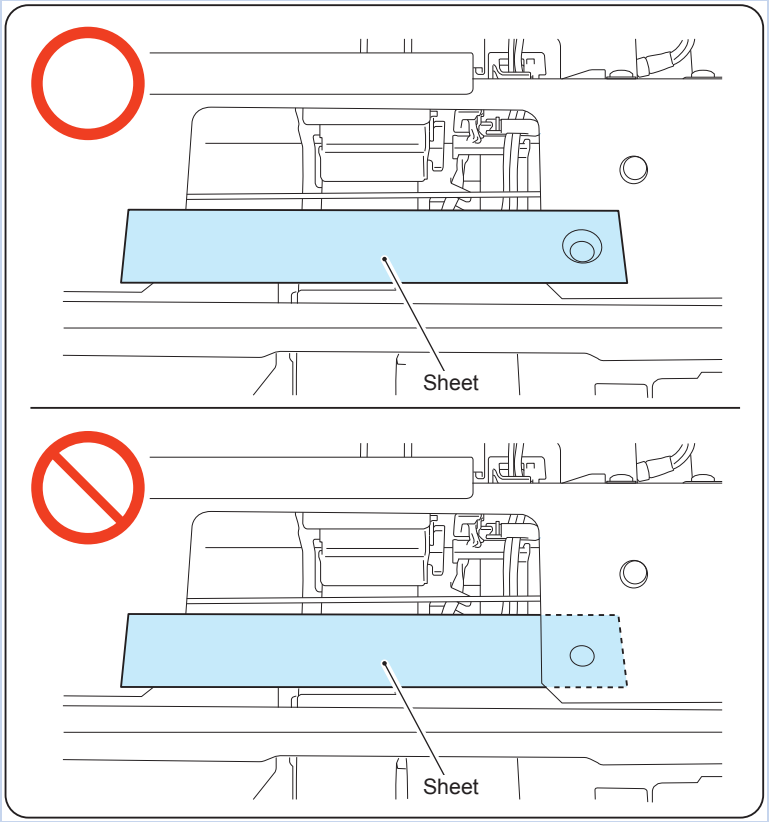

F-9-119

☐
12) Secure the harness in place using the Wire Saddle.




F-9-120

NOTE:
Be sure to check that the sheet is on the plate.




F-9-121

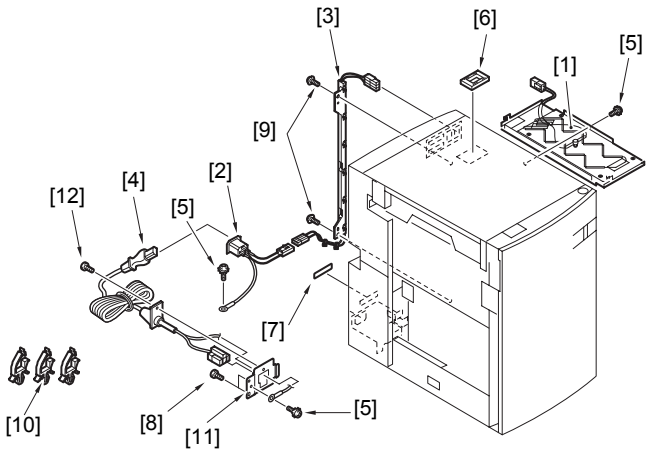
☐
13) Aligning with the boss, tighten the screw that has been removed in step 8).
14) Install the removed cover.
- Copyboard Glass
- DF Cable Cover (2 Screws)
- Right Retainer Cover (2 Screws)

15) Close the DADF.
16) Turn ON the environment switch
17) Insert the power plug to the outlet.
18) Turn the main power switch ON.

# Paper Deck Heater Unit-A1

## Checking the Contents

NOTE:
Every components of the paper deck heater unit (paper deck heater unit-A1) are supplied as service parts, so have the following parts on hand.




F-9-122

| No. | Parts Name | Parts Number | Q'ty |
|---|---|---|---|
| [1] | Heater Unit | FG6-9651 | 1pc. |
| [2] | AC Input Connector | FK3-0631 | 1pc. |
| [3] | Relay Harness Unit | FG6-2957 | 1pc. |
| [4] | AC Cable | FG6-1117 | 1pc. |
| [5] | Screw with Toothed Washer | XB2-7400-607 | 3pcs. |
| [6] | Cable Protection Bushing | WT2-5098-000 | 1pc. |
| [7] | Power Supply Label | FS6-8725 | 1pc. |
| [8] | Screw (Binding; M4x4) | XB1-2400-409 | 2pcs. |
| [9] | Screw (RS-tight; M4x8) | XA9-0732-000 | 2pcs. |
| [10] | Wire Saddle | WT2-5018-000 | 3pcs. |
| [11] | Cord Mount | FC7-5473 | 1pc. |
| [12] | Screw with Flat Spring | XB2-8401-007 | 1pc. |

T-9-4

## Check Items when Turning OFF the Main Power

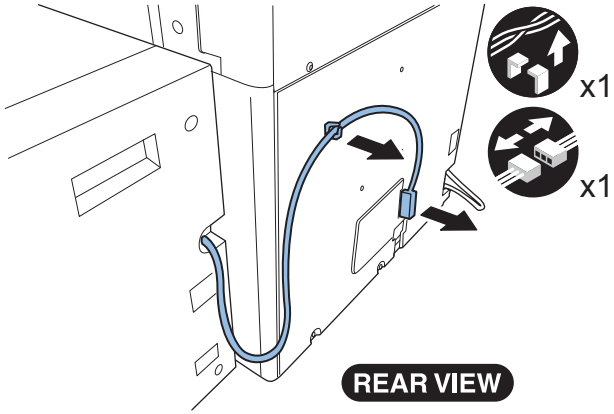
Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

CAUTION:
When installing the heater to the paper deck, take the following precautions.
a. The AC power plug of the host machine must have been removed from the outlet.
b. Install the heater after installing the host machine and paper deck.
c. Use correct screws (length and diameters) at correct positions.

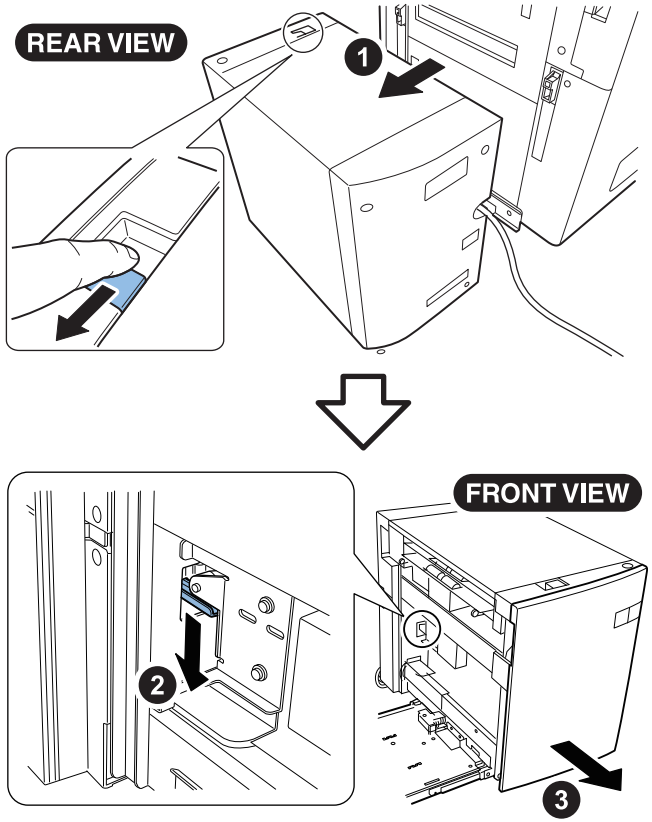
## Installation Procedure (Paper Deck Unit-C1)

☐
1) Disconnect the connector of the paper deck from the host machine.



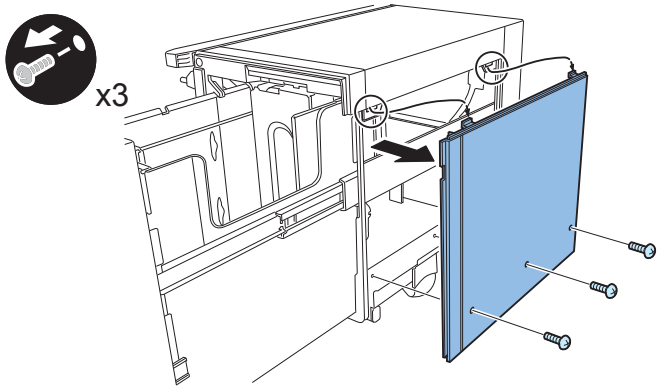

F-9-123

☐
2) Release the paper deck from the host machine, and then press down the latch plate of the paper deck housing with your finger to open the housing.



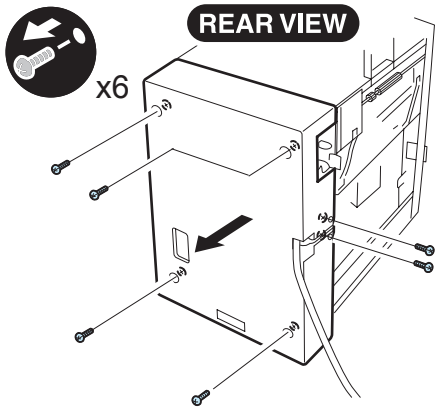

F-9-124

☐
3) Detach the right cover of the paper deck.
- 3 screws



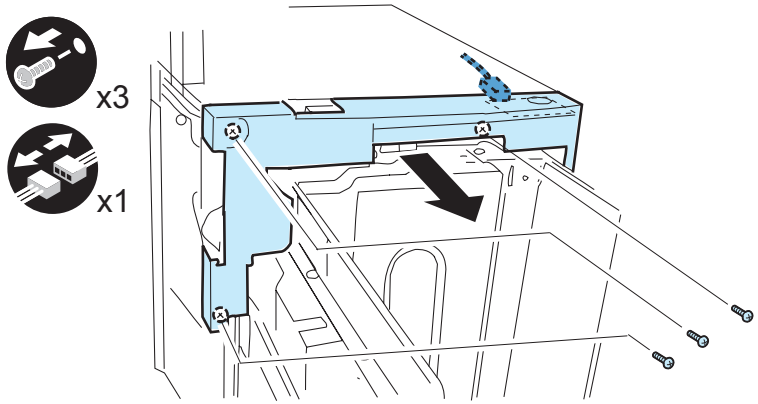

F-9-125

☐
4) Detech the rear cover of the paper deck.
- 6 screws (M3x8: 2pcs, M4x8: 4pcs)



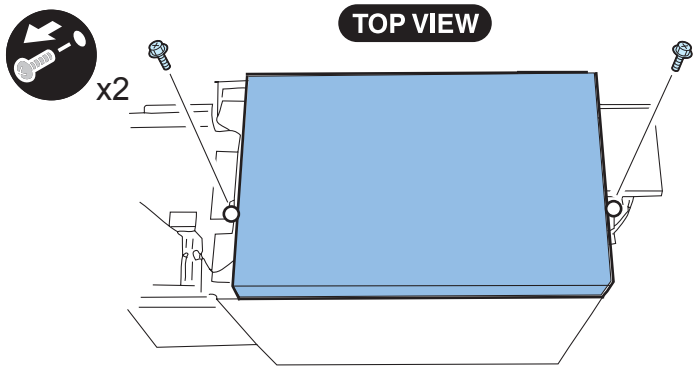

F-9-126

☐
5) Detach the front-upper cover.
- 3 screws
- 1 connector




F-9-127

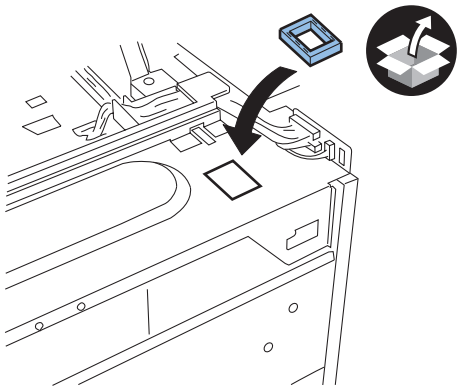
☐
6) Detach the top cover.
- 2 screws




F-9-128

☐

7) Atach the supplied cable protection bushing into the hole on the top panel of the paper deck.



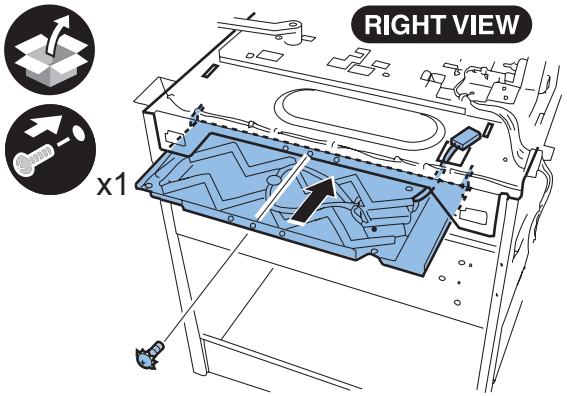
F-9-129

☐

8) Place the heater unit under the top panel of the paper deck, and then take the connector out from the hole on the top plate.

9) Insert 2 hooks of the heater unit into the holes on the top plate of the paper deck, and then secure the heater unit to the main body of the paper deck.

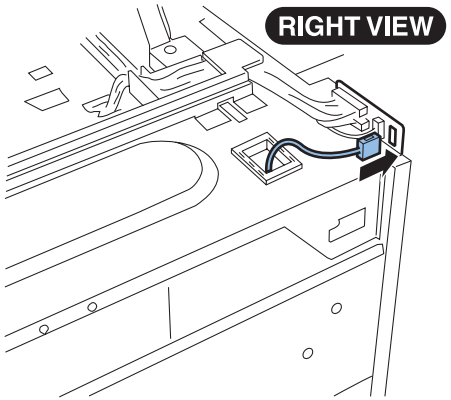
- 1 screw with toothed washer




F-9-130

☐

10) Attach the heater connector to the panel mount.

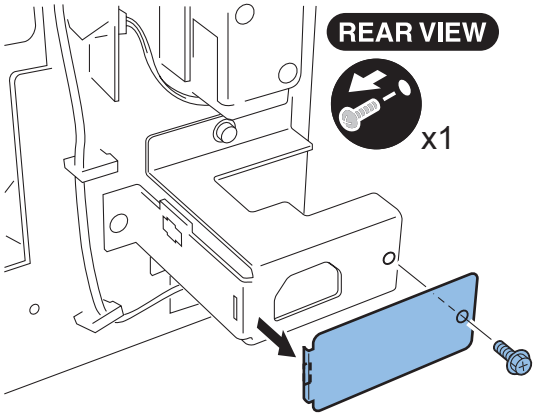



F-9-131

☐

11) Remove the blindfold plate from the power core mount of the papar deck.

- 1 screw



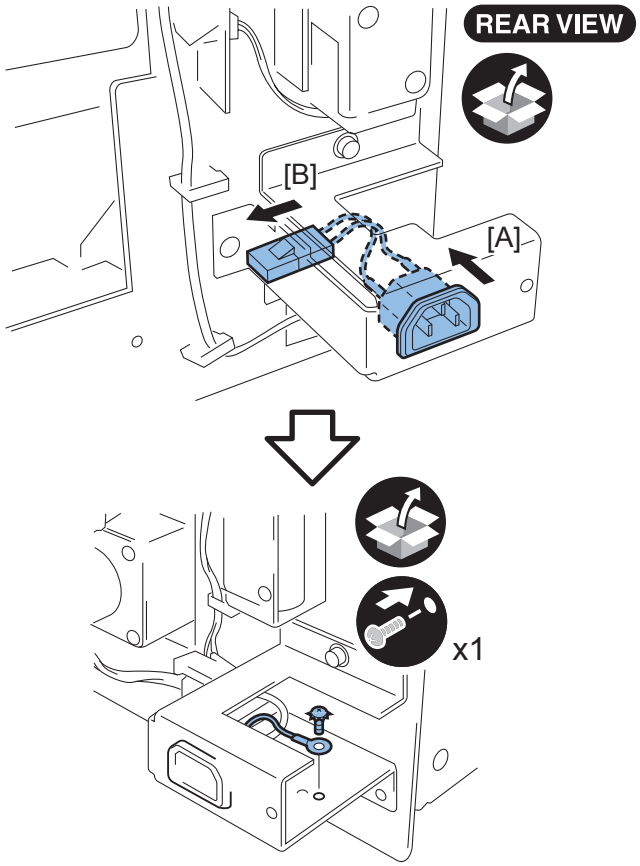

F-9-132

NOTE:
Removed blindfold plate and screw are no longer reused.

☐

12) Install the supplied AC input connector in 2 steps ([A] > [B]).
Secure the ground cable.

- 1 screw with toothed washer

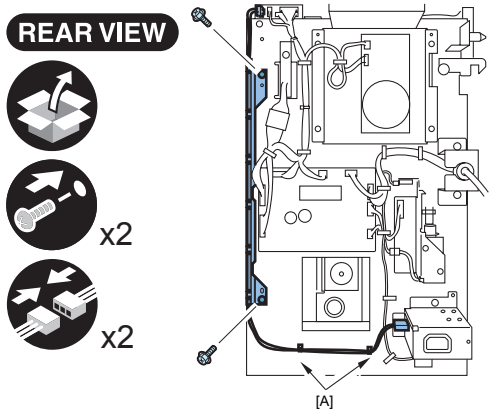



F-9-133

☐

13) Install the relay hareness unit to the rear side panel of the paper deck.

- 2 screws (RS-tight; M4x8)




F-9-134

☐

14) Insert the bind locks of the cable ties in the holes (at [A] shown below) in the rear side panel to secure the relay harness.

15) Connect the connector at both ends of the relay harness unit to the heater connector and AC power connector respectively.

☐

16) Reatach the exterior covers of the paper deck in the following sequence;

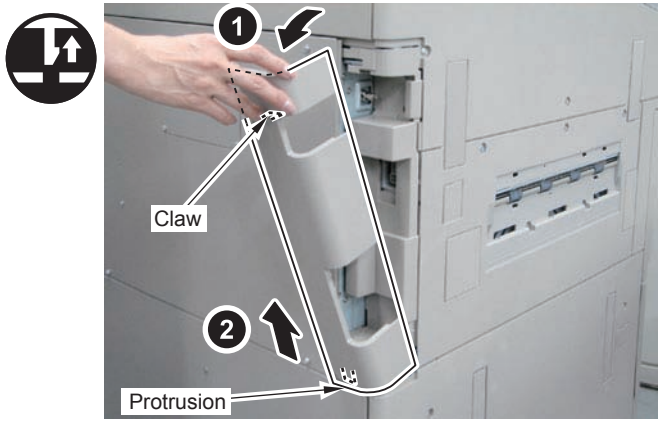
[1] Top cover (take care not to have the cables caught)
- 2 screws (RS-tight; M4x8)

[2] Front-upper cover (insert the connector)
- 3 screws (RS-tight; M4x8)

[3] Rear cover
- 4 screws (RS-tight; M4x8)
- 2 screws (Binding; M3x8)

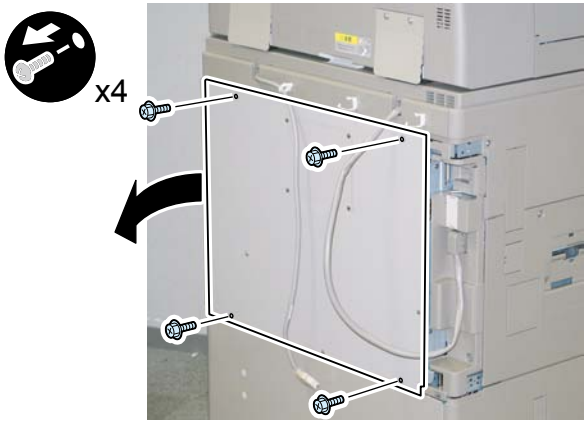
[4] Right cover
- 3 screws (RS-tight; M4x8)

☐
17) Remove the Left Rear Cover.
- 1 claw
- 1 protrusion



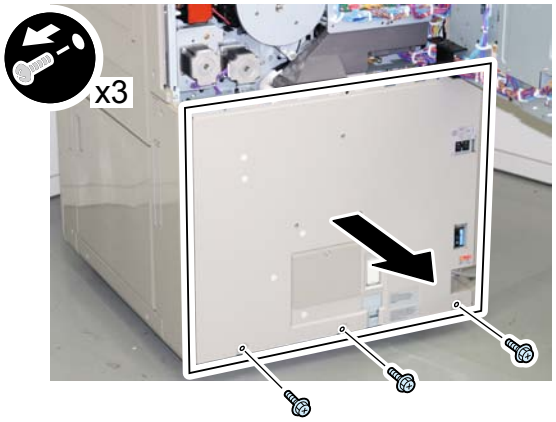

F-9-135

☐
18) Open the Controller Box in the direction of the arrow.
- 4 screws



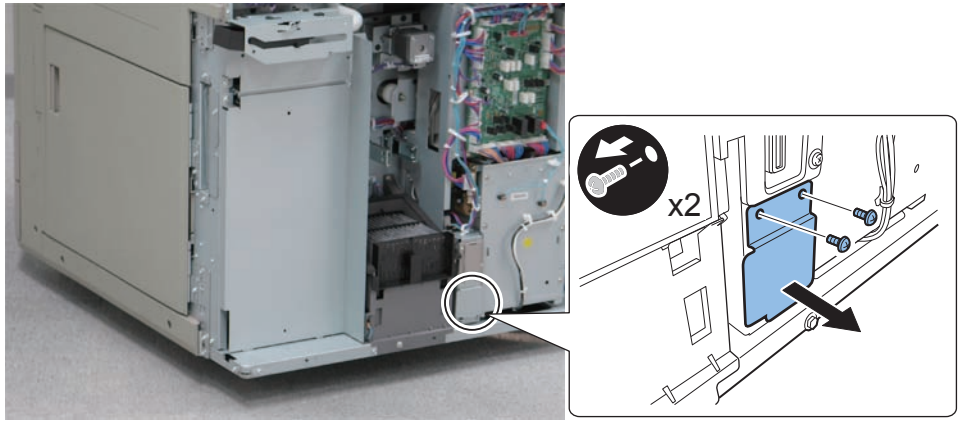

F-9-136

☐
19) Remove the Rear Lower Cover in the direction of the arrow.
- 3 screws




F-9-137

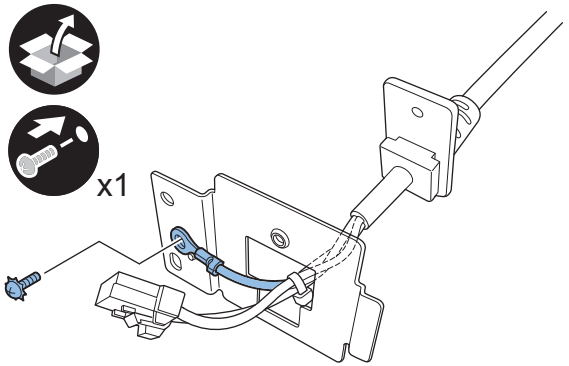
☐
20) Remove the blindfold plate.
- 2 screws




F-9-138

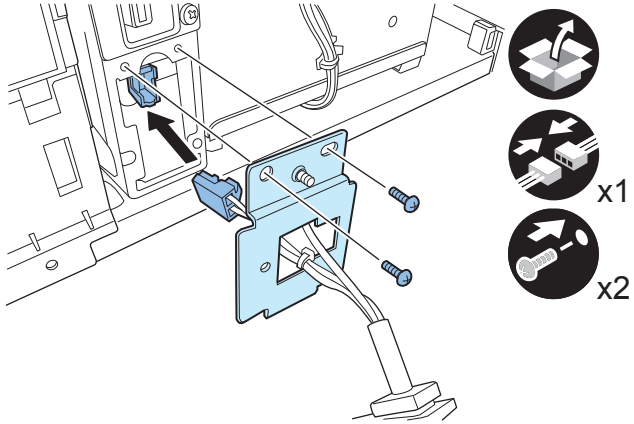
NOTE:
Removed blindfold plate and screw are no longer reused.

☐
21) Insert the AC cord into the hole of the cord mount, and then secure the ground cable to the cord mount.
- 1 screw with toothed washer



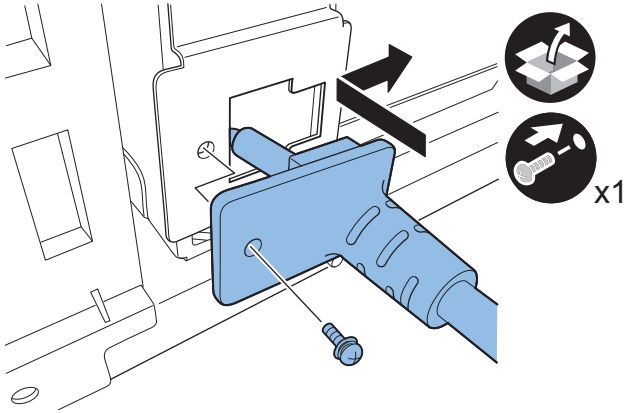

F-9-139

☐
22) Attach the cord mount on the host machine.
- 1 connector
- 2 screws (Binding; M4x4)




F-9-140

☐
23) Secure the AC cord to the cord mount.
- 1 screw with flat spring




F-9-141

☐
24) Reatach the exterior covers of the host machine in the following sequence;
[1] Rear Lower Cover
- 3 screws (RS-tight; M4x10)

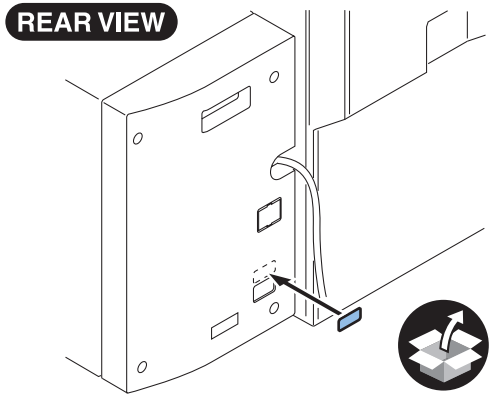
[2] Close the Controller Box.
- 4 screws (RS-tight; M4x10)

[3] Connect the Reader Communication Cable.
- 1 claw
- 1 protrusion

[4] Fix the Harness.
- 2 wire saddles

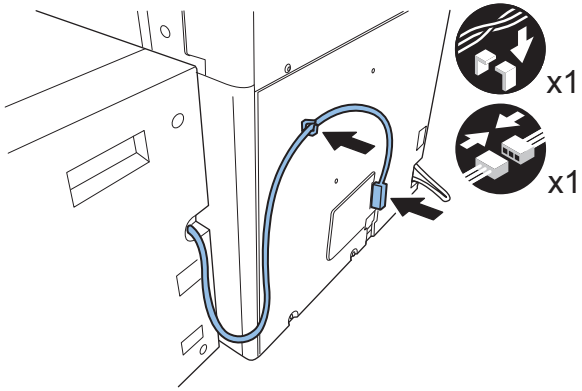
☐
25) Close the deck compartment.
Manually slide the paper deck to the left place in aside of the host machine.

☐
26) Stick the power supply label on the rear panel of the paper deck.



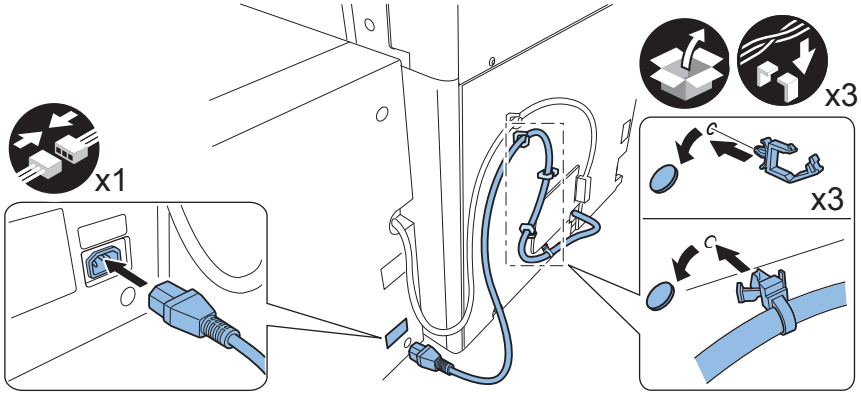

F-9-142

☐
27) Fix the paper deck cable in the wire saddle and joint the connector to the host machine.



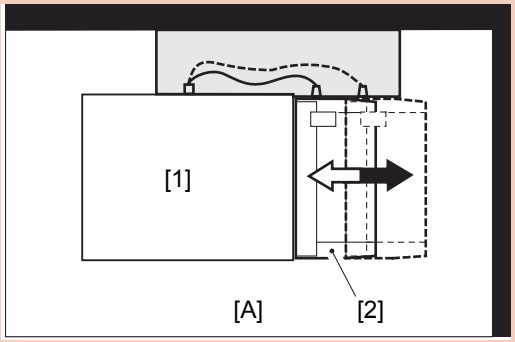

F-9-143

☐
28) Peel off the 4 blindfold seal at the rear side of the host machine, then fit the reuse band of the AC cable and 3 wire saddles as shown.
Wire the AC cable as shown in the figure and joint the AC connector to the power cord mount of the heater.




F-9-144

CAUTION:
To ensure smooth connection of the heater power connectors,
explain to the user that any obstacle that can prevent the paper deck from opening should not be placed in the hatched area.
[1]: Host machine [2]: Paper deck [A]: Front




F-9-145

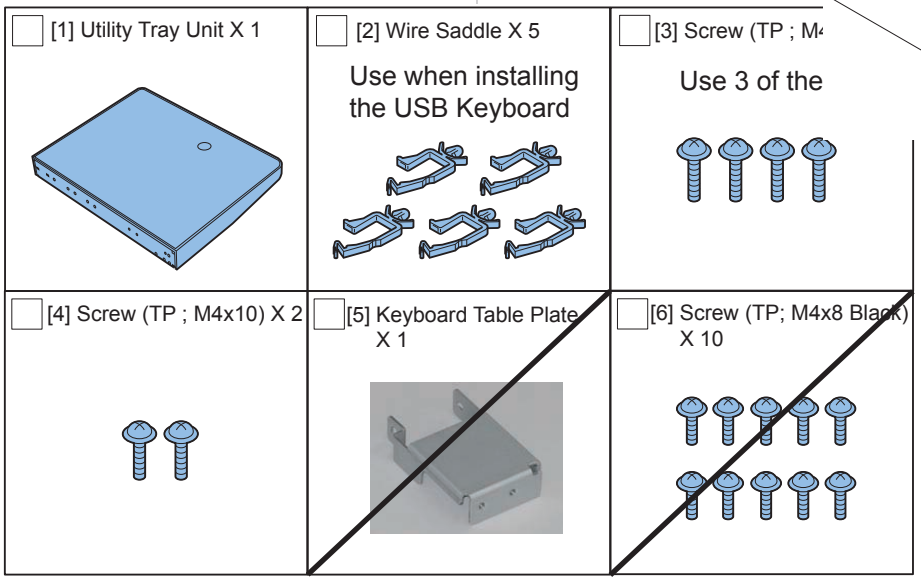
# Utility Tray-A2

## Points to Note at Installation

- Although model with the Upright Control Panel is used for illustration in this procedure, the same procedure is applied to model with
- Refer to "Combination of options" when installing this equipment before operation.

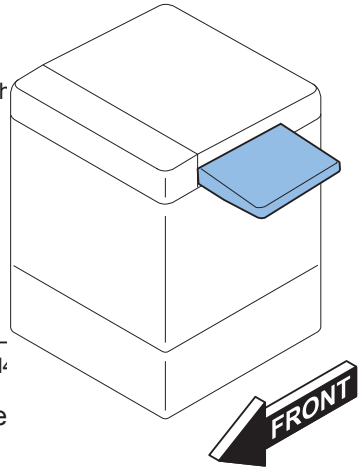
## Checking the Contents

The parts with a diagonal line in the contents list will not be used.




F-9-146

## Checking the Contents

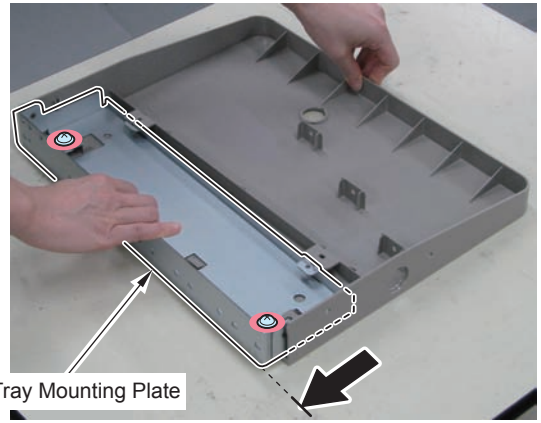



F-9-147

## Installation Procedure

☐
1) Remove packing tapes.

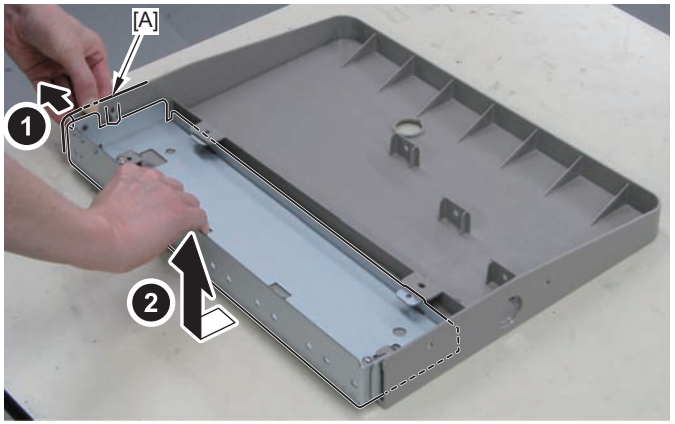
☐
2) Loosen the 2 screws, and move the Utility Tray Mounting Plate in the direction of the arrow until it stops.




F-9-148

☐
3) While pulling the [A] part of the Utility Tray, remove the Utility Tray Mounting Plate.

CAUTION:
To avoid damage, do not pull the [A] part of the Utility Tray too much.

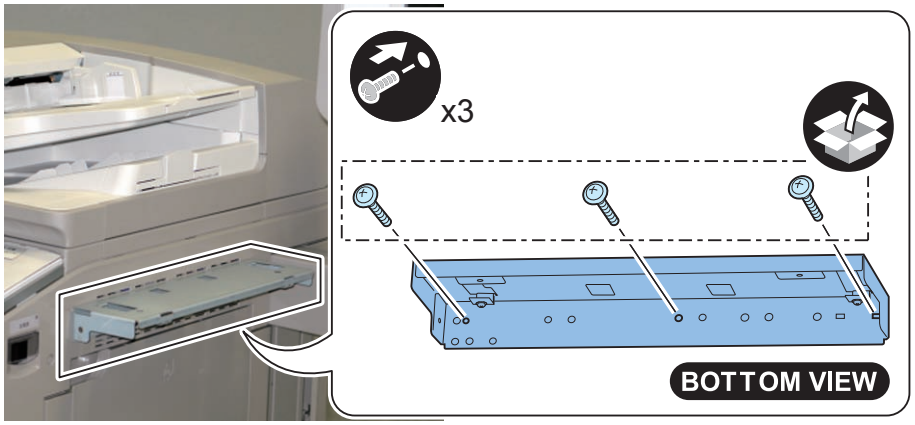



F-9-149

☐
4) Remove the 3 Rubber Caps from the Right Upper Cover. (The removed Rubber Caps will not be used.)

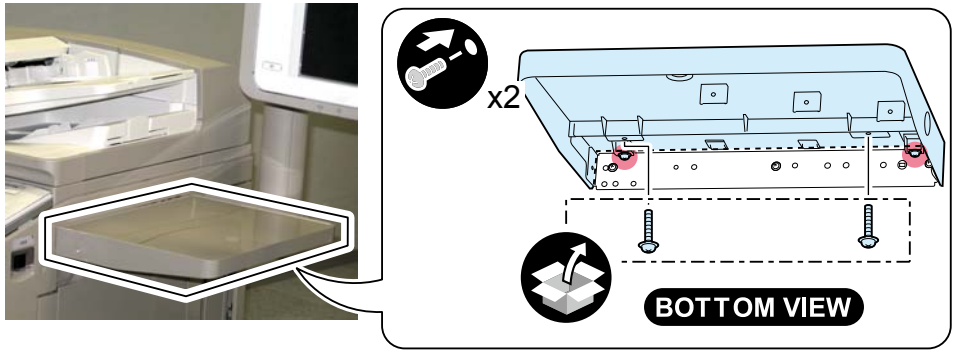
F-9-150

□
5) Install the Mounting Plate.
- 3 Screws (TP; M4x14)




F-9-151

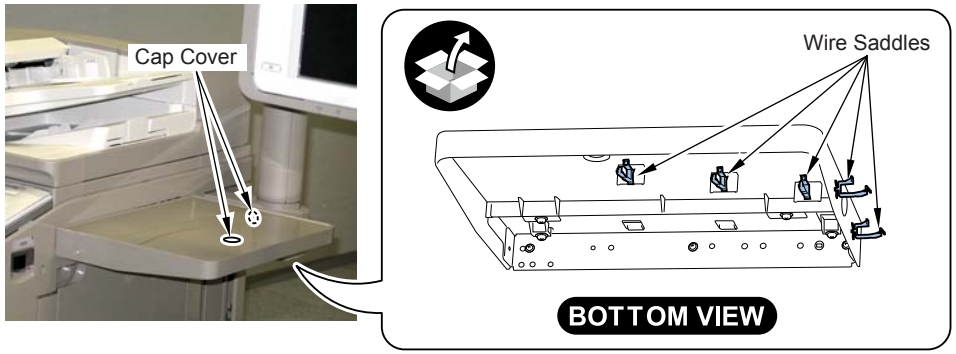
□
6) Install the Utility Tray.
- 2 Screws (TP; M4x10)
- 2 Screws (TP; The screws loosened in step 2.)




F-9-152

## When Installing the USB Keyboard

□
1) Remove the 2 Cap Covers, and install the 5 Wire Saddles.




F-9-153

# Card Reader-C1/Copy Card Reader-F1

## Points to Note at Installation

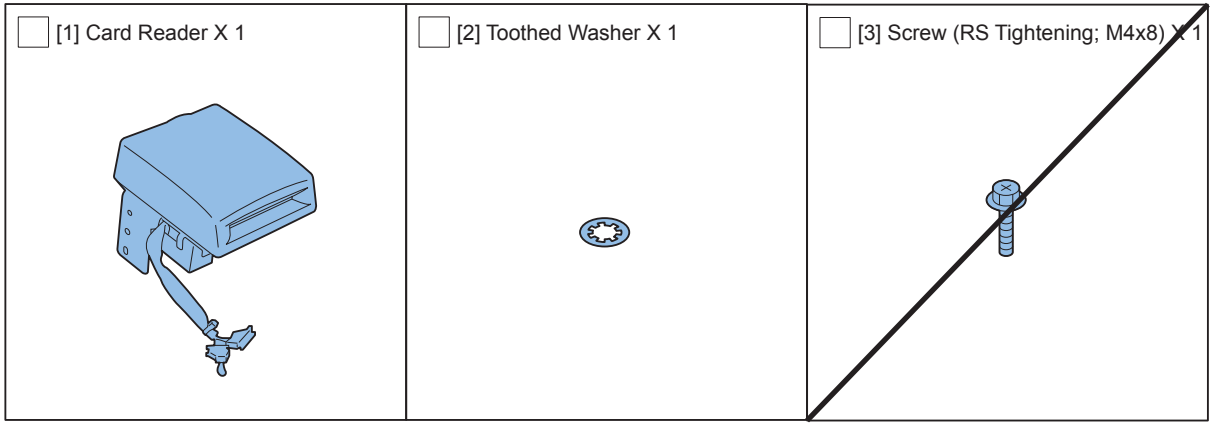
CAUTION:

To install this equipment, the Copy Card Reader Attachment-A2 is required.

## Checking the Contents

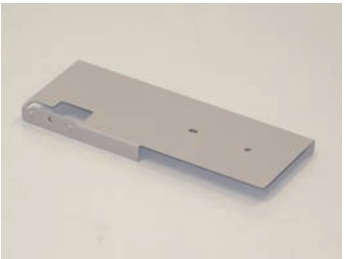
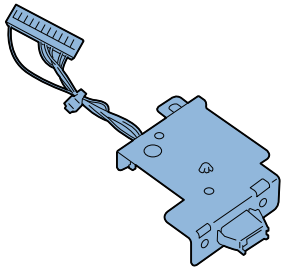
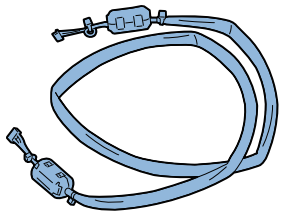
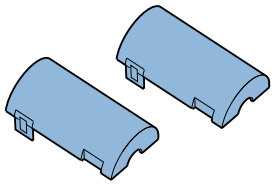
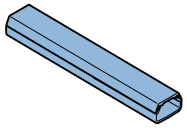
### Contents of Card Reader-C1

The parts with a diagonal line in the contents list will not be used.




F-9-154

## Contents of Copy Card Reader Attachment-A2

| | | | | |
|---|---|---|---|---|
| ☐ [1] Card Reader Mounting Plate X 1  | ☐ [2] Card Reader X 1  | ☐ [3] Connector Cover1 X 1 | ☐ [4] Connector Cover2 X 1 | ☐ [5] Card Reader External Relay Harness X 1  |
| ☐ [6] Connector Case X 2  | ☐ [7] Cord Guide X 1  | ☐ [8] PCB Spacer X 1 | ☐ [9] Screw (TP; M4x12) X 1 | ☐ [10] Screw (RS tight; M4x8) X 1 |
| ☐ [11] Screw (Bindeing; M4x20) X 1 | ☐ [12] Screw (TP; M3x6) X 1 | | | |

F-9-155

# Copy Card Reader-F1

## Points to Note at Installation

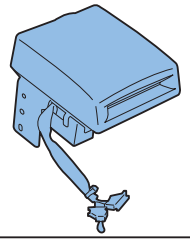
CAUTION:

To install this equipment, the Copy Card Reader Attachment-A2 is required.

NOTE:
Illustrations and photo of these steps may differ from the actual shape of parts but the installation steps remain similar.

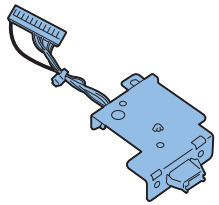
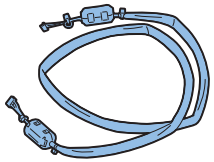
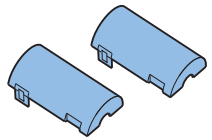
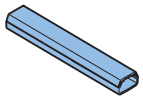
## Checking the Contents

### Copy Card Reader-F1

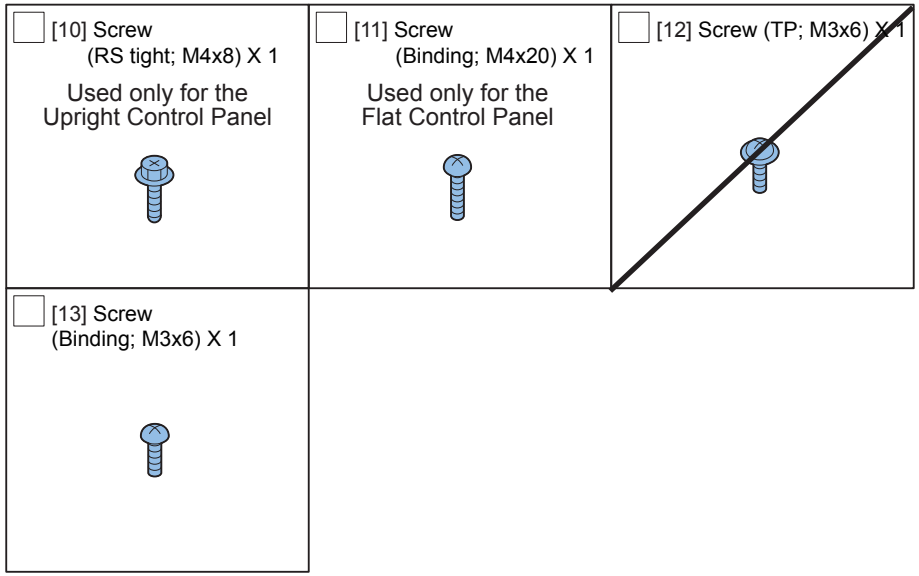
| | | |
|---|---|---|
| ☐ [1] Card Reader X 1  | ☐ [2] Toothed Washer X 1 | ☐ [3] Screw (RS Tightening; M4x10) X 1 |

F-9-156

### Copy Card Reader Attachment-A2

| | | |
|---|---|---|
| ☐ [1] Card Reader Mounting Plate X 1<br>Used only for the Upright Control Panel | ☐ [2] Card Reader X 1  | ☐ [3] Connector Cover1 X 1 |
| ☐ [4] Connector Cover2 X 1 | ☐ [5] Card Reader External Relay Harness X 1  | ☐ [6] Connector Case X 2  |
| ☐ [7] Cord Guide X 1  | ☐ [8] PCB Spacer X 1 | ☐ [9] Screw (TP; M4x12) X 1<br>Used only for the Upright Control Panel |

F-9-157



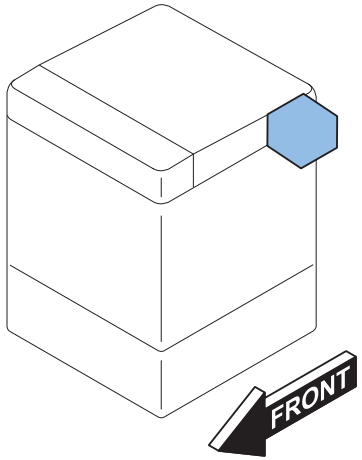

F-9-158

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing




F-9-159

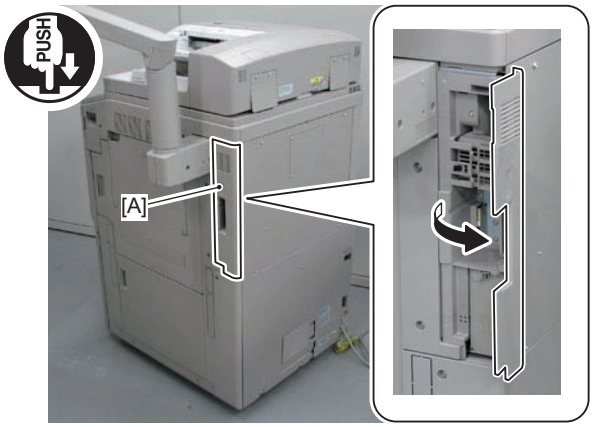
# Installation Procedure

CAUTION:

- Refer to "Combination of options" when installing this equipment before operation.
- After installing the Card Reader, enter the card number to be used in the following service mode of this equipment: COPIER > FUNCTION > INSTALL > CARD. Otherwise, the card will not be recognized even inserting it.

□

1) Press [A] part, and open the Right Rear Cover 1.

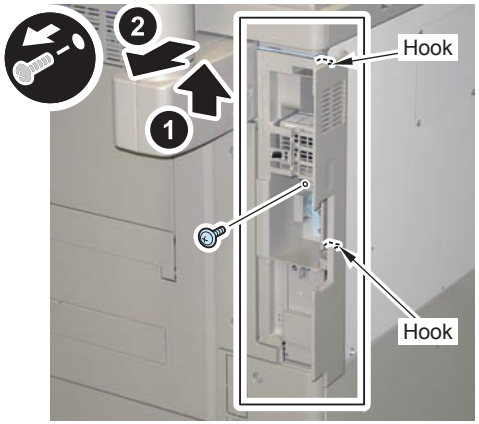



F-9-160

□

2) Remove the Side Cover.

- 1 Screw (The removed screw will be used in step 13.)
- 2 Hooks



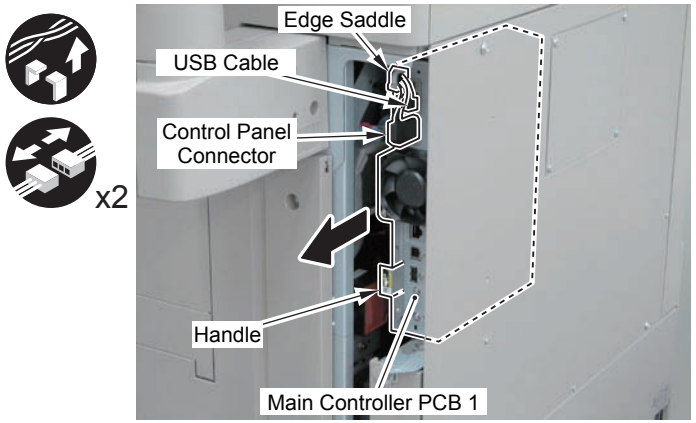

F-9-161

□

3) Disconnect the USB Cable and the Control Panel Cable.

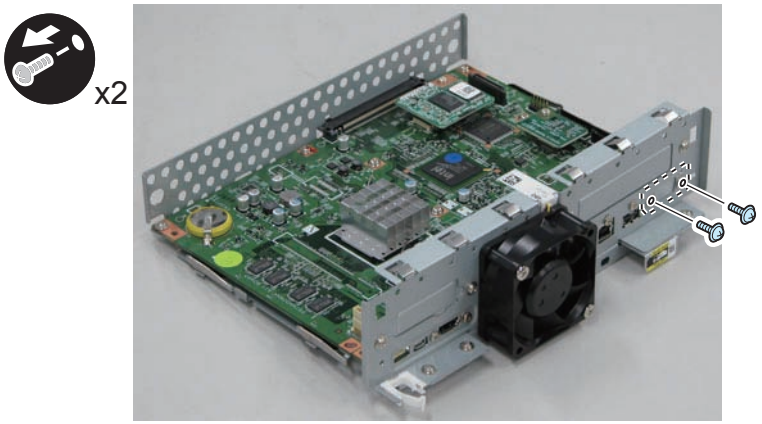
- 1 Edge Saddle

4) Route the removed cable to the open space and remove the Main Controller PCB 1.



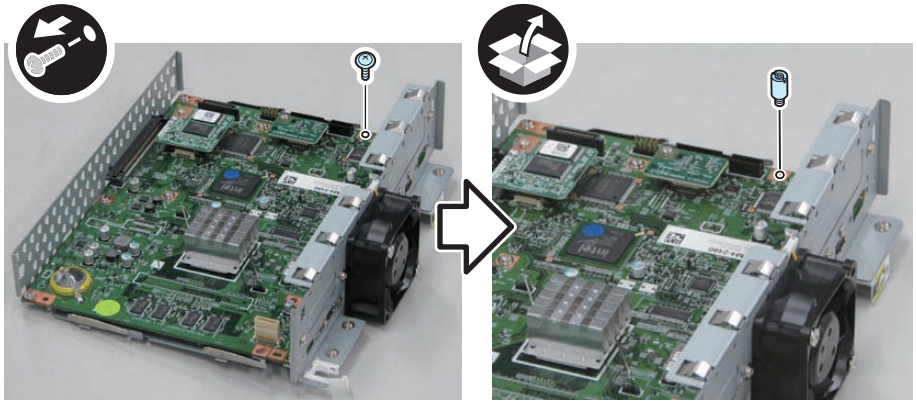

F-9-162

☐
5) Remove the Face Cover. (The removed Face Cover will not be used.)
- 2 Screws (The removed screws will be used in step 7.)



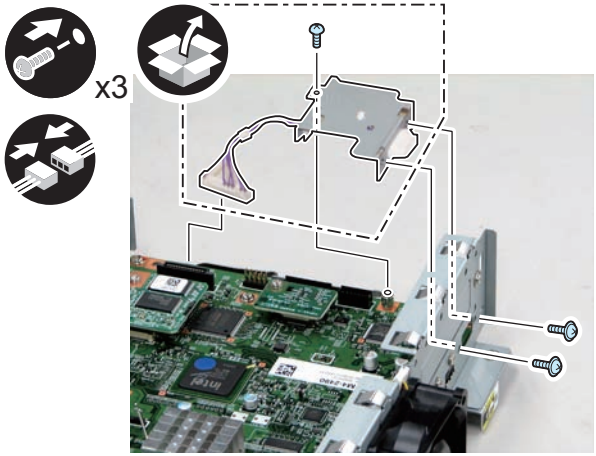

F-9-163

☐
6) Remove the screw, and install the PCB Spacer. (The removed screws will not be used.)



F-9-164

☐
7) Install the Card Reader Reply Unit.
- 2 Screws (Use the screws removed in step 5.)
- 1 Screw (Binding; M3x6)
- 1 Connector

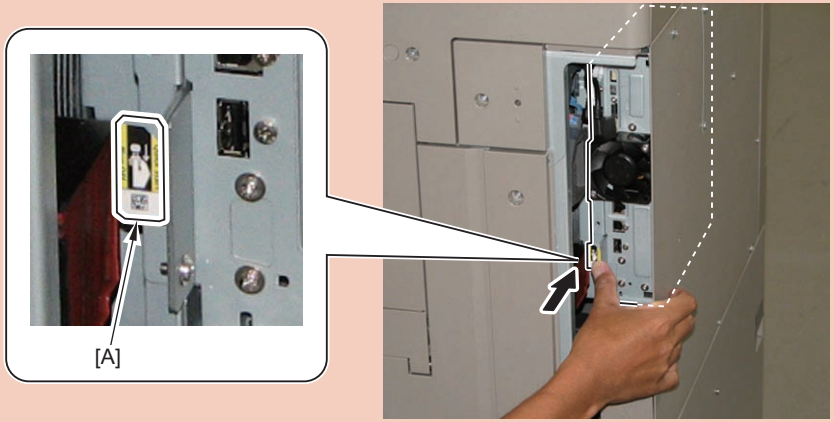



F-9-165

☐
8) Insert the Main Controller PCB 1 until it stops.

CAUTION: Points to Note when Inserting the Main Controller PCB 1

- Be sure to install the Main Controller PCB 1 while paying attention not to trap cables.
- Be sure to push the handle [A] in horizontally. If pushing any part other than the handle, the Main Controller PCB 1 may not be inserted horizontally. In such case, note that connector connection error (or damage of connector) or deformation of plate may occur.

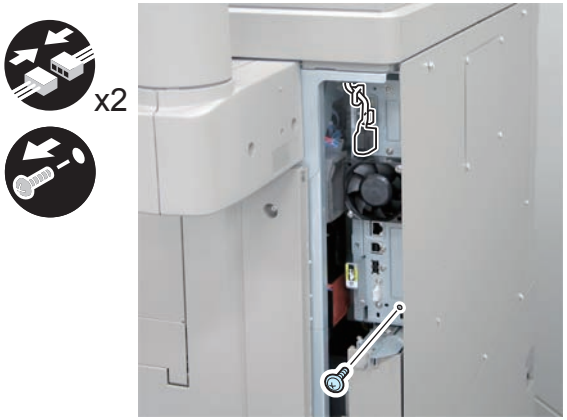



F-9-166

9) Connect the USB Cable and the Control Panel Cable.

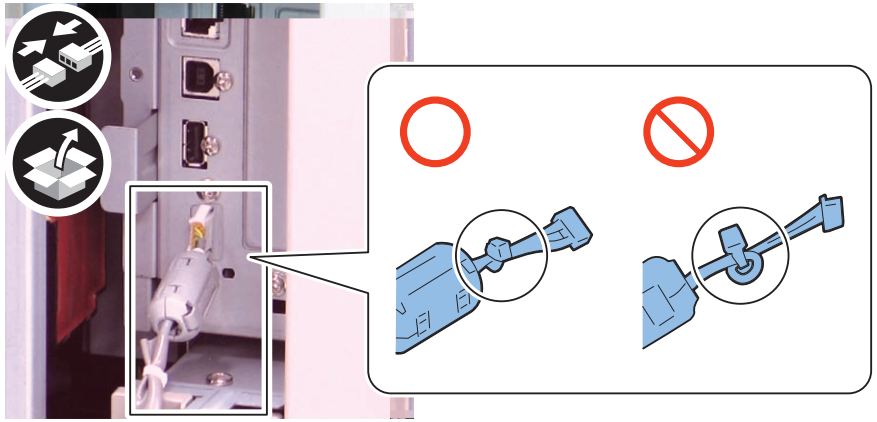
- 1 Edge Saddle

☐
10) Remove the screw. (The removed screw will be used in step 12).




F-9-167

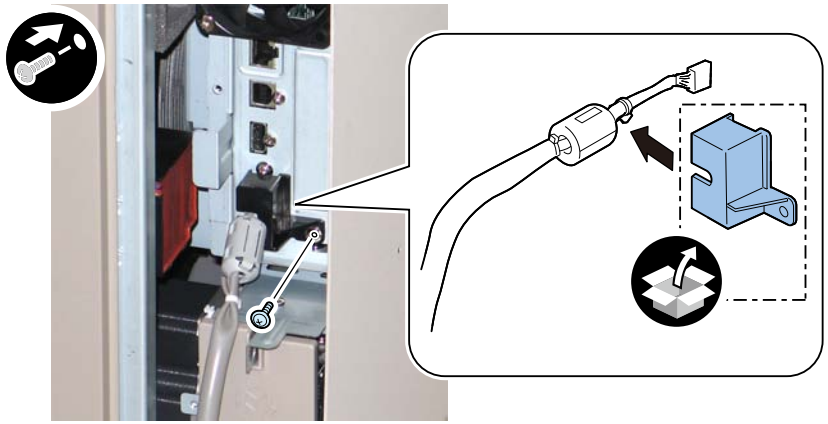
☐
11) Connect the Card Reader External Relay Harness.



F-9-168

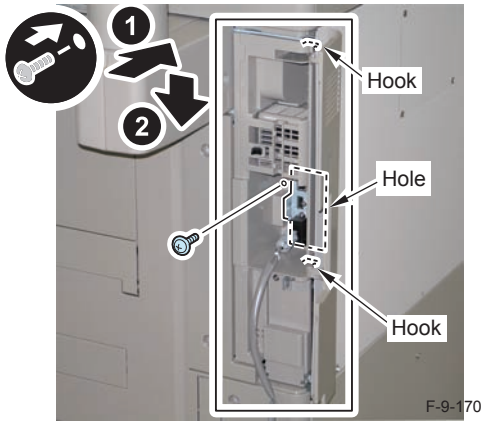
☐
12) Install the Connector Cover to the Card Reader External Relay Harness.
- 1 Screw (Use the screws removed in step 10.)

CAUTION:
When installing the Connector Cover, be sure to place the tie-wrap on the Card Reader External Relay Harness on the inside of the Connector Cover.



F-9-169

☐
13) Install the Side Cover by putting the Card Reader External Relay Harness through a hole of the cover.
- 2 Hooks
- 1 Screw (Use the screw removed in step 2.)

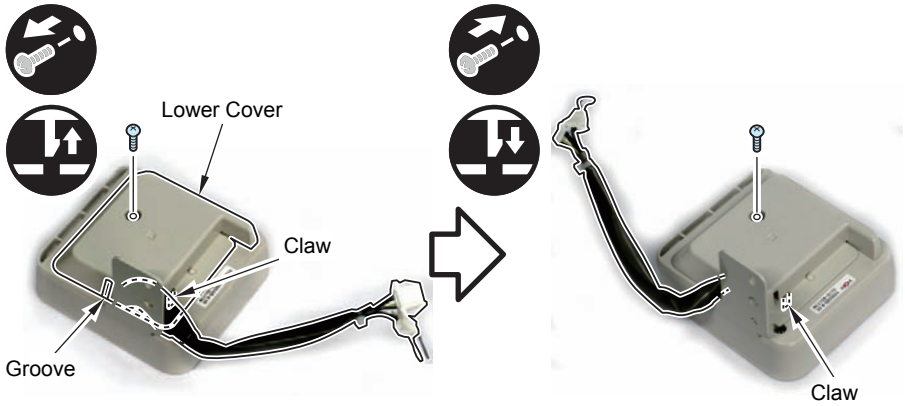



F-9-170

☐
14) Close the Right Rear Cover 1.

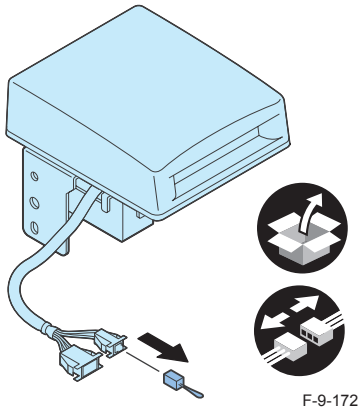
☐
15) Remove the Lower Cover of the Card Reader Unit, and change the position of the cable.
- 1 Screw
- 1 Claw

16) Install the Lower Cover of the Card Reader Unit.
- 1 Claw




F-9-171

☐
17) Disconnect the Short Connector on the Card Reader. (The removed Short Connector will not be used.)



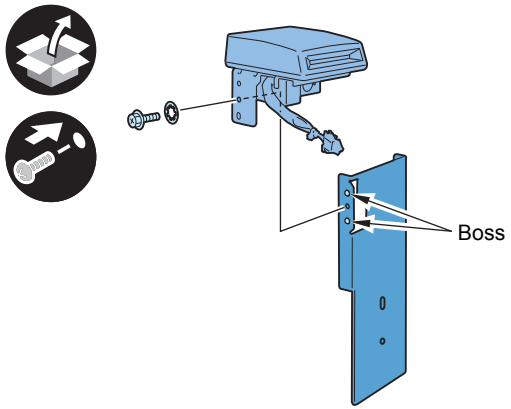
F-9-172

18) Install the Card Reader.

<In the Case of Upright Control Panel>

18-1) Install the Card Reader to the Card Reader Mounting Plate.

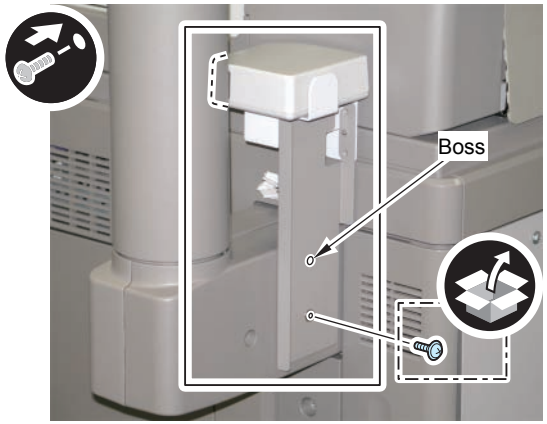
- 2 Bosses
- 1 Toothed Washer
- 1 Screw (RS Tightening; M4x8)




F-9-173

18-2) Install the Card Reader Unit assembled in step 18-1).

- 1 Boss
- 1 Screw (TP; M4x12)

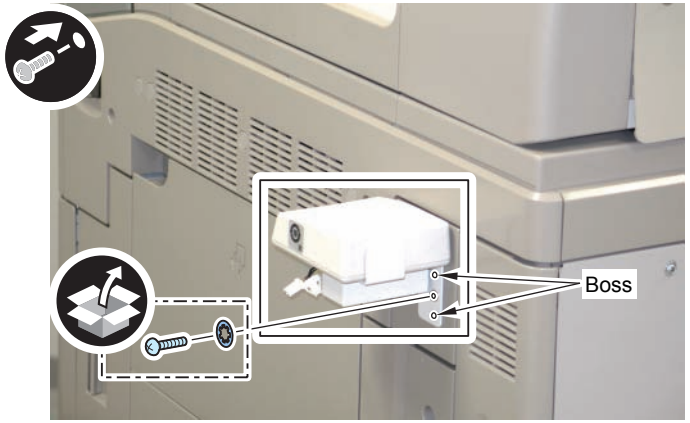



F-9-174

<In the Case of Flat Control Panel>

18-1) Install the Card Reader.

- 2 Bosses
- 1 Toothed Washer
- 1 Screw (Binding; M4x20)




F-9-175

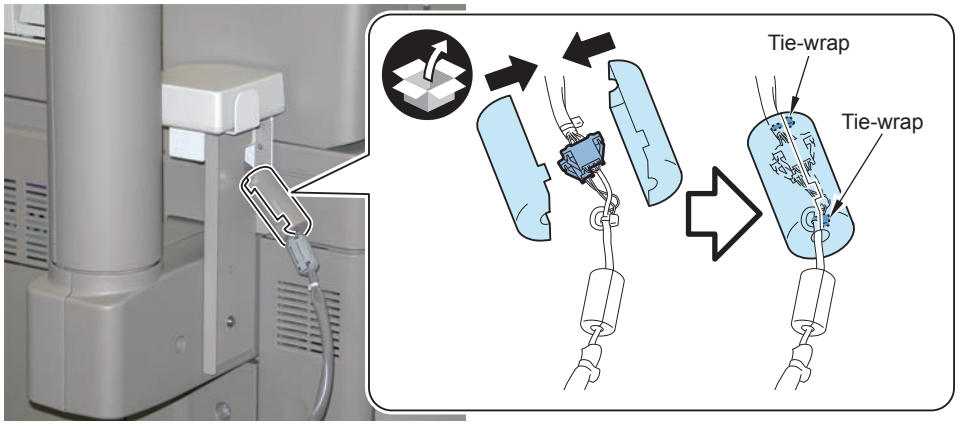
19) Put the connector of the Card Reader Unit through the hole on the Card Reader Mounting Plate.(Upright Control Panel only)

20) Connect the connectors of the Card Reader Unit and the Card Reader External Relay Harness.

F-9-176

□
21) Install the Connector Case.

CAUTION:
When installing the Connector Cases, be sure to place the tie-wrap on the Card Reader External Relay Harness on the inside of the Connector Cases.

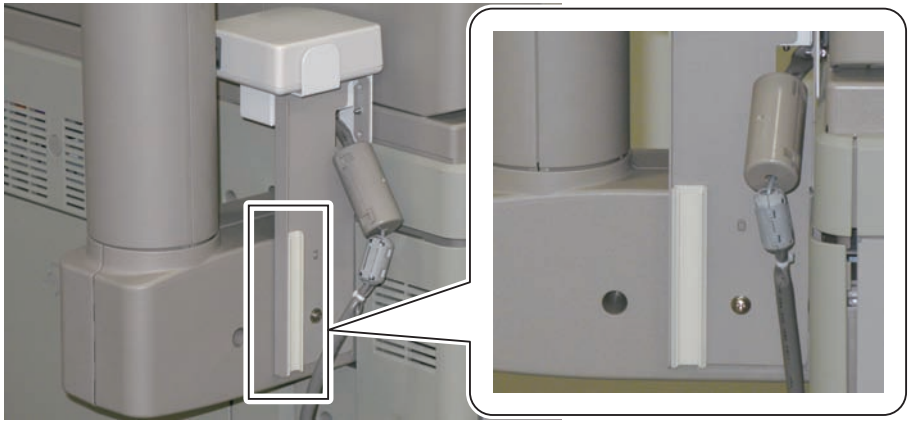



F-9-177

□
22) Secure the Card Reader External Relay Harness to the Cord Guide.

<In the Case of Upright Control Panel>

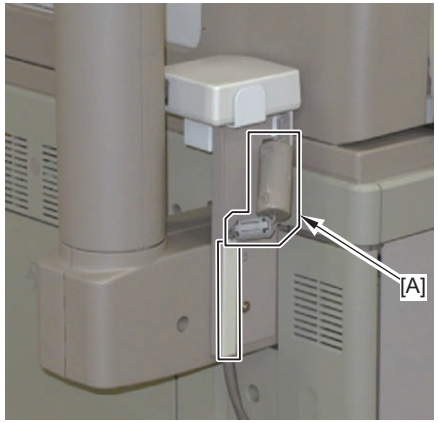
□
22-1) Remove the cover of Cord Guide, and affix it to the area indicated in the figure.



F-9-178

□
22-2) Put the Card Reader External Relay Harness through the Cord Guide, and install the cover of the guide.

NOTE:
When installing it, be sure [A] part does not interfere when opening/closing the Right Rear Cover 1.

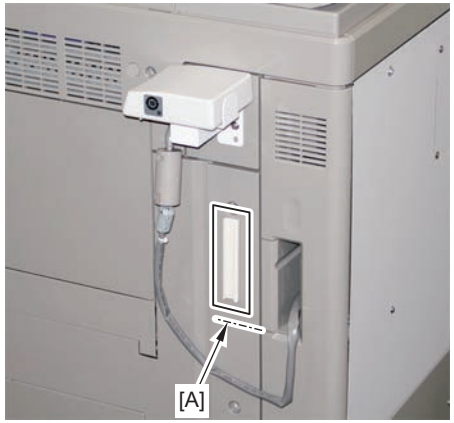



F-9-179

<In the Case of  Flat Control Panel>

□ 22-1) Remove the cover of Cord Guide, and affix it to the area indicated in the figure.

NOTE:
Be sure to affix the Cord Guide above the [A] parts for not interfering to open/close the Right Rear Cover 1.




F-9-180

□ 22-2) Put the Card Reader External Relay Harness through the Cord Guide, and install the cover of the guide.

F-9-181

□ 22-3) Push the Card Reader External Relay Harness in the Right Rear Cover 1.

NOTE:
When pushing the Card Reader External Relay Harness in the Right Rear Cover 1, be sure the guide does not interfere when opening/closing the cover.

F-9-182

□
23) Connect the power plug of the host machine to the power outlet.
24) Turn the main power switch ON.

## Setting After Installation

□

1) Select "0" for the following service mode.

Service Mode (Level 1) > COPIER > OPTION > ACC > CR-TYPE

NOTE:
The number of card (number of department) can be changed if a request arises from a user. Make this setting before the step 3).
- Specify the number of cards to be used in service mode (Level 2) > COPIER > OPTION > FNC-SW > CARD-RNG.
- To enable the number of sheets, turn OFF/ON the main power switch.
- After that, go through the procedure from step 2).

2) Enter the card number to be used (1 to 2001).
- Service Mode (Level 1) > COPIER > FUNCTION > INSTALL > CARD

NOTE:
1000 cards from the inputted number can be used.

3) To enable the number of sheets, turn OFF/ON the main power switch.

4) Insert the registered card, and check that it is in standby.

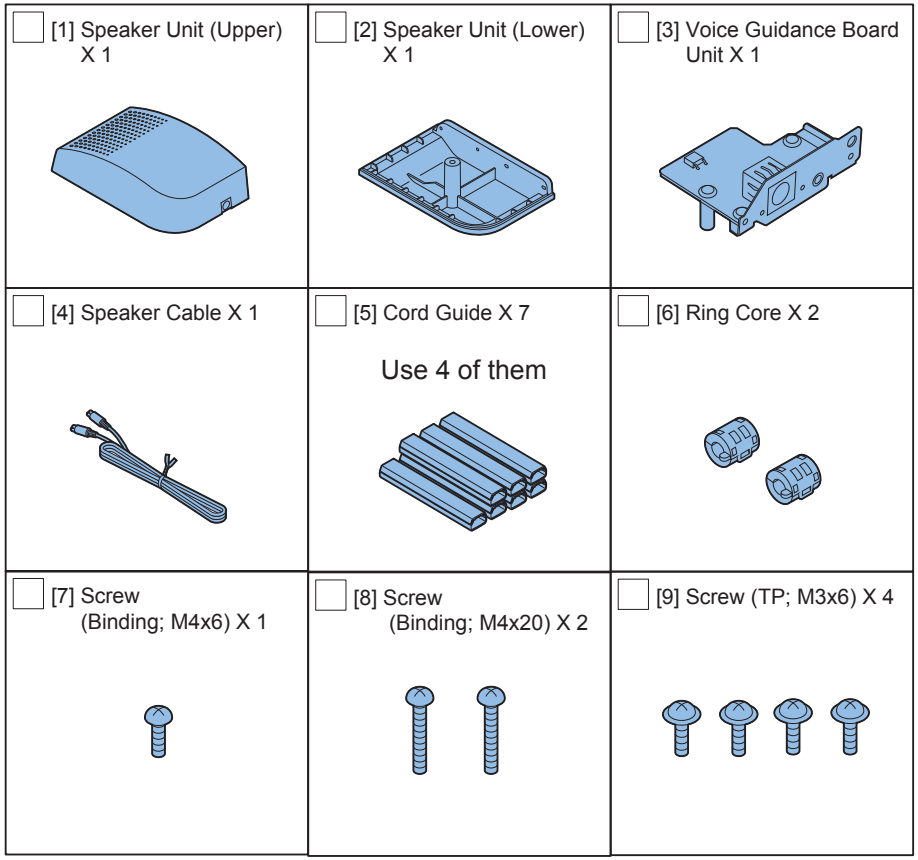
NOTE:
After setting, if a request arises from a user and changing the number of card (number of department), make a following setting. In that case, the current counter information by department will be reset.
- Execute in service mode (Level 1) > COPIER > FUNCTION > CLEAR > CARD.
- Specify the number of cards to be used in service mode (Level 2) > COPIER > OPTION > FNC-SW > CARD-RNG.
- To enable the number of sheets, turn OFF/ON the main power switch.
- After that, go through the procedure from step 2).

# Voice Guidance Kit-F2

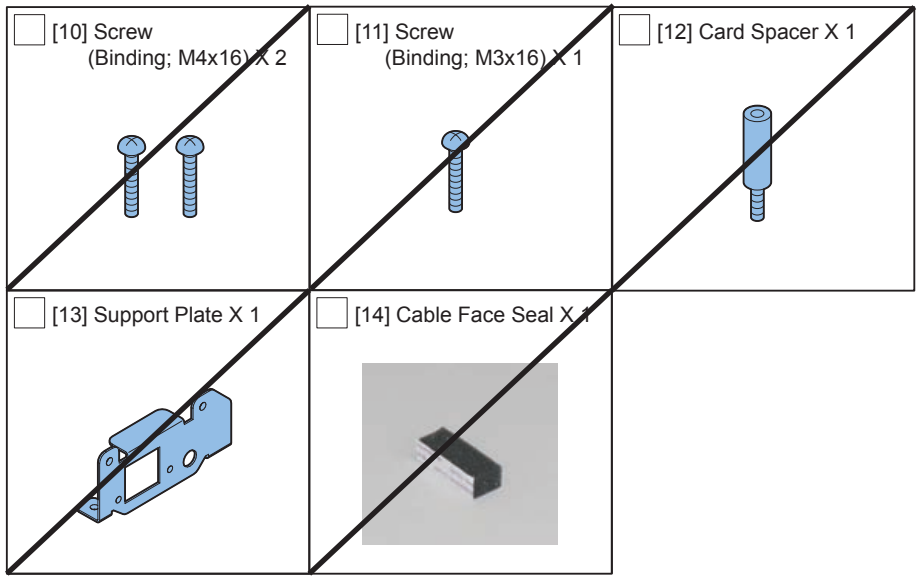
## Points to Note at Installation

- To use the equipment, the Reader Unit is required.
- Although model with the Upright Control Panel is used for illustration in this procedure, the same procedure is applied to model with the Flat Control Panel.
- Refer to "Combination of options" when installing this equipment before operation.

## Checking the Contents




F-9-183




F-9-184

<CD/Guides>

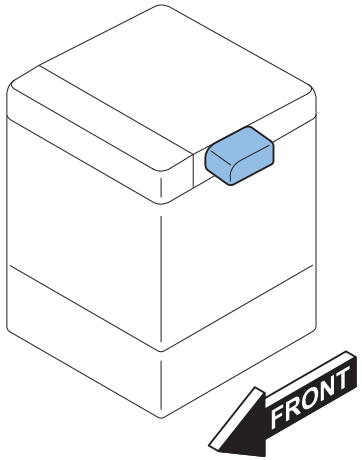
- User's Guide
- Voice Guidance Kit User's Guide
- Voice Guidance Manual CD
- FCC/IC-A DOCUMENT

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing

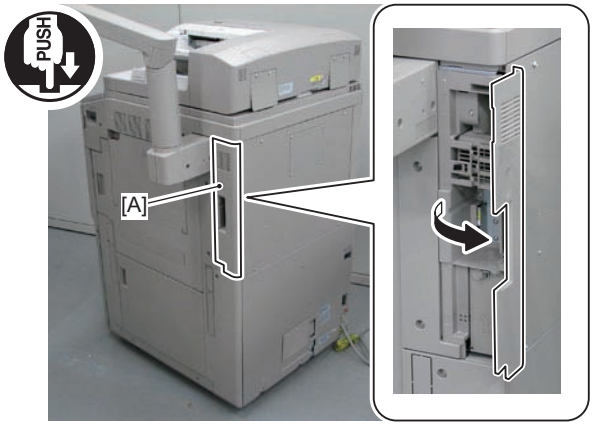



F-9-185

## Installation Procedure

□

1) Press [A] part, and open the Right Rear Cover 1.

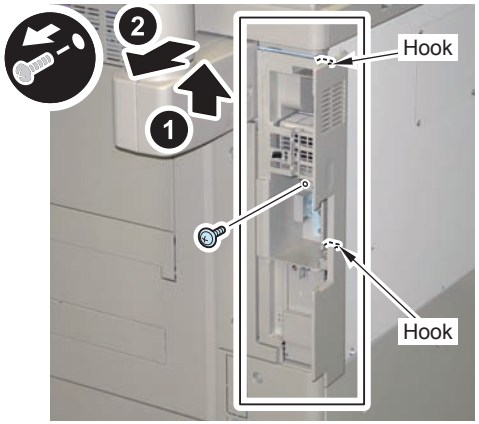



F-9-186

□

2) Remove the Side Cover.

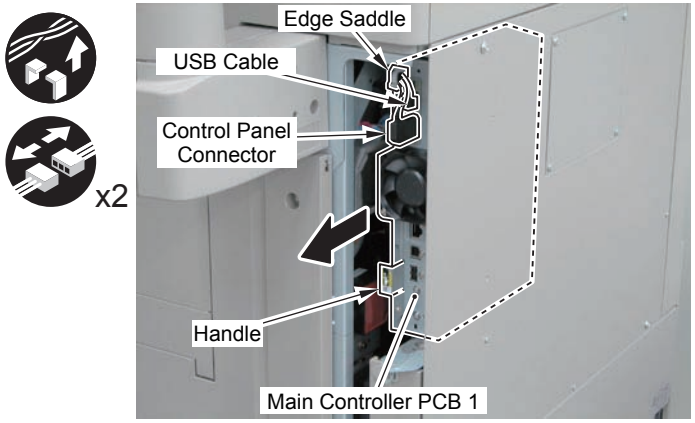
- 1 Screw (The removed screw will be used in step 12.)
- 2 Hooks




F-9-187

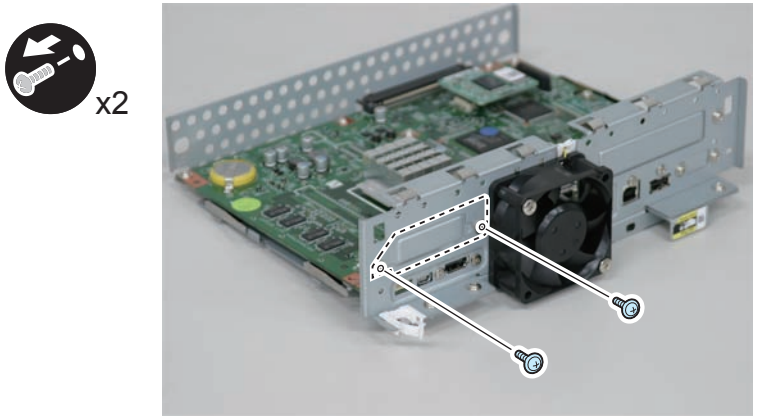
□
3) Disconnect the USB Cable and the Control Panel Cable.
- 1 Edge Saddle

4) Route the removed cable to the open space and remove the Main Controller PCB 1.




F-9-188

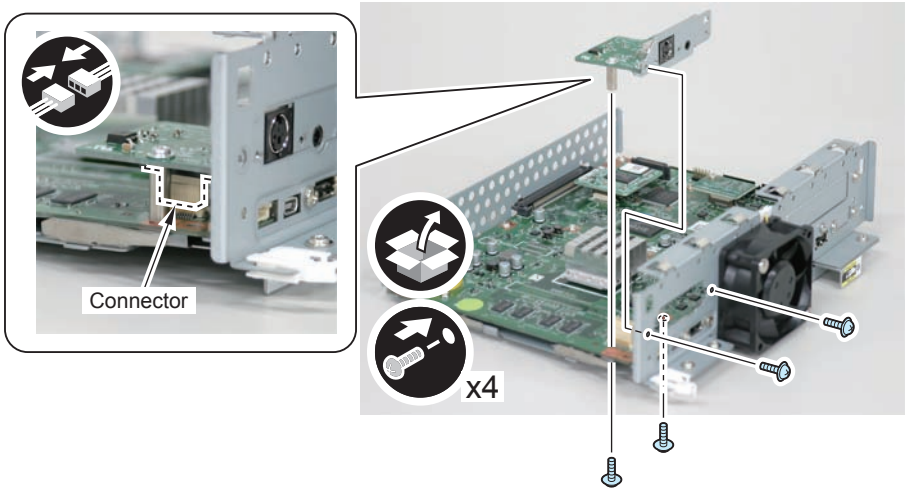
□
5) Remove the Face Plate. (The removed Face Plate and screws will not be used.)
- 2 Screws




F-9-189

□
6) Install the Voice Guidance Board Unit to the Main Controller PCB 1.
- 1 Connector
- 4 Screws (TP; M3x6)

NOTE:
Check that the connector is connected properly.

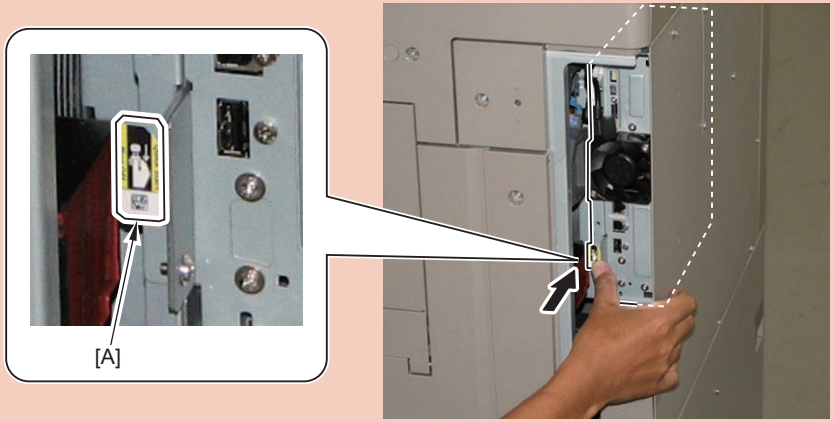



F-9-190

☐
7) Insert the Main Controller PCB 1 until it stops.

CAUTION: Points to Note when Inserting the Main Controller PCB 1

- Be sure to install the Main Controller PCB 1 while paying attention not to trap cables.
- Be sure to push the handle [A] in horizontally. If pushing any part other than the handle, the Main Controller PCB 1 may not be inserted horizontally. In such case, note that connector connection error (or damage of connector) or deformation of plate may occur.




F-9-191

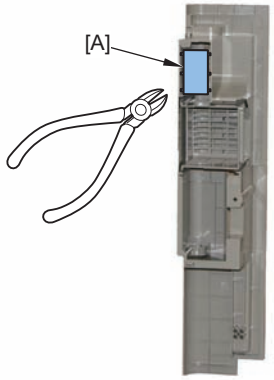
8) Connect the USB Cable and the Control Panel Cable.

- 1 Edge Saddle

☐
9) Cut off [A] part of the Side Cover with nippers.

CAUTION:

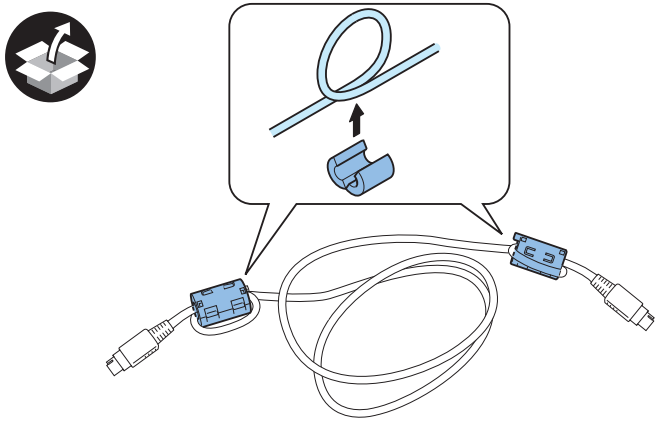
When cutting off the part, be sure not to make burrs.




F-9-192

☐

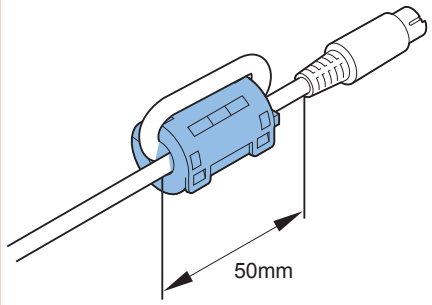
10) Attach the 2 Ring Cores to both ends of the Speaker Cable.



F-9-193

CAUTION:

Be sure to attach the Ring Cores within 50mm from the end of the Speaker Cable.




F-9-194

☐

11) Connect the Speaker Cable to the Voice Guidance Board Unit.

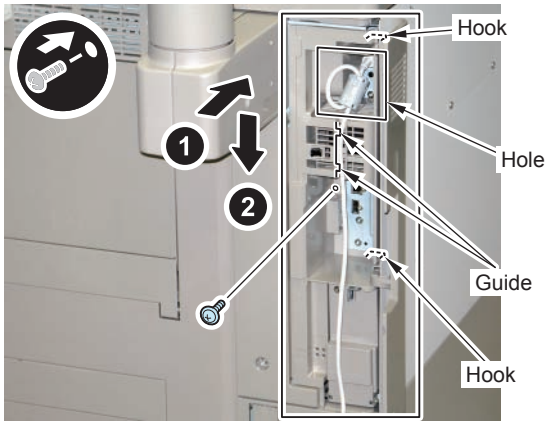
F-9-195

☐

12) Install the Side Cover by putting the Speaker Cable through a hole of the cover.

- 2 Hooks
- 1 Screw (Use the screw removed in step 2.)

13) Put the Speaker Cable through the guide.

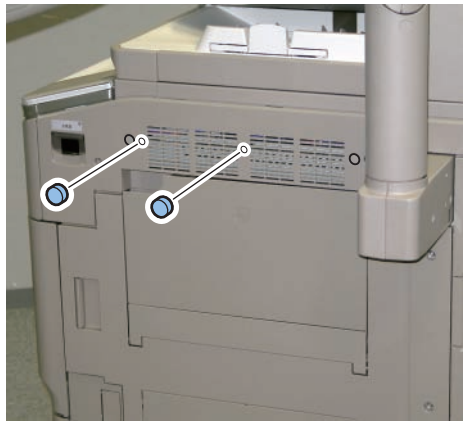



F-9-196

☐

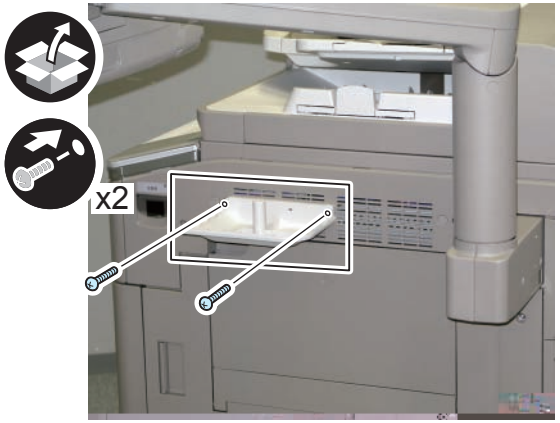
14) Close the Right Rear Cover 1.

☐
15) Remove the 2 Rubber Caps from the Right Upper Cover. (The removed Rubber Caps will not be used.)



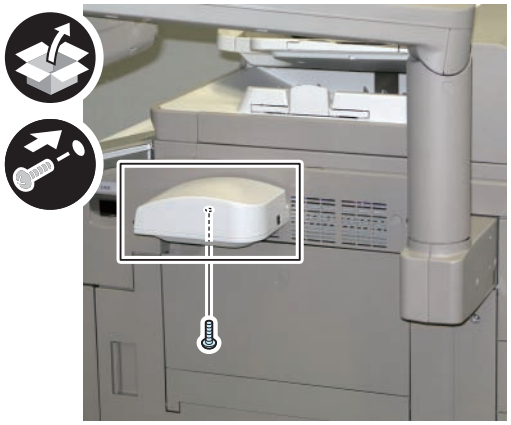
F-9-197

☐
16) Install the Speaker Unit (Lower).
- 2 Screws (Binding; M4x20)




F-9-198

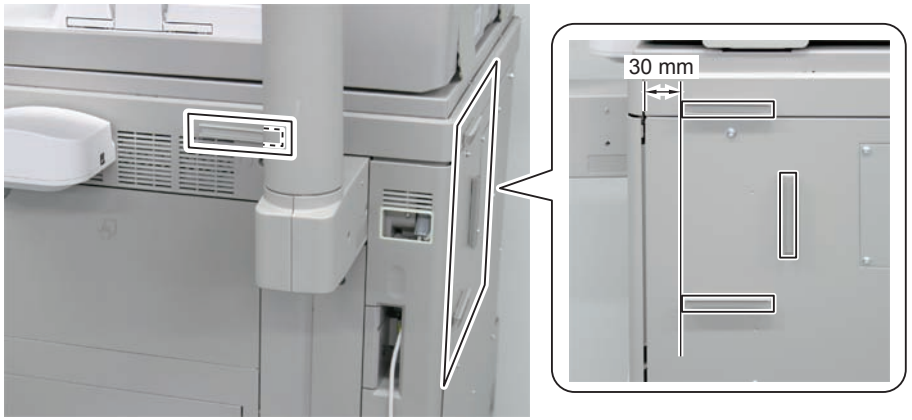
☐
17) Install the Speaker Unit (Upper).
- 1 Screw (Binding; M4x6)



F-9-199

☐
18) Remove the covers of 4 Cord Guides, and affix them to the area indicated in the figure.

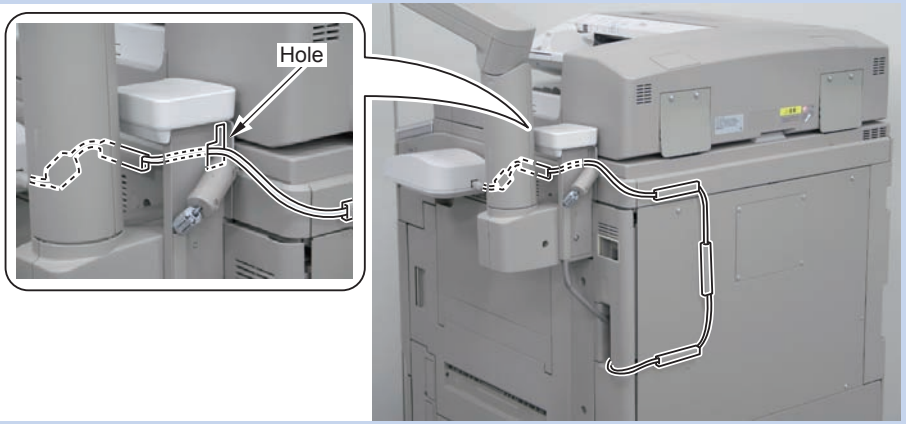
NOTE:
When affixing it, be sure to keep 30mm or more distance from the end of the Rear Upper Cover to prevent interfering with opening/closing the Right Rear Cover 1.




F-9-200

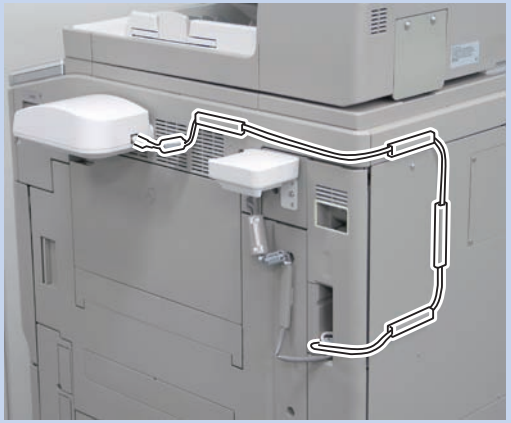
NOTE: When using together with the Copy Card Reader

<In the Case of Upright Control Panel>
- Insert the Speaker cable into the hole.




F-9-201

<In the Case of Flat Control Panel>



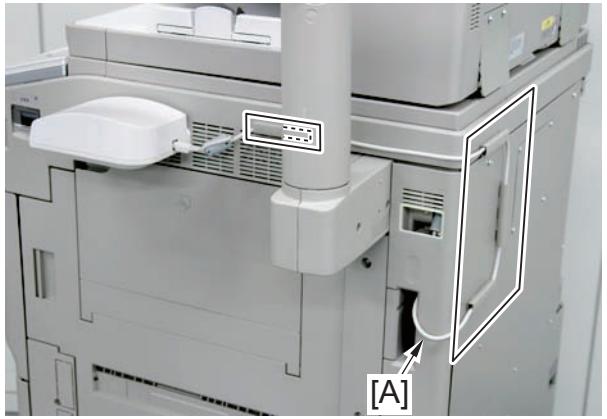
F-9-202

☐
19) Insert the Speaker Cable to the Speaker Unit (Upper).

F-9-203

☐
20) Put the Speaker Cable through the Cord Guide, and install the cover of the guide.

CAUTION:
Be sure to slack off [A] part for not interfering to open/close the Right Rear Cover 1.




F-9-204

☐
21) Connect the power plug of the host machine to the power outlet.
22) Turn the main power switch ON.

## Checking after Installation

NOTE:
When changing the settings upon user's request, it is required to log in as a system manager in accordance with instructions from the user administrator.

☐
1) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Use Voice Navigation, and check that the setting is ON.
2) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Voice Guide from Speakers, and check that the setting is ON.

## Operation Check

<When Starting to Use>

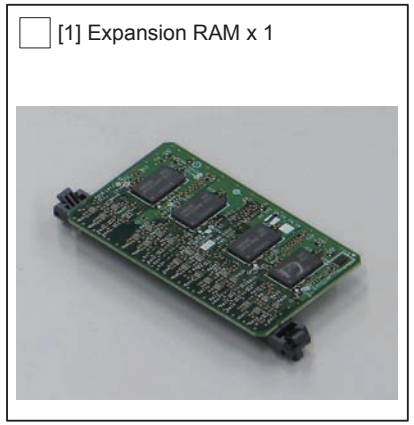
☐
1) Press reset key 3 secs or more.
2) Press [Main Menu] in Control Panel.
3) If the display in panel screen is boxed with red frame, "Voice Guidance Kit" is available.
   If "Voice Guidance Kit" doesn't properly operate, check the below.
   - Enter Service Mode (Level 1) > COPIER > DISPLAY > VERSION, and check whether languages to be used for TTS-JA / TTS-EN / TTS-IT / TTS-FR / TTS-ES / TTS-DE are properly installed.

<When Stopping to Use>

☐
1) Press the Reset Key for 3 secs or more.

# Additional Memory Type B (512MB)

## Checking the Contents




F-9-205

< CD/Guides >

- China RoHS Notice sheet

## Checking before Installation

□

1) Check the memory capacity.
- Service Mode (Level 1) > COPIER > DISPLAY > ACC-STS > RAM

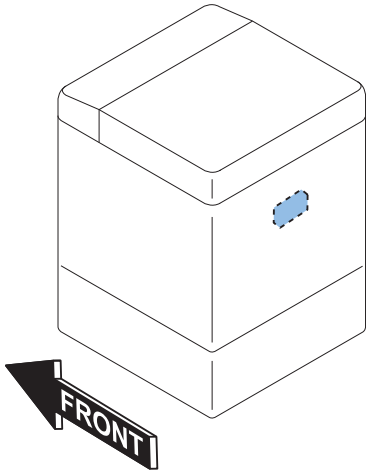
2) Get out from service mode.

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing

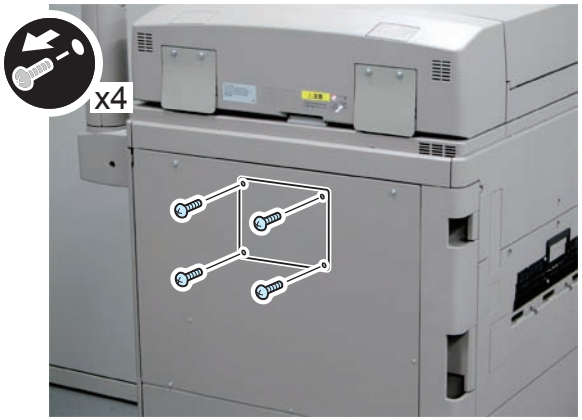



F-9-206

## Installation Procedure

□

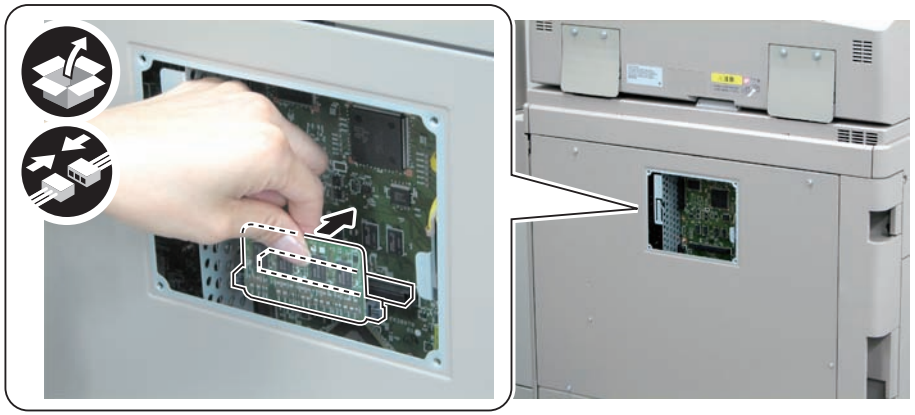
1) Remove the Rear Small Cover.
- 4 Screws




F-9-207

□
2) Install the Expansion RAM.

NOTE:
Be sure to insert it until it stops.



F-9-208

□
3) Return the Rear Small Cover to its original position. (4 Screws)
4) Connect the power plug of the host machine to the power outlet.
5) Open the switch cover and turn ON the main power switch.

## Checking after Installation

□
1) Check that the memory capacity is increased.
- Service Mode (Level 1) > COPIER > DISPLAY > ACC-STS > RAM

2) Get out from service mode.

# Combination of HDD Options

When installing the HDD options (5 products indicated below), refer to the pages indicated in the followi

- 2.5inch/160GB HDD-J1
- 2.5inch/1TB HDD-K1
- Removable HDD Kit-AG1
- HDD Mirroring Kit-G1
- HDD Data Encryption & Mirroring Kit-C5

CAUTION:

When using the mirroring function, be sure to install 2 HDDs of the same capacity.

Reference Pages in the Manual According to Product Combination:

| Title | Combination of Product | Reference Pages | Remarks |
|---|---|---|---|
| TYPE-1 | Option HDD (1TB) | p. 9-101 to p. 9-105 | |
| TYPE-2 | Standard HDD +<br>Removable HDD Kit | p. 9-111 to p. 9-123 | |
| TYPE-3 | Option HDD (1TB) +<br>Removable HDD Kit | p. 9-124 to p. 9-137 | |
| TYPE-4 | Standard HDD +<br>Option HDD (160GB) +<br>HDD Mirroring Kit<br>or HDD Data Encryption & Mirroring Kit | p. 9-142 to p. 9-157 | TYPE-4 to 11 correspond to “CASE-8” described in “HDD Data Encryption & Mirroring Kit-C Series Installation Procedure” included in HDD Data Encryption & Mirroring Kit-C5. |
| TYPE-5 | 2 Option HDDs (1TB) +<br>HDD Mirroring Kit<br>or HDD Data Encryption & Mirroring Kit | p. 9-163 to p. 9-178 | |
| TYPE-6 | Standard HDD +<br>HDD Data Encryption & Mirroring Kit | p. 9-184 to p. 9-195 | |
| TYPE-7 | Option HDD (1TB) +<br>HDD Data Encryption & Mirroring Kit | p. 9-201 to p. 9-214 | |
| TYPE-8 | Standard HDD +<br>Option HDD (160GB) +<br>Removable HDD Kit +<br>HDD Mirroring Kit<br>or HDD Data Encryption & Mirroring Kit | p. 9-221 to p. 9-243 | |
| TYPE-9 | 2 Option HDDs (1TB) +<br>Removable HDD Kit +<br>HDD Mirroring Kit<br>or HDD Data Encryption & Mirroring Kit | p. 9-248 to p. 9-268 | |
| TYPE-10 | Standard HDD +<br>Removable HDD Kit +<br>HDD Data Encryption & Mirroring Kit | p. 9-273 to p. 9-290 | |
| TYPE-11 | Option HDD (1TB) +<br>Removable HDD Kit +<br>HDD Data Encryption & Mirroring Kit | p. 9-296 to p. 9-314 | |

T-9-5

# Points to Note Regarding Data Backup/Export

Before performing work that will result in the loss of data, inform the system administrator of the inevitable loss, asking him to make a backup or export of important data items.
Backup or export work must not be performed by the service person because of security considerations.
In this Installation Procedure, a series of backup or export procedures are described for reference.

[List of Data to be Deleted]

| Data to be Deleted | Availability of Backup |
|---|---|
| Information registered in the Address Book | Yes |
| Settings made from the Settings/Registration screen | Yes *1 |
| Forwarding Settings | Yes |
| License files for MEAP applications | Yes |
| MEAP applications | No |
| Data saved using MEAP applications | Yes *2 |
| Favorite Settings registered in the Copy and Mail Box functions | No |
| Data stored in Mail Boxes or the Advanced Box | Yes *3 |
| Scan modes registered in the Send Function | No |
| Unsent documents (documents waiting to be sent with the Delayed Send mode) | No |
| Image forms stored in the Superimpose Image | Yes |
| MEAP SMS (Service Management Service) password (the password will return to its default password if it was changed) | No |
| Job logs | No |
| User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H) | Yes |
| Registration information for the Network Place | No |
| Key Pair and Server Certificate | No |
| Log information for the IP address/MAC address restriction settings | No |
| Password that is protected by TPM | Yes *4 |
| Encryption key that is protected by TPM | No |
| Information for Web browser settings | Yes *5 |
| Quick Menu Information | Yes |
| User Information of the Advanced Box | Yes |

T-9-6

*1 Can only be backed up using the Remote UI.
*2 Depending on the MEAP application.
*3 Only the following items are backed up.
- Mail Box Settings (mail box names, passwords, and auto erase times)
- Files in Mail Box
- Files in Advanced Box
- Forms registered for the Superimpose Image

*4 You may not be able to back up, depending on the type of the password.
*5 Only the stored Favorite Settings can be backed up.

[List of Data that can be backed up]

| Data that can be backed up | Reference |
|---|---|
| Address Book | See the "e-Manual > Remote UI". |
| Settings/Registration settings | |
| Device Settings (Forwarding Settings, Address List, Favorite Settings) | |
| Printer Settings | |
| Paper Information | |
| Image forms stored in the Superimpose Image | |
| Quick Menu Information | |
| User Information of the Advanced Box | |
| Favorite Settings for Web browser | See the e-Manual > Web Access.<br>(You can select this if web browser (Option) is installed.) |
| License files for MEAP applications | For information on downloading license files, see the "e-Manual > MEAP". |
| Data saved by MEAP applications | Data saved by MEAP applications may be able to be backed up, depending on the MEAP application.<br>See the documentation included with the MEAP application. |
| Data stored in Mail Boxes or the Advanced Box | See the e-Manual > Remote UI "Setting the Backup Location for Stored Data ". |
| SSO-H (Single Sign-On H) user authentication information | see the "e-Manual > MEAPI". |

T-9-7

CAUTION: Work to Perform After Installing the Kit
- When you start using this product, passwords set for Mail Boxes, Confidential Fax Inboxes, and the Memory RX Inbox are erased. Set these passwords again.
- If you have logged on to the machine using a login service, such as SSO-H (Single Sign-On H) before using this product, you must select the login service again using SMS (Service Management Service) after restarting the machine. For more information on using SMS, see the e-Manual > MEAP.

# Making a Backup of the Data (reference only)

The data items that have been backed up may be restored when the HDD Data Encryption & Mirroring Kit-C Series has been installed.
These data items are property of the user, and the restoration work must be performed by the system administrator.
The method of restoration is described in the Users Guide. See Table T-1-2/T-1-4 (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

## Procedure for Import/Export ALL of User Settings

Following data can be batch exported.

- Address Book
- Settings/Registration settings
- Device Settings (Forwarding Settings, Address List, Favorite Settings)
- Printer Settings
- Paper Information
- Image forms stored in the Superimpose Image
- Quick Menu Information
- User Information of the Advanced Box

1) Access the URL given below, and then access Remote UI.
   http://[IP address of the device]/
   If the system administrator ID and password are set, a dialog box to enter the user name and password appears. Enter the system administrator ID in User Name and the password in Password, and then click [Administrator Login].
2) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Import/Export ALL] > [Export].
3) Select items to export.

> CAUTION:
> When exporting only specific items, this may cause setting information relating to multiple items to lose its relations and cause setting details to be switched. In this case, export all related items simultaneously.

4) Enter the password into [Encryption Password] and click on [Start Exporting].
5) Click [Check Status].
6) Check the batch export result.

## Backup of MEAP Application

When a MEAP application has been installed, the data and license that the MEAP application retains will be deleted. If no MEAP application is installed, there is no need to make a backup. If a MEAP application has a backup function, make a backup of the data peculiar to the MEAP application using this function. With regard to the license, there is a need to stop all applications from SMS (Service Management Service), invalidate the license, and download the invalid license file.

The overview of procedures for stop of MEAP applications, Disabling of the license, and download of an Disabled license file is described below. For more information, see the MEAPSMS Administrator Guide

## Stop of MEAP Applications, Disabling, Download of Disabled License Files and Uninstallation

1) Select the URL given below and access SMS.
   http://[IP address of the device]:8000/sms/
   The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

> CAUTION:
> The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

2) Click [MEAP Application Management].
3) Click [Stop] button of the application you want to stop on the MEAP Application Management page.
4) Check the status of MEAP Application is [Stop],
5) Click on the name of applications to disable.
6) Click [License Control], and then click [Disable].
7) Click [Yes] in a confirmation window for disabling the license.
8) Return to the MEAP Application Management page and click on the appropriate application names.
9) Click [License Management] on the Application/License Information page.
10) Click [Download].

11) Following the instructions on the window, specify the location to save the file. Set a distinctive name for the disabled license file so that you can recognize it for which application. After you download the disabled license file to your PC, click [Delete]. Click [Yes] in a confirmation window for license deletion.
12) Return to the MEAP Application Management page, click [Uninstall] button of the application you want to uninstall. Click [Yes] in a confirmation window for uninstallation. If there are several applications, repeat the procedures 1) to 7).
13) After the use of this product is started, re-install the application using an application file (jar file) of each application from SMS and the disabled license file (lic file).

## User Authentication Information Registered by SSO-H (Single Sign-ON H)

In the case that the MEAP login application has been changed to SSO-H, there is a need to make a backup of the user authentication information.

1) Access the URL given below.
   http://[IP address of the device]:8000/sso/
2) Login with the user name and password registered as an administrator in SSO-H.
   The default administrator user name and password are as follows:
   User Name: Administrator
   Password: password
3) Click [User Control].
4) Put a checkmark to Select All, and then click [Export].
5) Leave the file format and character code as defaults and click [Start Export].
6) Following the instructions on the window, specify the location to save the file and click [Save].

## Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD. Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.
Specify the backup destination of a document data:

- Backup to SMB server
  Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
  Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

- CAUTION:
- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,', 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
2) Select 'All' or 'Changes' for the backup method.
3) Click [Execute].

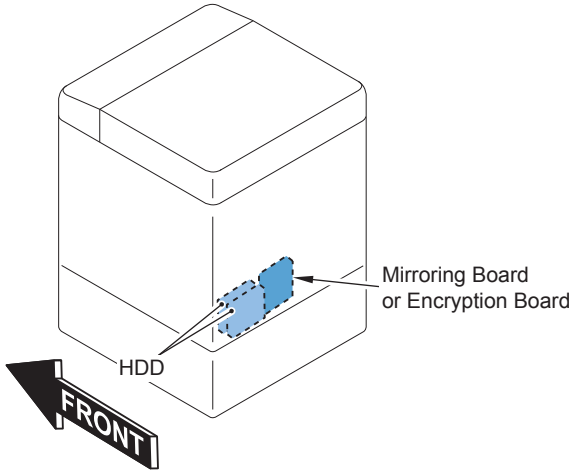
- CAUTION:
- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

[Restoring the backup data of User inbox and Advanced Box document data]

1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
2) Click [Display Backup Data].
3) Select the backup data to restore from the list and then click [Execute].

- CAUTION:
- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

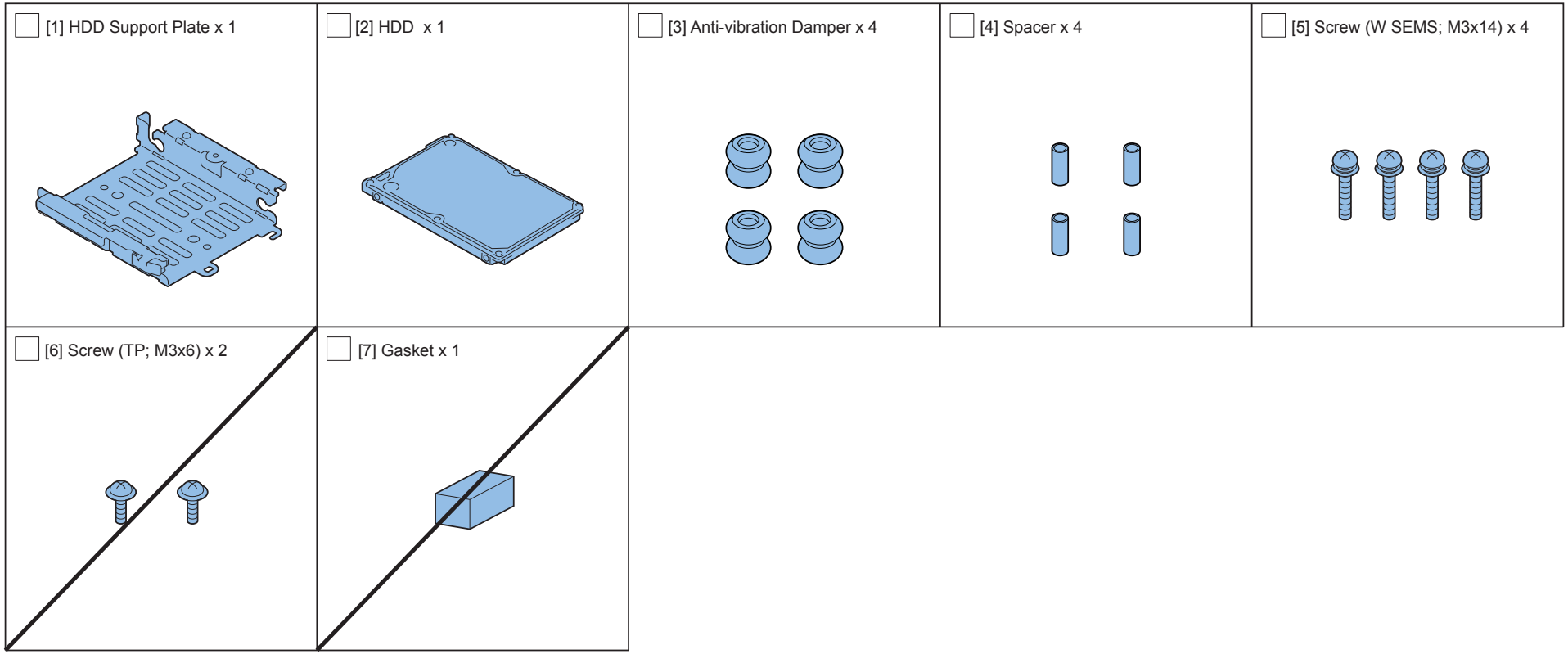
# Installation Outline Drawing




F-9-209

# [TYPE-1] Option HDD (1TB)

## Checking the Contents




F-9-210

< CD/Guides >

- FCC/IC Sheet

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

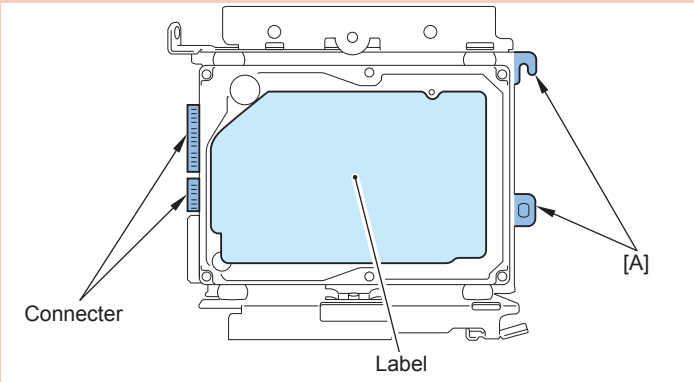
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Assembling the Option HDD

CAUTION:

When assembling the Option HDD, be sure to pay attention to the direction.

- Be sure that the label face of the Option HDD is up.
- Be sure that the [A] part of the HDD Support Plate is on the other side of the connecter.



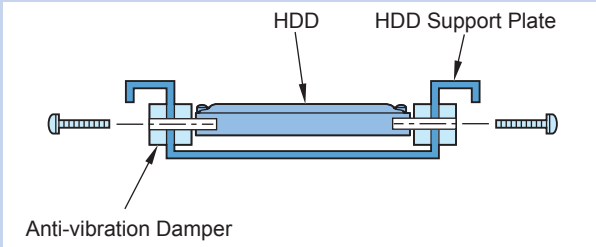

F-9-211

□

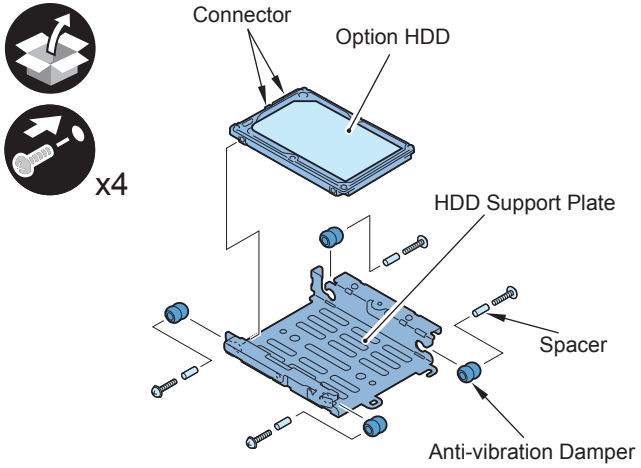
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.




F-9-212

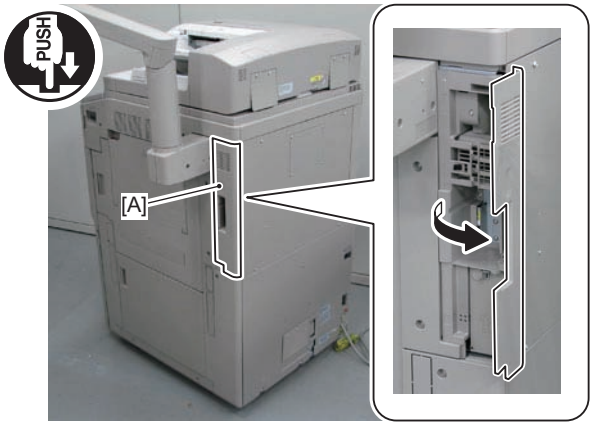



F-9-213

## Procedure to Replace with the HDD

☐

1) Push [A] part, and open the Right Rear Cover 1.

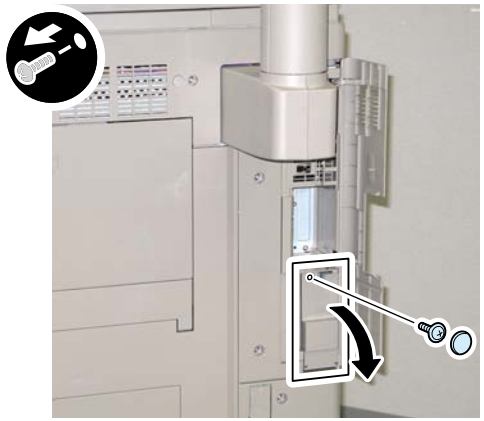



F-9-214

☐

2) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw

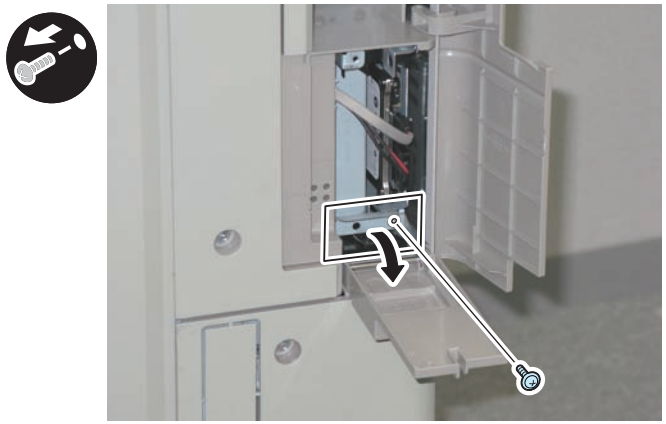


F-9-215

☐

3) Turn the HDD Fixed Plate toward the front.

- 1 Screw



F-9-216

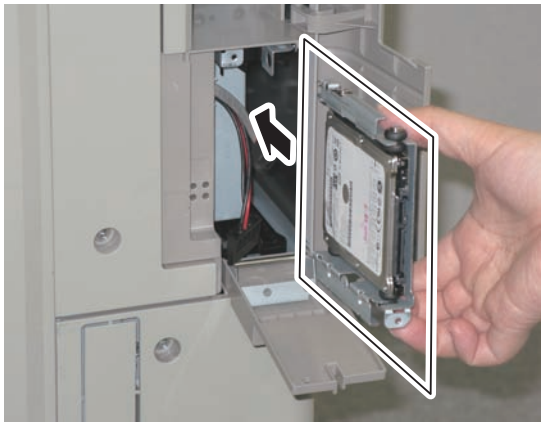
☐

4) Remove the HDD. (The removed HDD will not be used.)

- 2 Connecters

F-9-217

☐
5) Insert the assembled Option HDD.



F-9-218

☐
6) Connect 2 connecters to the Option HDD.

F-9-219

☐
7) Return the HDD Fixed Plate to its original position.
- 1 Screw

8) Close the HDD Cap.
- 1 Screw
- 1 Rubber Cap

9) Close the Right Rear Cover 1.
10) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

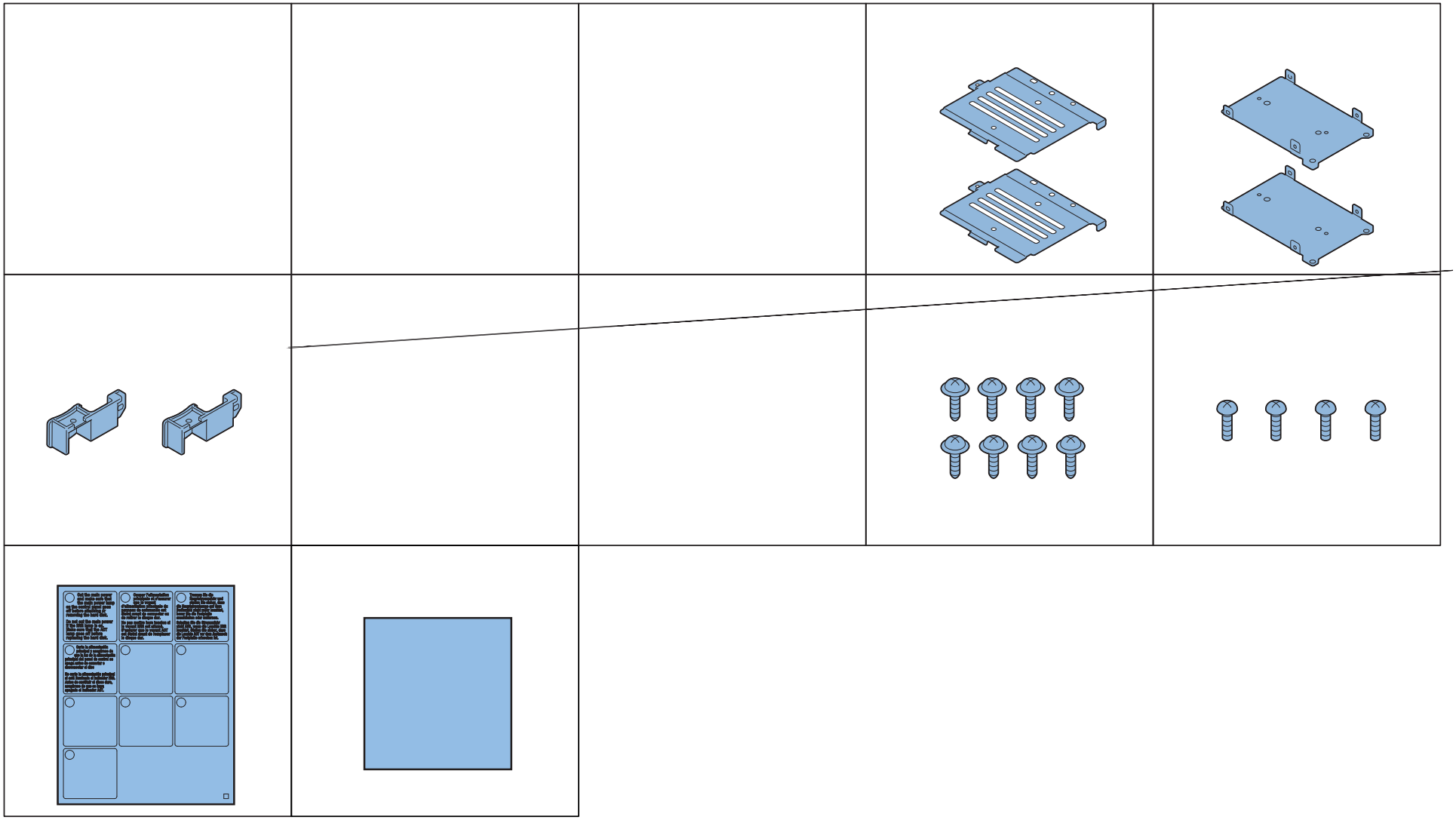
1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

# [TYPE-2] Removable HDD Kit

## Checking the Contents



## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

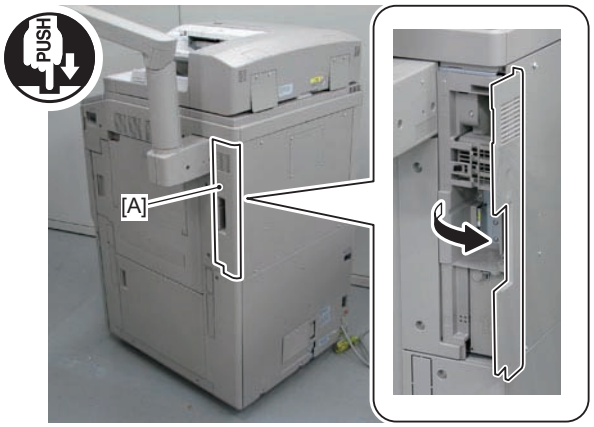
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the HDD and HDD Case Unit

□

1) Push [A] part, and open the Right Rear Cover 1.

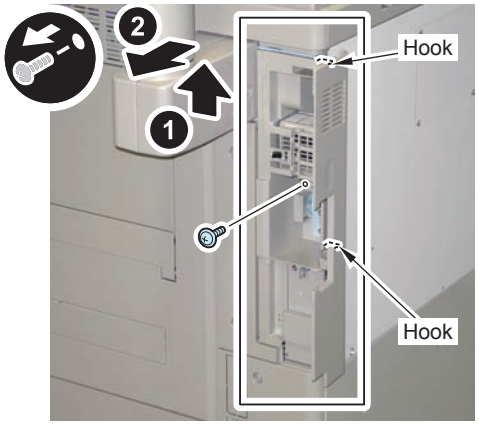



F-9-221

□

2) Remove the Side Cover.

- 1 Screw
- 2 Hooks

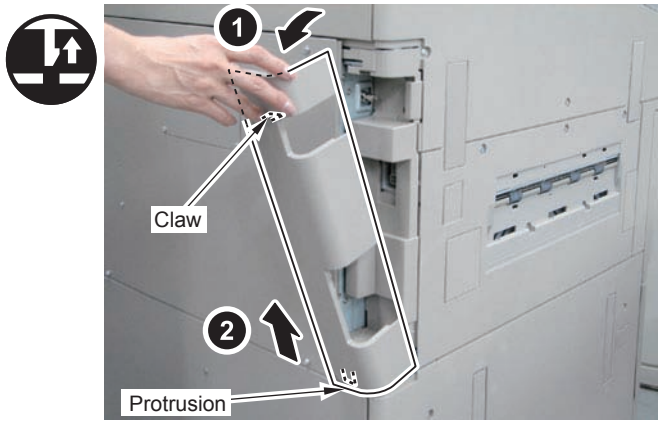



F-9-222

□

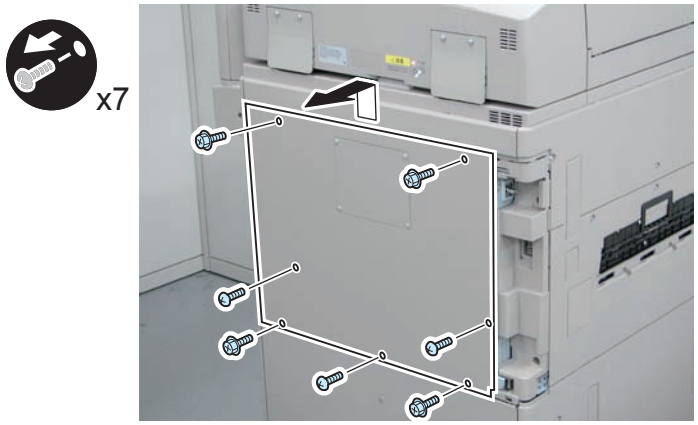
3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions



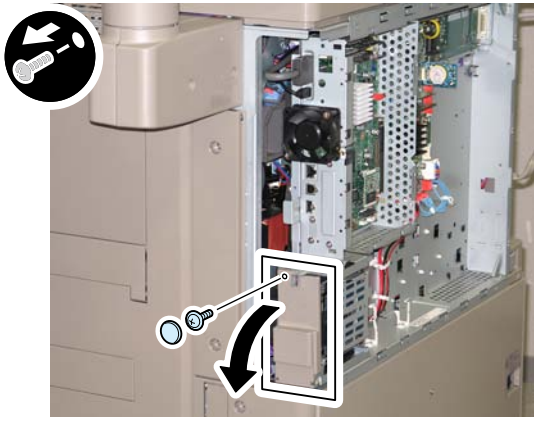

F-9-223

☐
4) Remove the Rear Upper Cover.
- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)




F-9-224

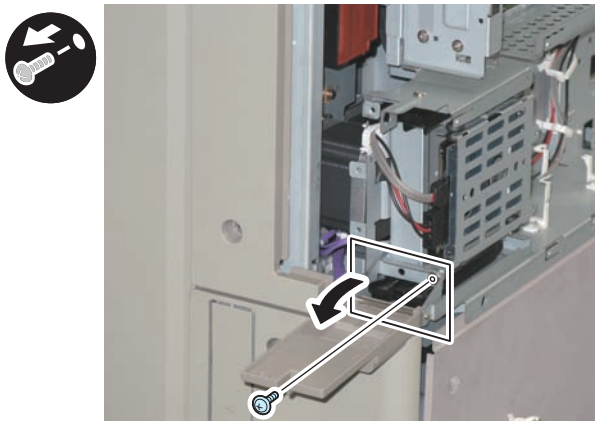
☐
5) Open the HDD Cap.
- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-225

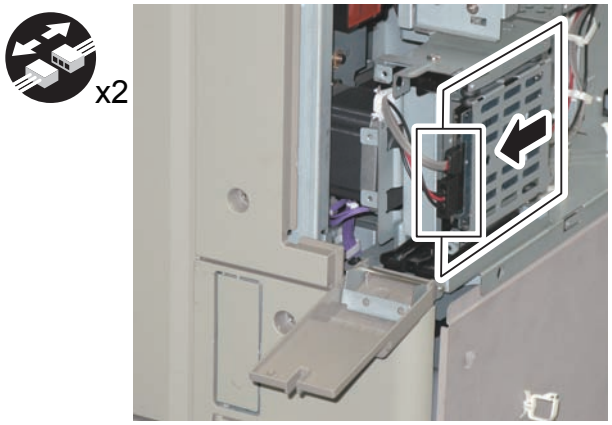
☐
6) Return the rubber cap to the HDD Cap.

☐
7) Turn the HDD Fixed Plate toward the front.
- 1 Screw (The removed screw will not be used.)



F-9-226

☐
8) Remove the HDD.
- 2 Connectors

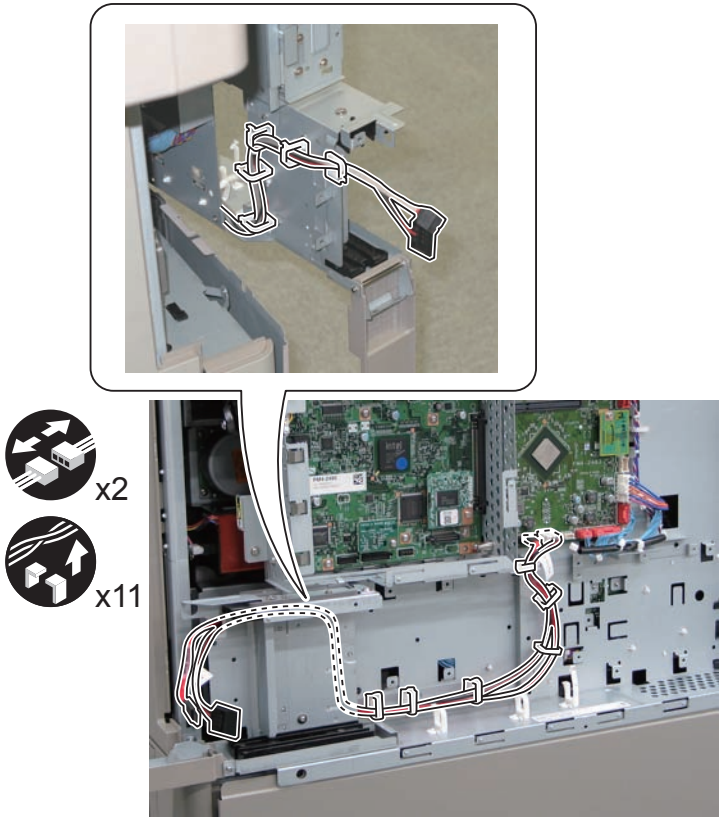



F-9-227

☐

9) Open the Controller Box, and disconnect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) on the host machine. (Disconnected Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) will not be used.)

- 2 Connectors
- 9 Wire Saddles
- 2 Edge Saddles

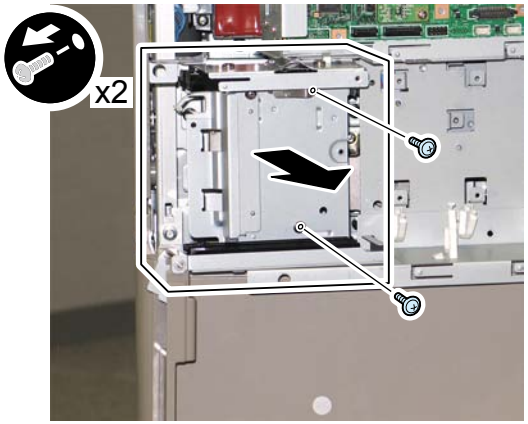



F-9-228

☐

10) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the HDD Case Unit” step 1).)



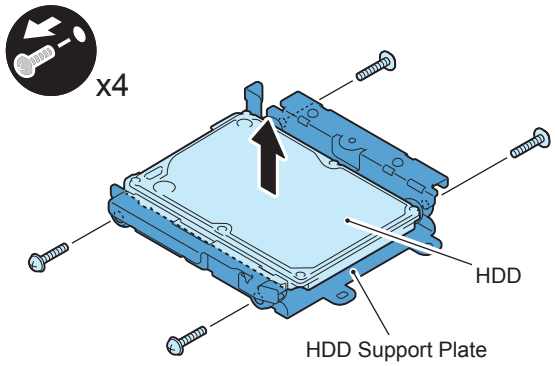

F-9-229

## Disassembling and Assembling of the HDD Removed from the Host Machine

□

1) Disassemble the removed HDD.

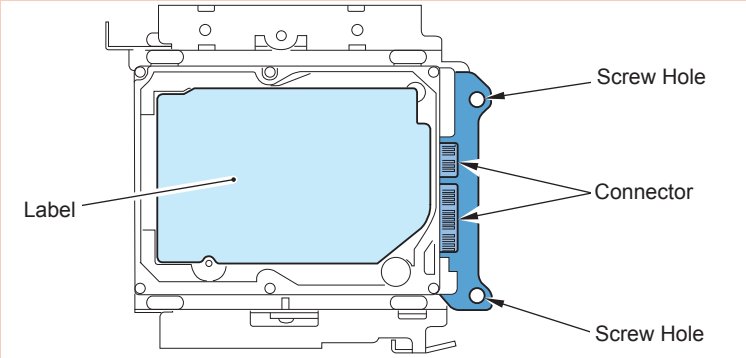
- 4 Screws (W Sems)
- 1 HDD Support Plate




F-9-230

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.




F-9-231

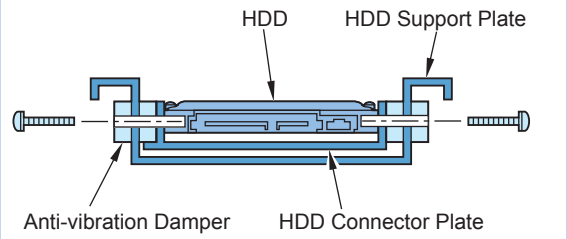
NOTE:
Use the parts disassembled in step 1) and parts included in the Removable HDD Kit.

□

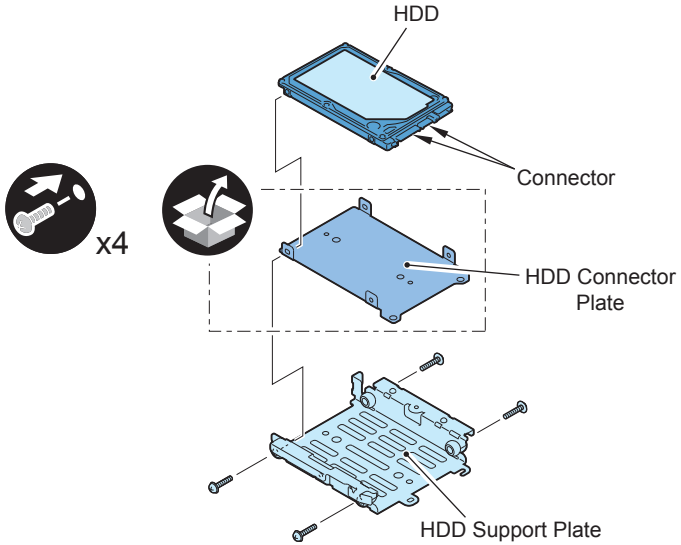
2) Assemble the HDD disassembled in step 1).

- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.




F-9-232



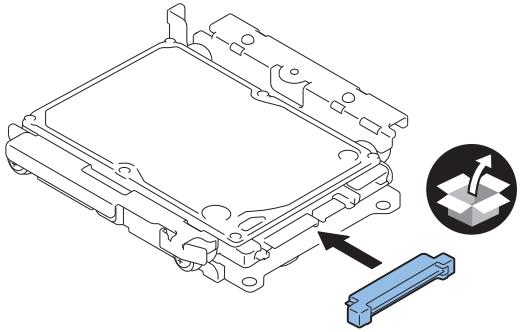

F-9-233

□

3) Install the Conversion Connector.

CAUTION:

Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-234

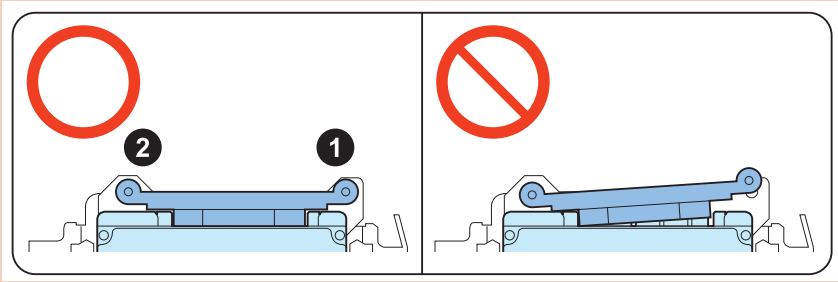
□

4) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

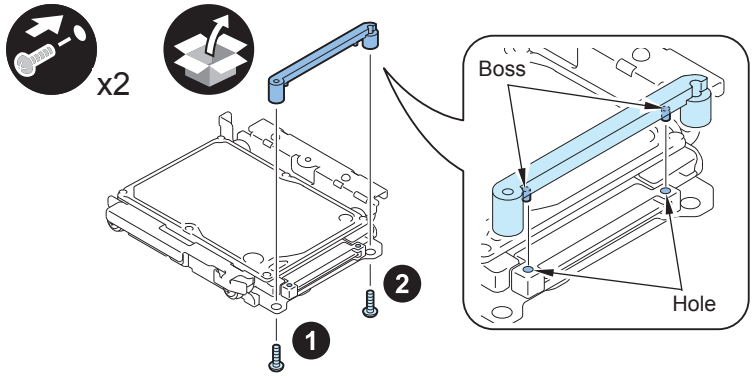
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-235




F-9-236

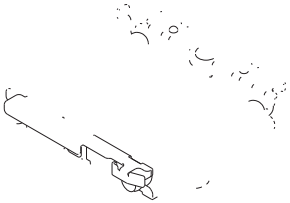
□

5) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

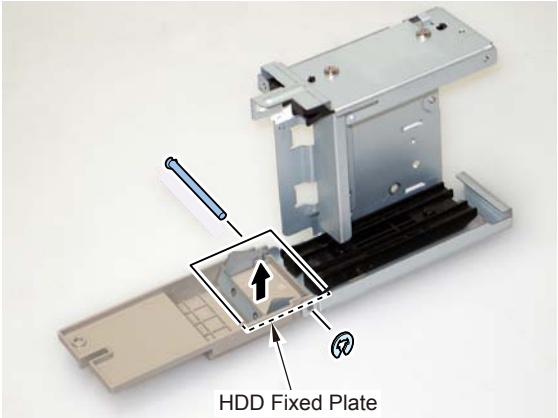
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



## Changing Configuration inside of HDD Case Unit

□

1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)




F-9-240

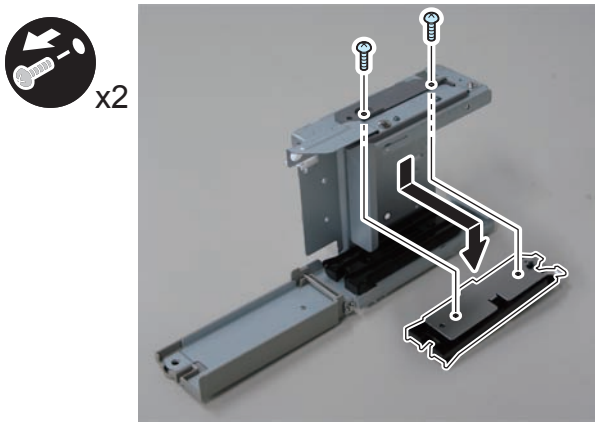
□

2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

□

3) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 6).)

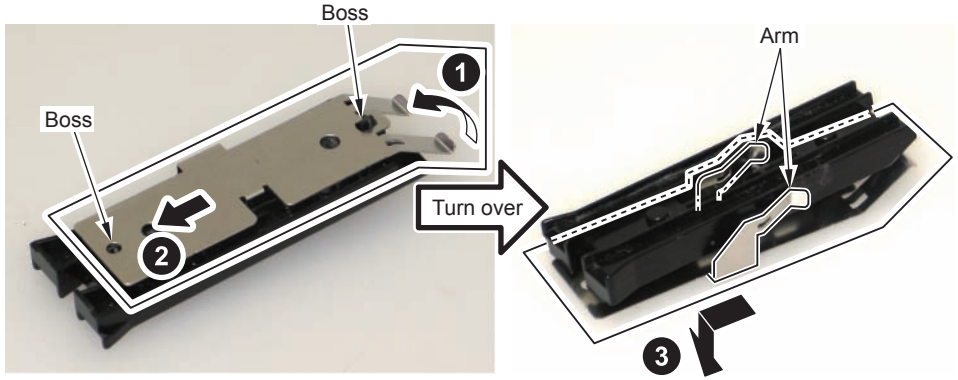



F-9-241

□

4) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



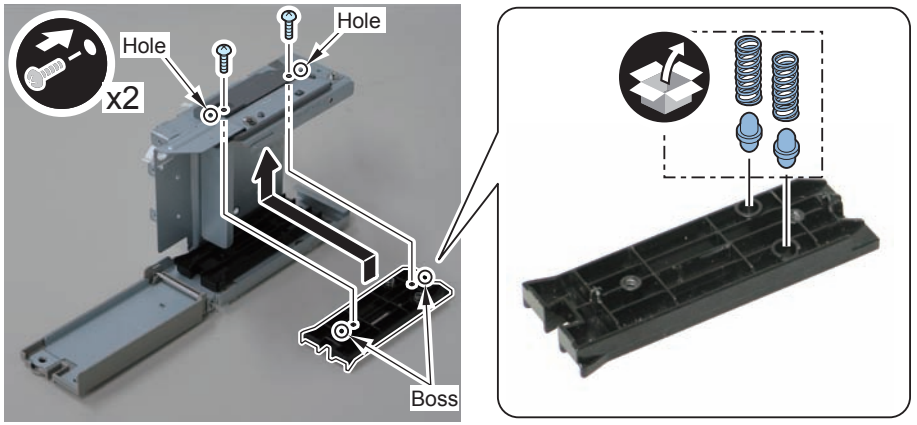

F-9-242

□

5) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

6) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 3).)




F-9-243

□

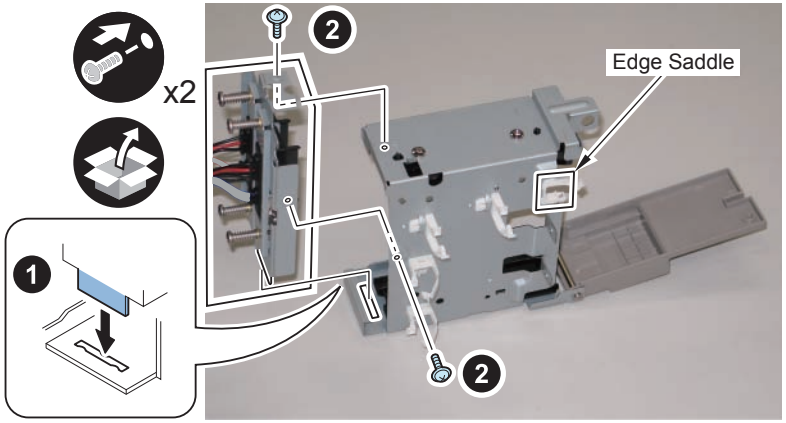
7) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

8) Close the Edge Saddle.




F-9-244

## Installing the HDD Case Unit

□

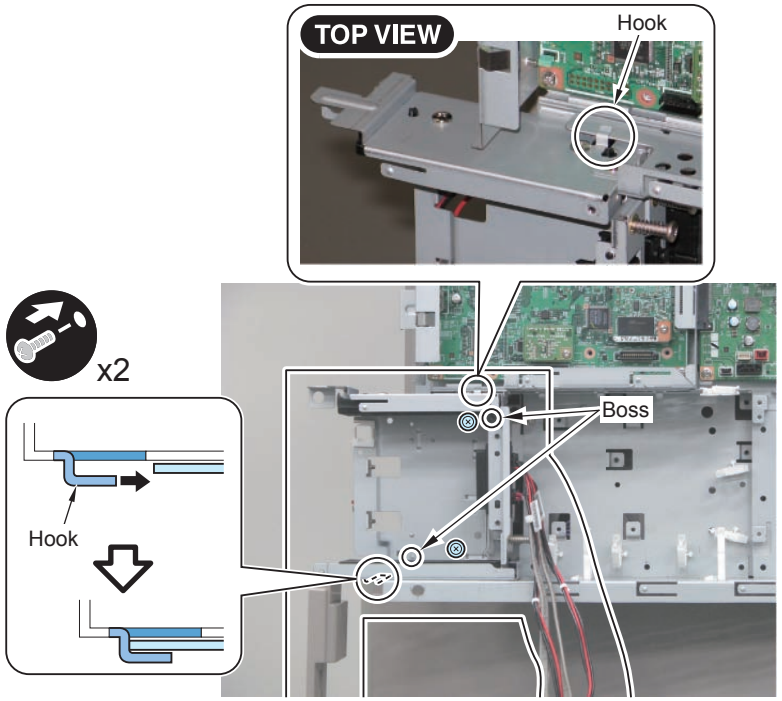
1) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.



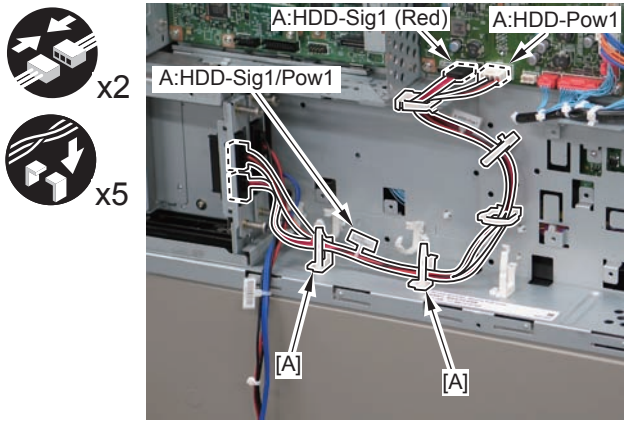

F-9-245

□

2) Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A:HDD-Pow1) of the HDD Drawer Unit to the Main Controller PCB 2.

- 2 Connectors
- 1 Edge Saddle
- 4 Wire Saddles

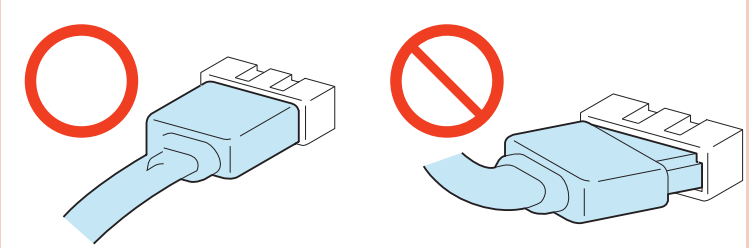
NOTE:
Be sure not to close the 2 Wire Saddles [A] in this step.




F-9-246

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



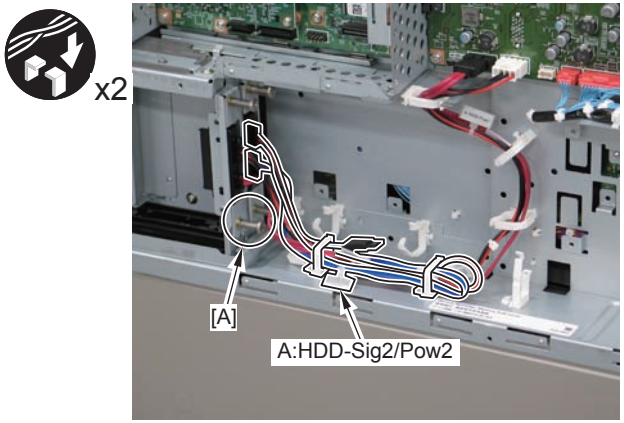
F-9-247

□

3) Fold the extra length of "A:HDD-Sig2/Pow2" cable of the HDD Drawer Unit and secure using 2 Wire Saddles.

CAUTION:

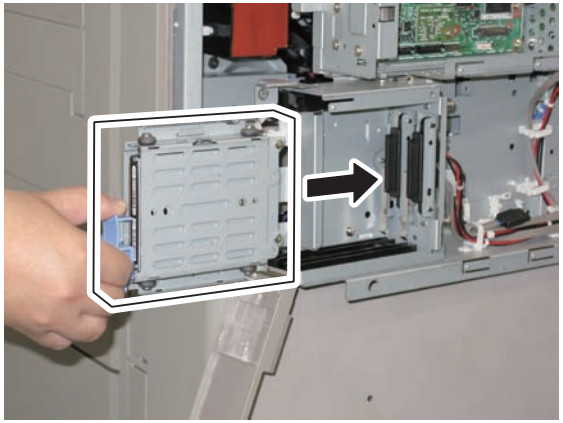
- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-248

□

4) Insert the assembled Removable HDD.



F-9-249

□
9) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.
- Size (width x depth x height) : 67mm x 14mm x 64mm

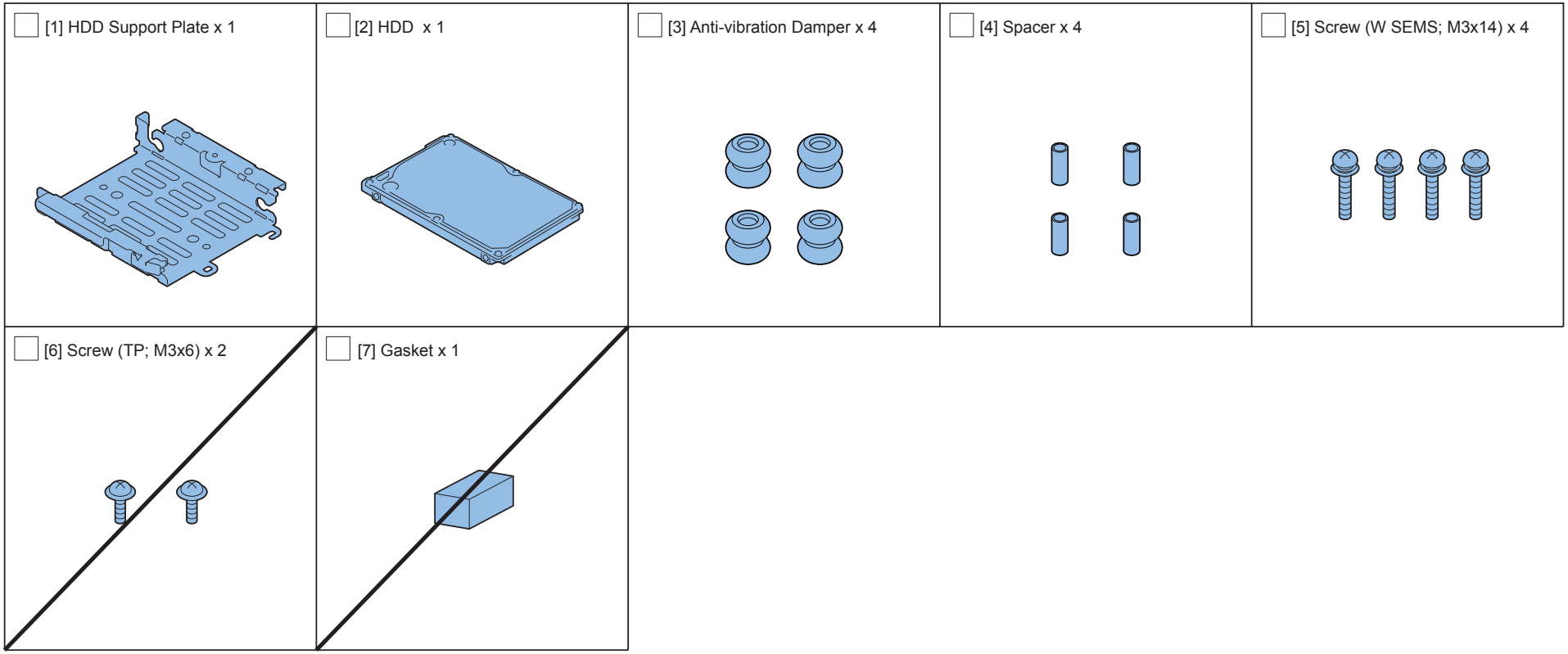
F-9-253

□
10) Close the Right Rear Cover 1.
11) Return the Left Rear Cover to its original position.
12) Connect the power plug to the outlet.
13) Turn ON the main power switch.

# [TYPE-3] Option HDD (1TB) + Removable HDD Kit

## Checking the Contents

### Option HDD (1TB)

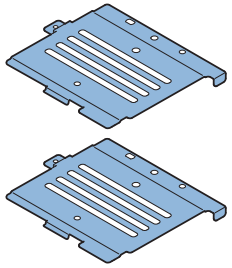
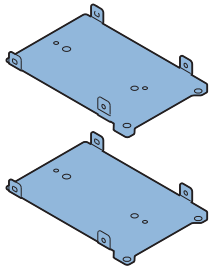
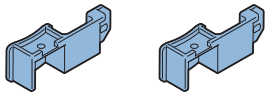
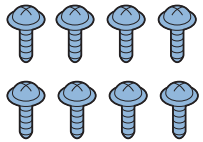
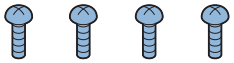
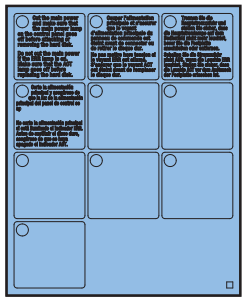
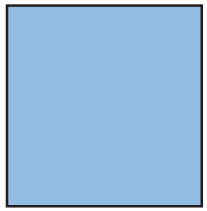



F-9-254

< CD/Guides >

- FCC/IC Sheet

## Removable HDD Kit

| | | | | |
|---|---|---|---|---|
| | | |  |  |
|  | | |  |  |
|  |  | | | |

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

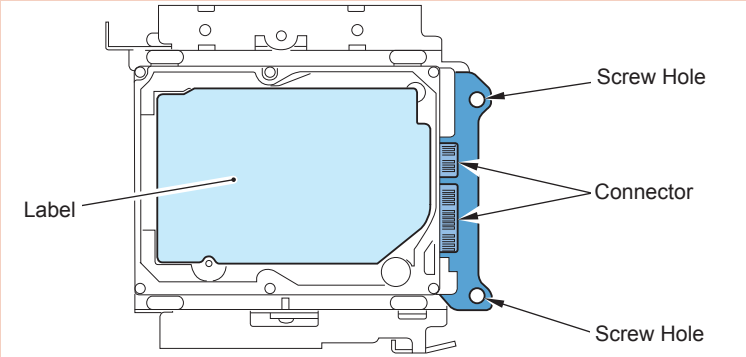
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Assembling the Option HDD

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.




F-9-256

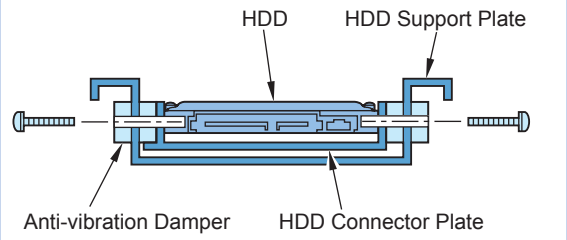
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

□

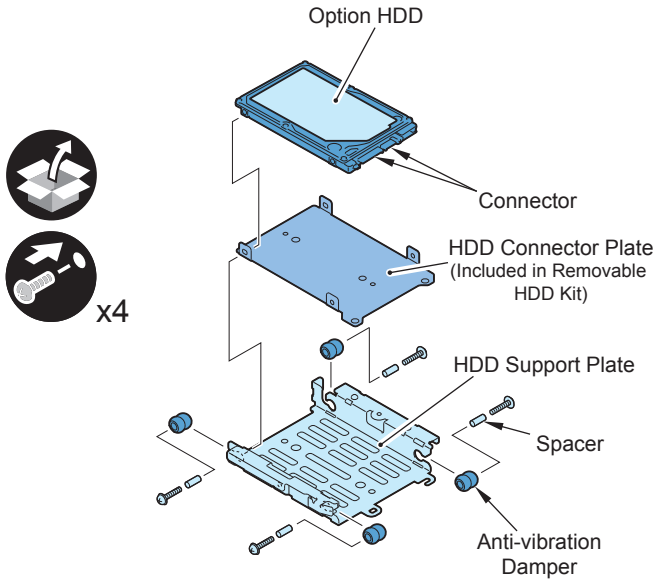
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.




F-9-257



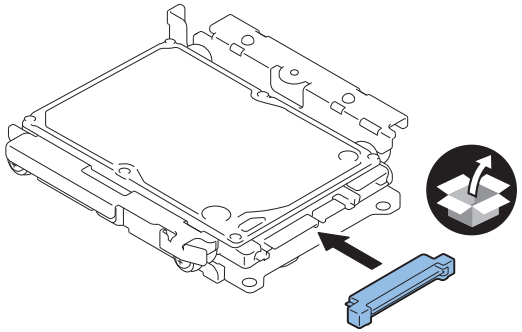

F-9-258

☐

2) Install the Conversion Connector.

CAUTION:

Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-259

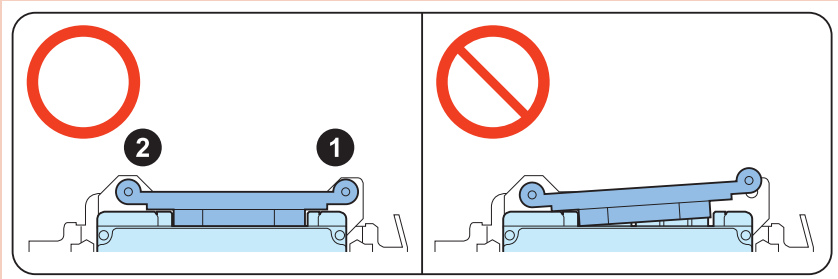
☐

3) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

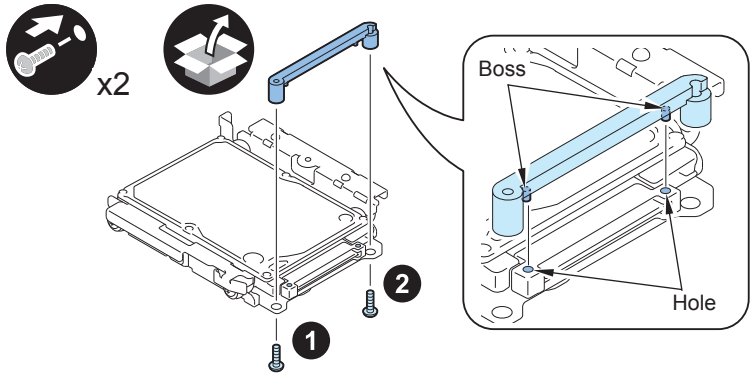
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



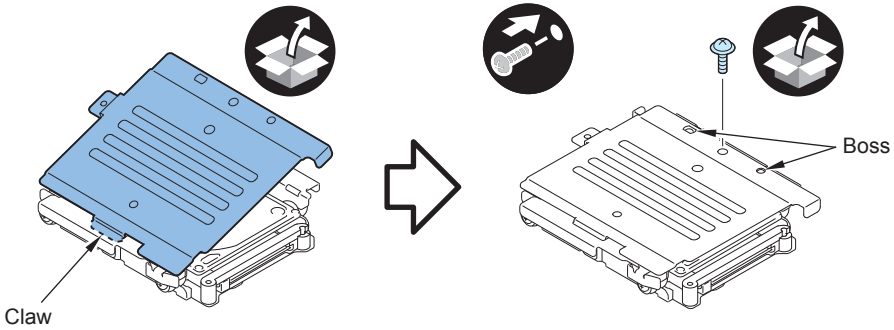

F-9-260




F-9-261

□
4) Install the HDD Cover.
- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

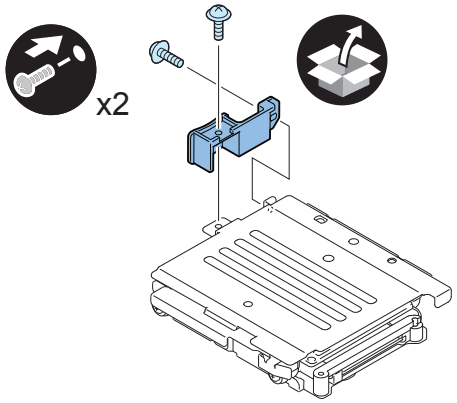
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-262

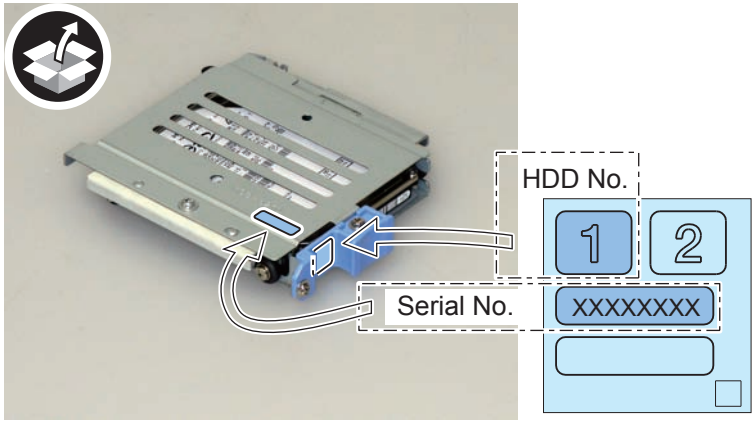
□
5) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-263

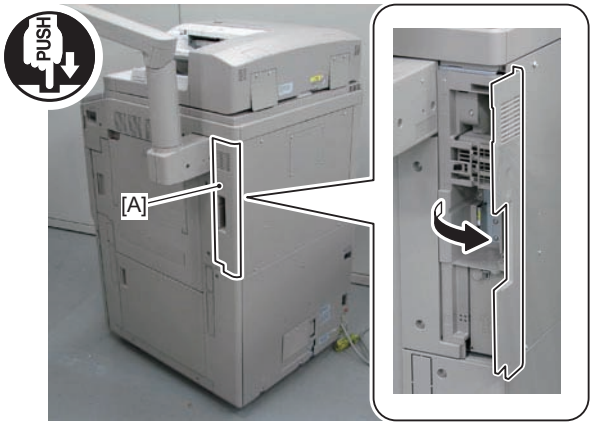
□
6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.
7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.




F-9-264

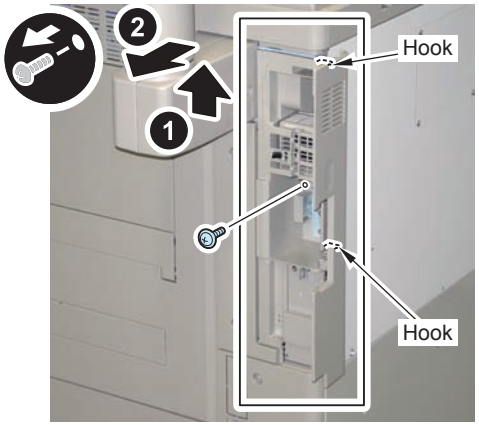
## Removing the HDD and HDD Case Unit

□
1) Push [A] part, and open the Right Rear Cover 1.



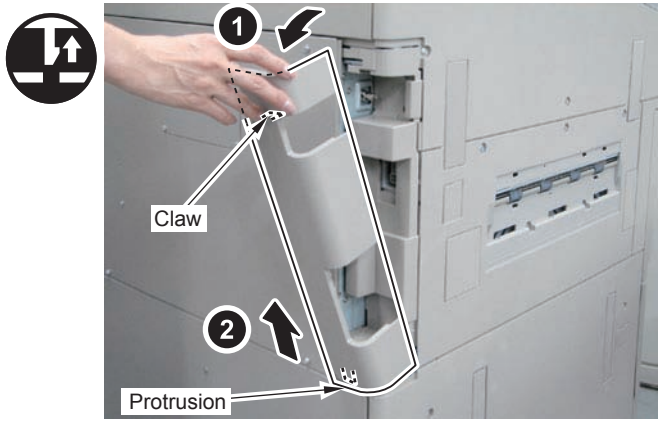

F-9-265

□
2) Remove the Side Cover.
- 1 Screw
- 2 Hooks



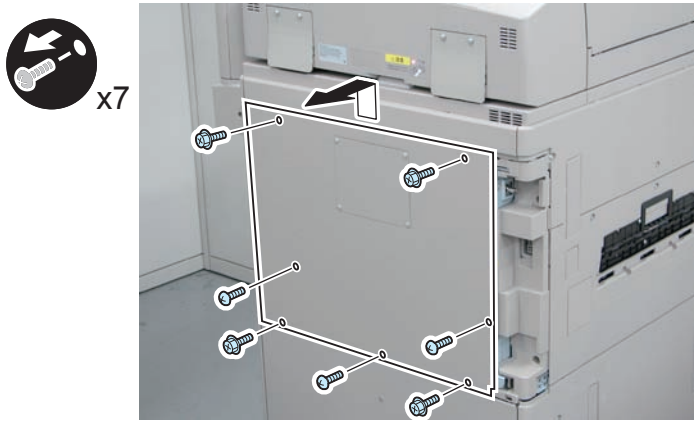

F-9-266

□
3) Remove the Left Rear Cover.
- 1 Claw
- 1 Protrusions




F-9-267

□
4) Remove the Rear Upper Cover.
- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

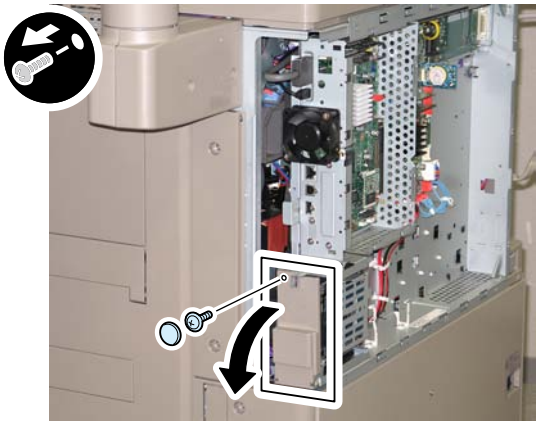



F-9-268

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-269

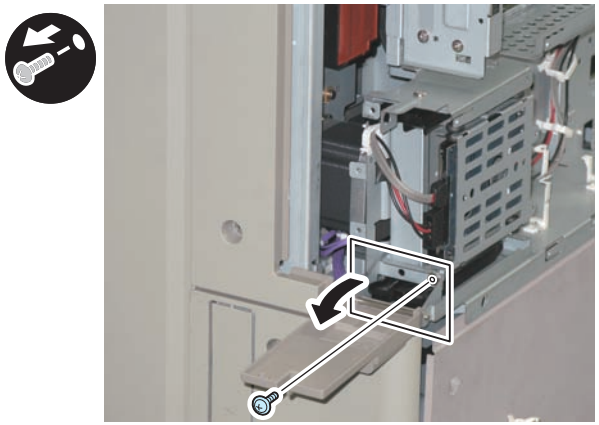
☐

6) Return the rubber cap to the HDD Cap.

☐

7) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will not be used.)

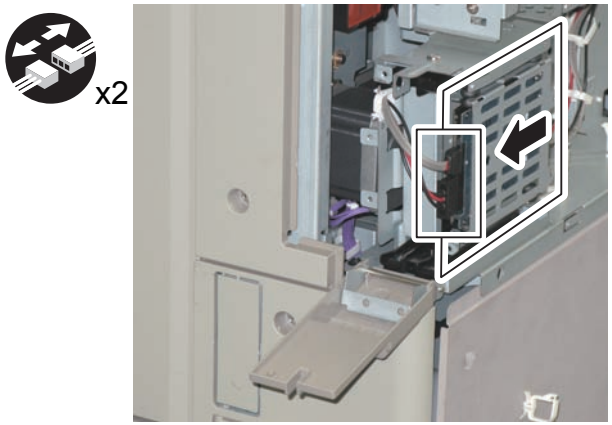


F-9-270

☐

8) Remove the HDD. (The removed HDD will not be used.)

- 2 Connectors

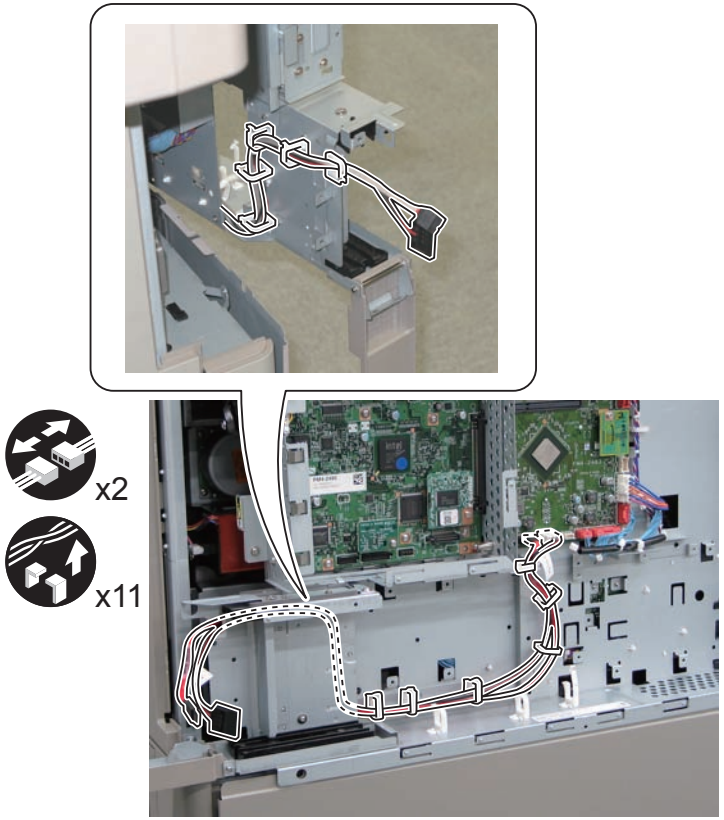



F-9-271

□

9) Open the Controller Box, and disconnect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) on the host machine. (Disconnected Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) will not be used.)

- 2 Connectors
- 9 Wire Saddles
- 2 Edge Saddles

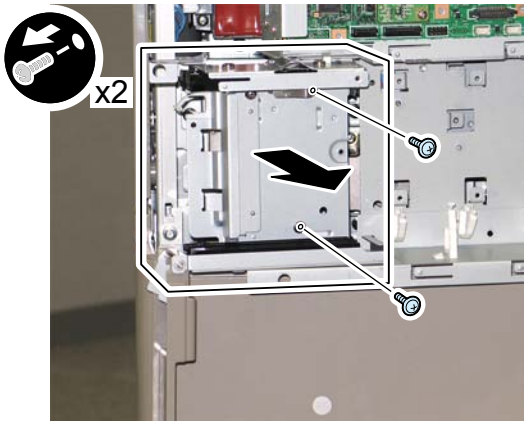



F-9-272

□

11) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the HDD Case Unit” step 1).)

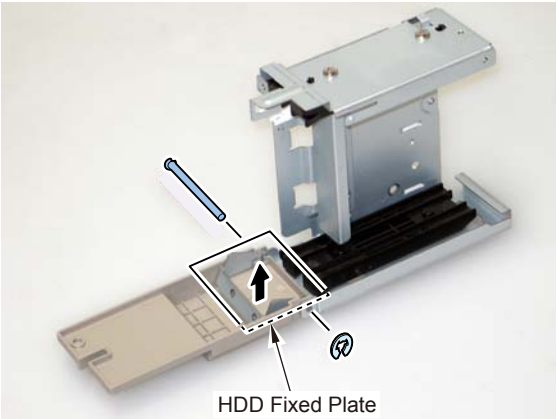



F-9-273

## Changing Configuration inside of HDD Case Unit

□

1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)




F-9-274

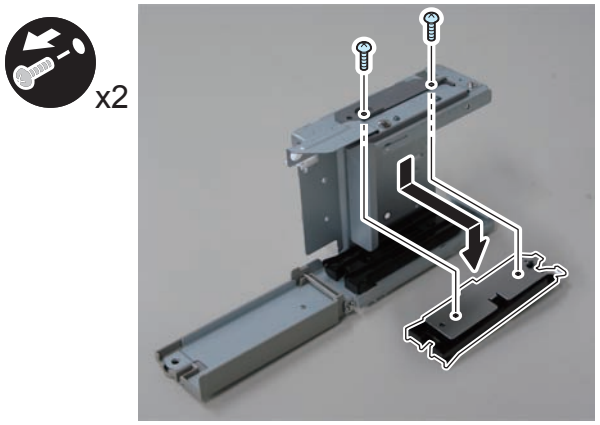
□

2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

□

3) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 6).)

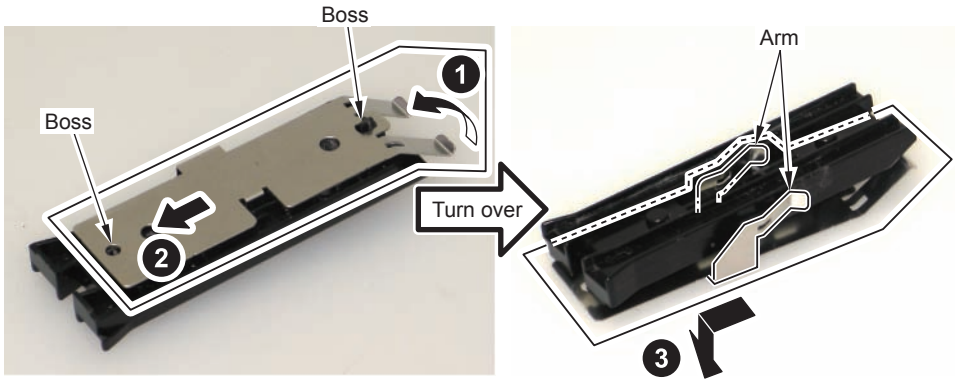



F-9-275

□

4) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



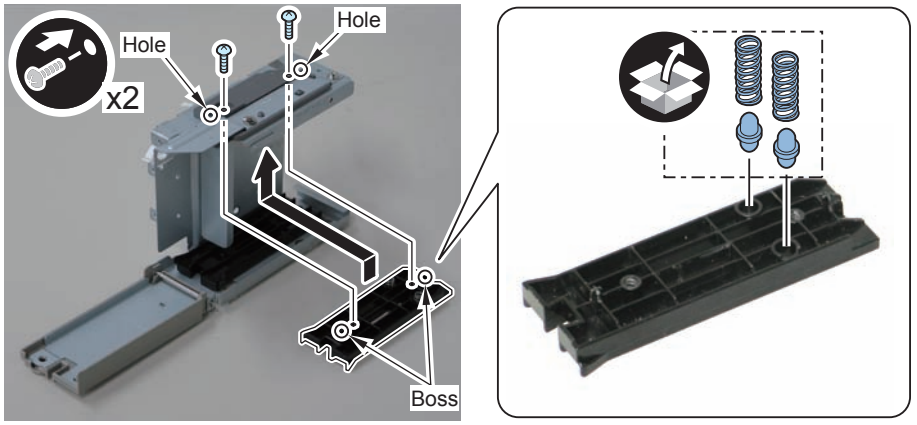

F-9-276

□

5) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

6) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 3).)




F-9-277

□

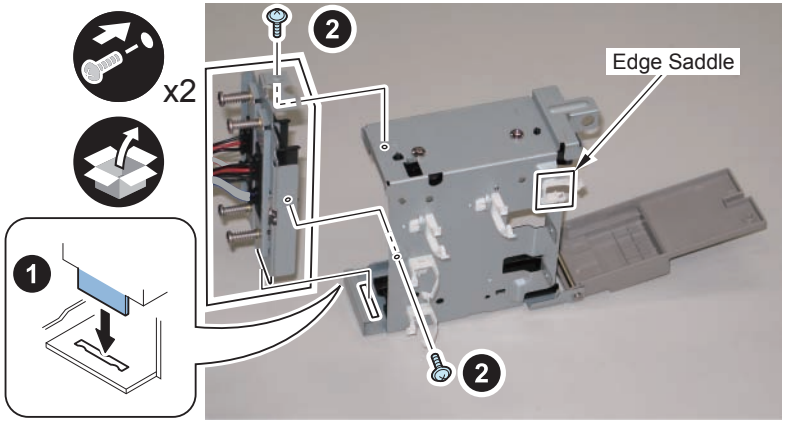
7) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

8) Close the Edge Saddle.




F-9-278

## Installing the HDD Case Unit

□

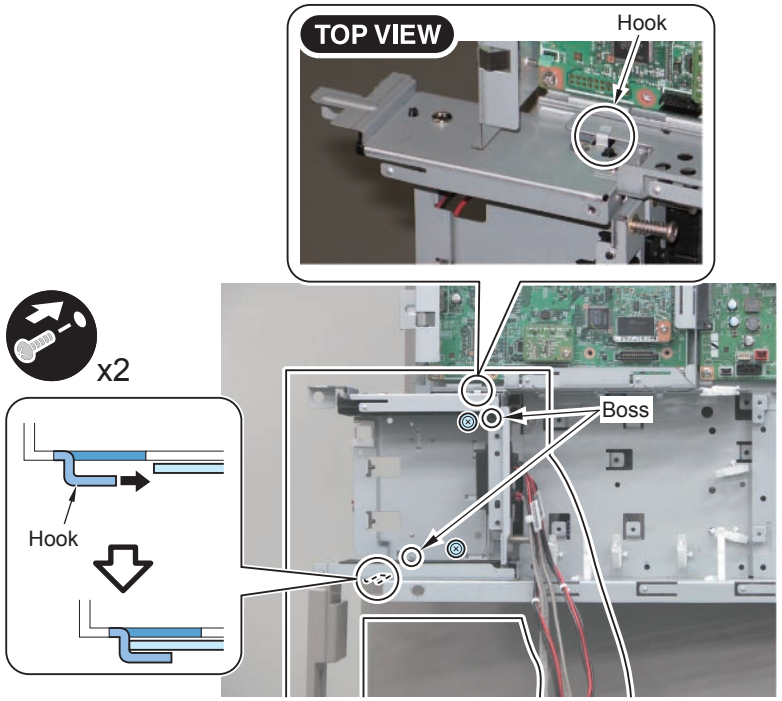
1) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.



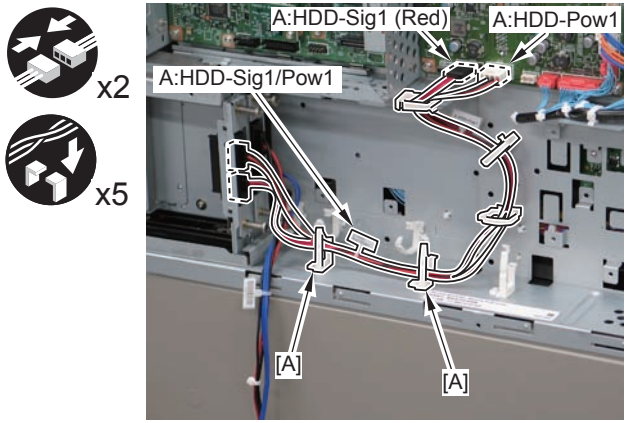

F-9-279

□

2) Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A:HDD-Pow1) of the HDD Drawer Unit to the Main Controller PCB 2.

- 2 Connectors
- 1 Edge Saddle
- 4 Wire Saddles

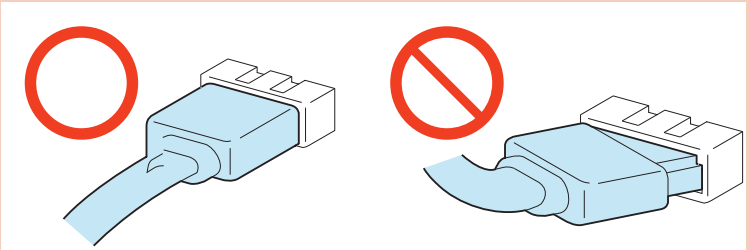
NOTE:
Be sure not to close the 2 Wire Saddles [A] in this step.




F-9-280

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



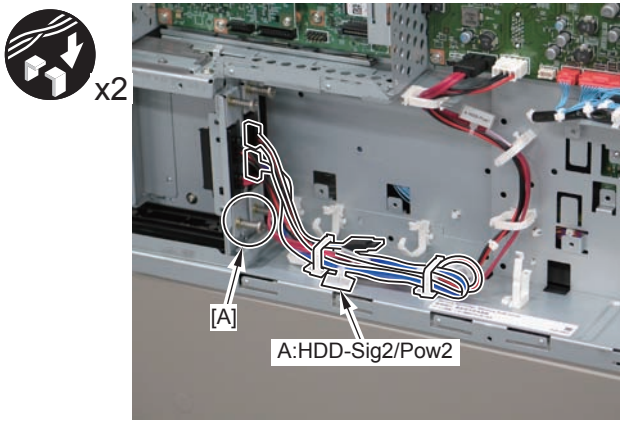
F-9-281

□

3) Fold the extra length of "A:HDD-Sig2/Pow2" cable of the HDD Drawer Unit and secure using 2 Wire Saddles.

CAUTION:

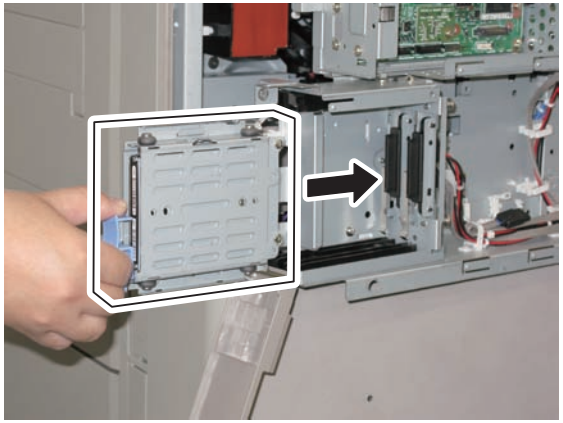
- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-282

□

4) Insert the assembled Removable HDD.

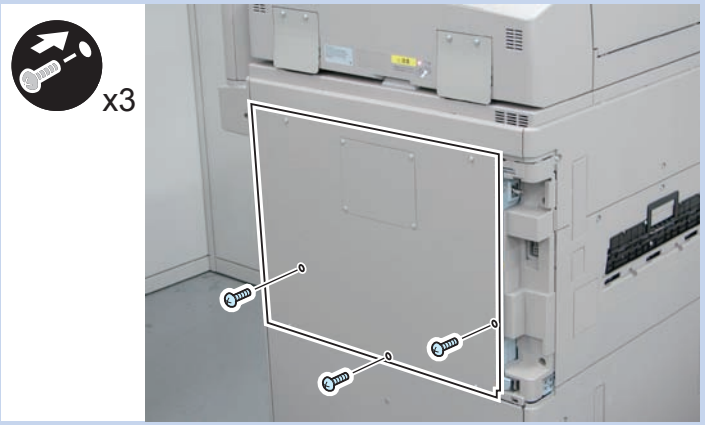


F-9-283

☐
5) Close the Controller Box.

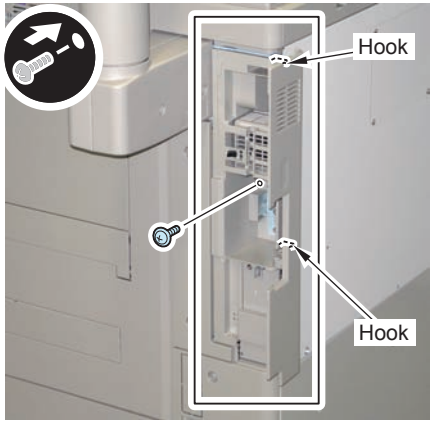
☐
6) Install the Rear Upper Cover.
- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.



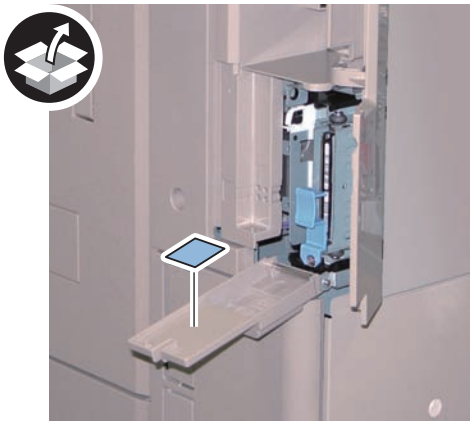

F-9-284

☐
7) Install the Side Cover.
- 2 Hooks
- 1 Screw




F-9-285

☐
8) Affix the HDD Caution Label in the appropriate language on the HDD Cap.



F-9-286

□
9) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.
- Size (width x depth x height) : 67mm x 14mm x 64mm

F-9-287

□
10) Close the Right Rear Cover 1.
11) Return the Left Rear Cover to its original position.
12) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Execution of Auto Adjust Gradation

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

9-141
9 Installation > [TYPE-3] Option HDD (1TB) + Removable HDD Kit > Execution of Auto Adjust Gradation

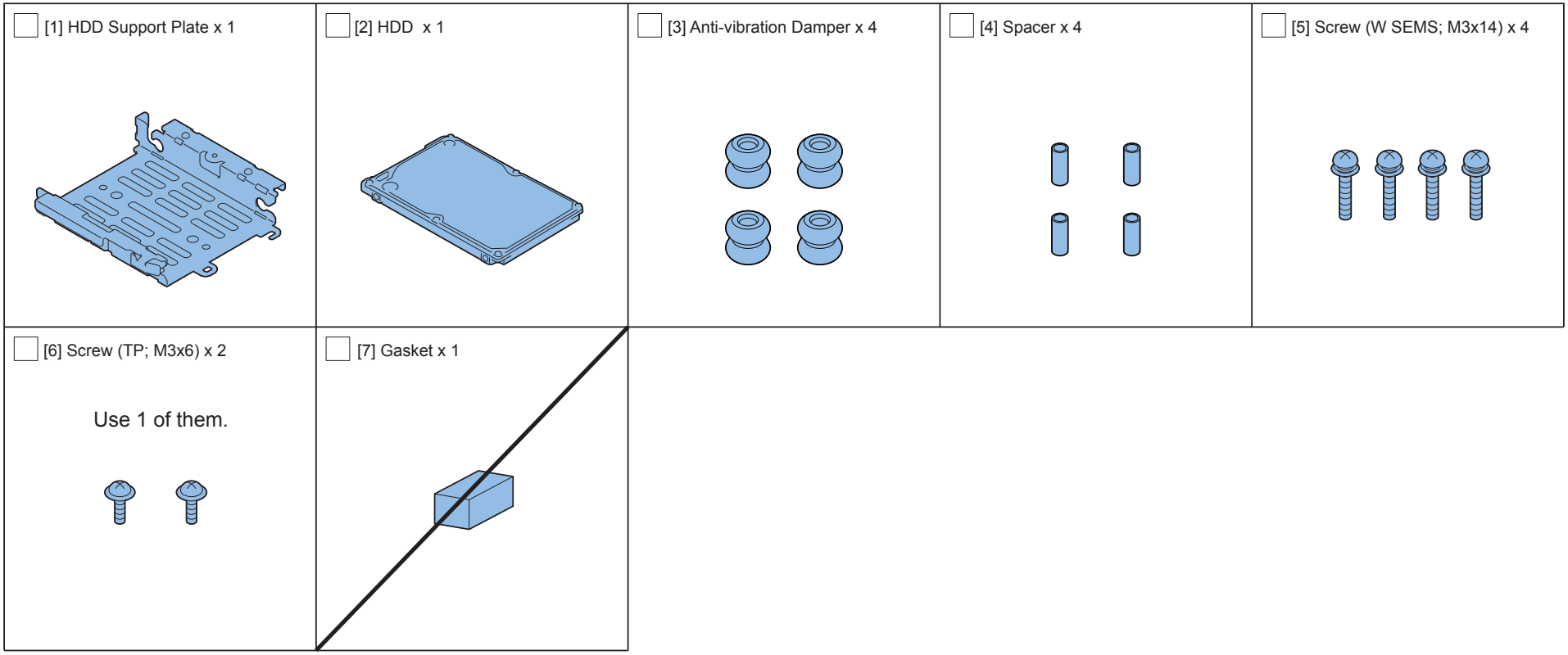
# [TYPE-4] Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (160GB)

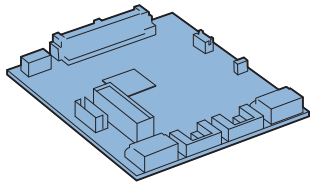
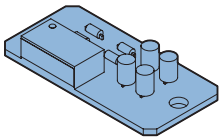
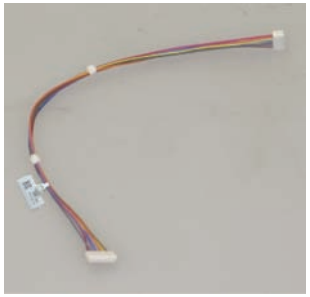
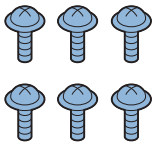
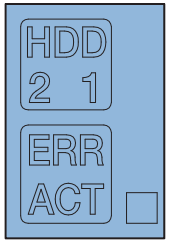



F-9-288

< CD/Guides >

- FCC/IC Sheet

## HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] Power Supply Cable (A:HDD-Pow1) X 1 | ☐ [4] Power Supply Cable (A:HDD-Pow2) X 1 | ☐ [5] Signal Cable (A:HDD-Sig1 (Red)) X 1 |
| ☐ [5] Signal Cable (A:HDD-Sig2 (Blue)) X 1 | ☐ [7] LED Cable (A:LED-Sig) X 1  | ☐ [8] Screw (TP; M3x6) X 6  | ☐ [9] LED Label X 1   | |

F-9-289

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Guide
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

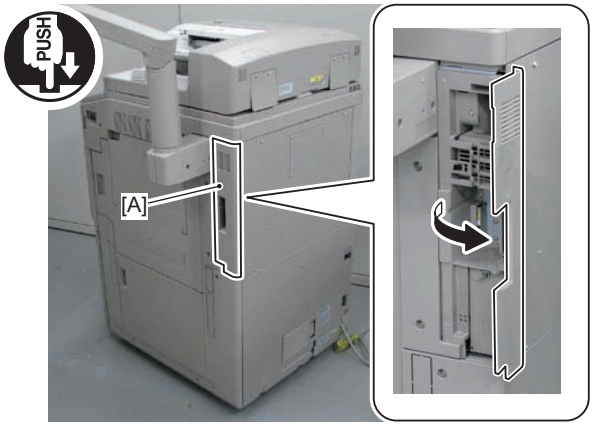
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the Covers

□

1) Push [A] part, and open the Right Rear Cover 1.

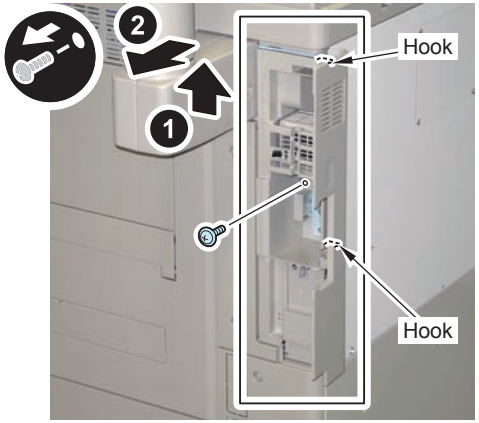



F-9-290

□

2) Remove the Side Cover.

- 1 Screw
- 2 Hooks

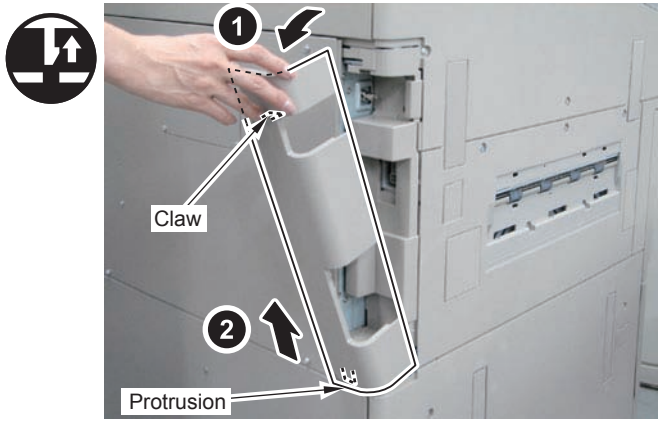



F-9-291

☐

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

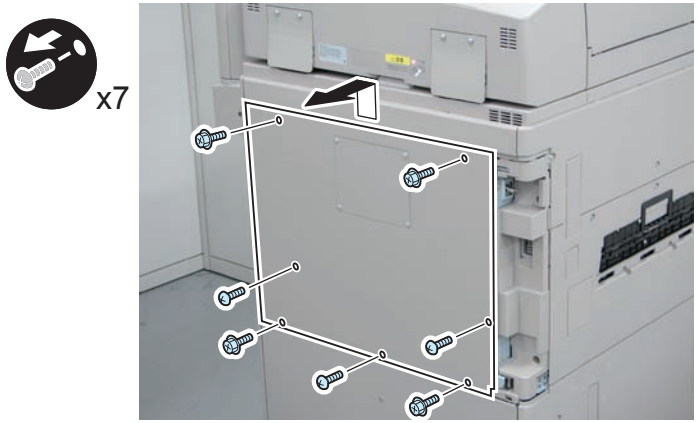



F-9-292

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

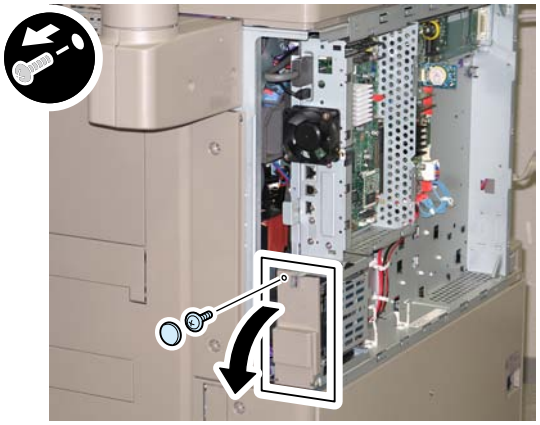



F-9-293

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw

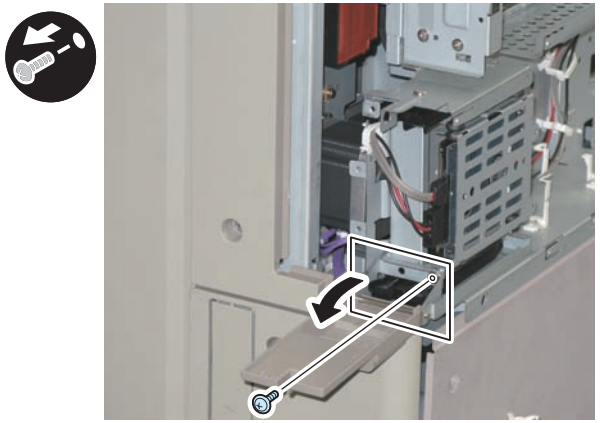


F-9-294

☐

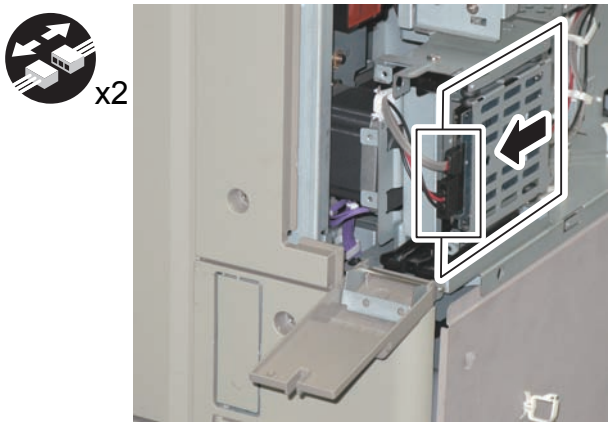
6) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will be used in “Installing the Mirroring Board or Encryption Board” step 12).)



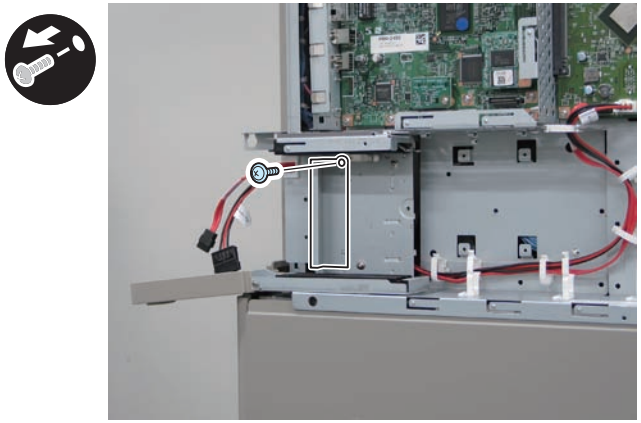
F-9-295

☐
7) Remove the HDD.
- 2 Connectors




F-9-296

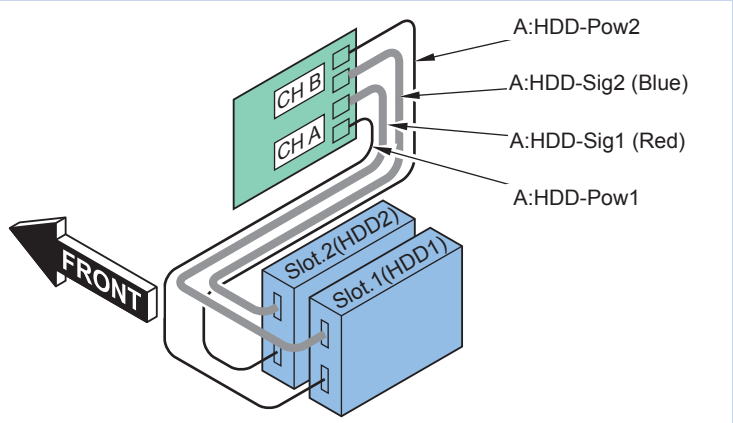
☐
9) Remove the Face Plate. (The removed Face Plate and screw will not be used.)
- 1 Screw



F-9-297

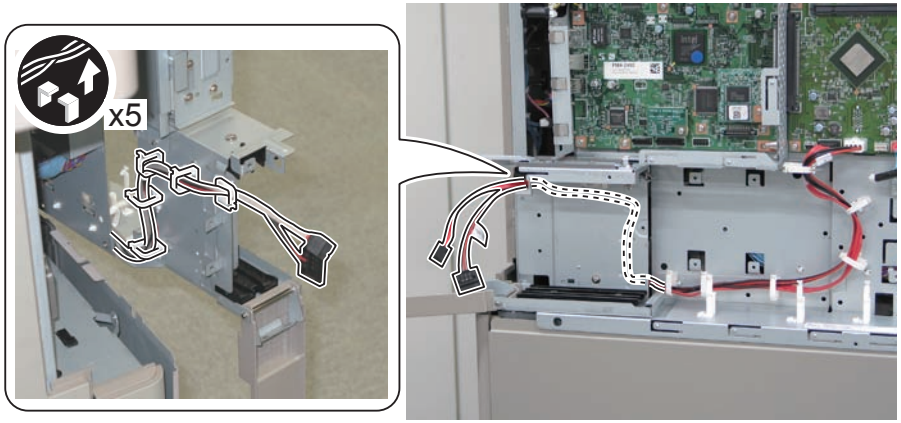
## Installing the Mirroring Board or Encryption Board

NOTE:
The following shows combination of the HDD and the Mirroring Board or Encryption Board.
- Connect “CH A” to Slot.1 (The original HDD)
- Connect “CH B” to Slot.2 (The new HDD)




F-9-298

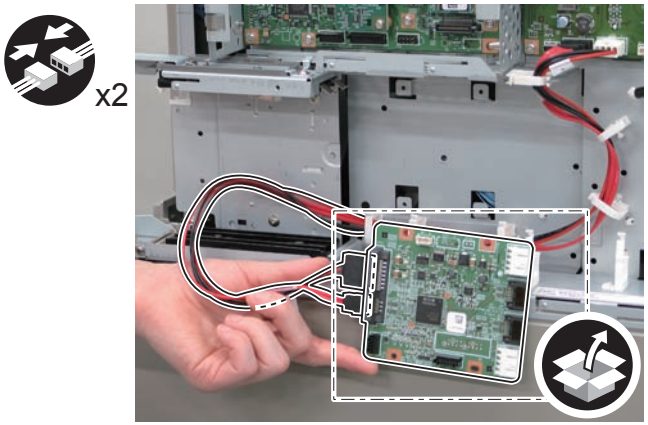
☐
1) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.




F-9-299

☐

2) Pull out the cables to the front, and connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) to the Mirroring Board or Encryption Board.



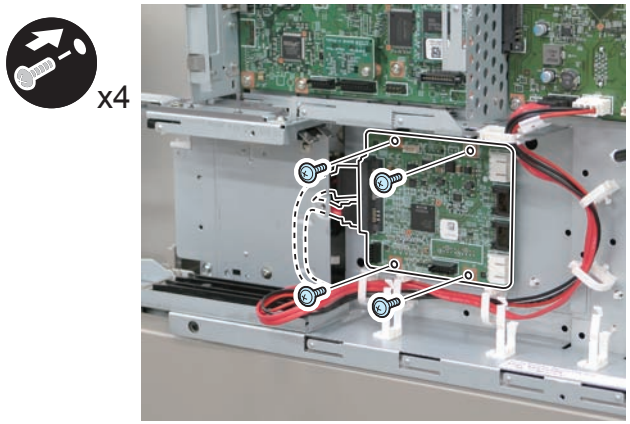

F-9-300

☐

3) Install the Mirroring Board or Encryption Board.

- 4 Screws (TP; M3x6)

NOTE:
When installing the Encryption Board, the Signal Cable (A:Cont-Sig) and Power Supply Cable (A:Cont-Pow) along the wavy line should be located on the back side of the HDD Case Unit.

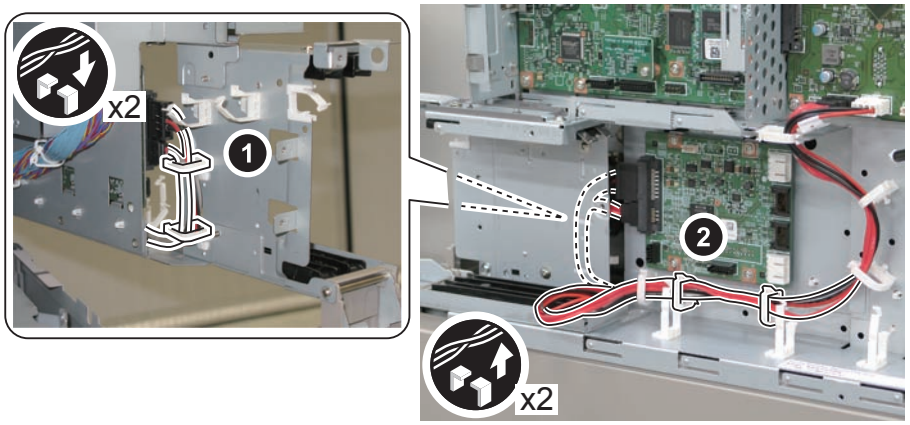



F-9-301

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

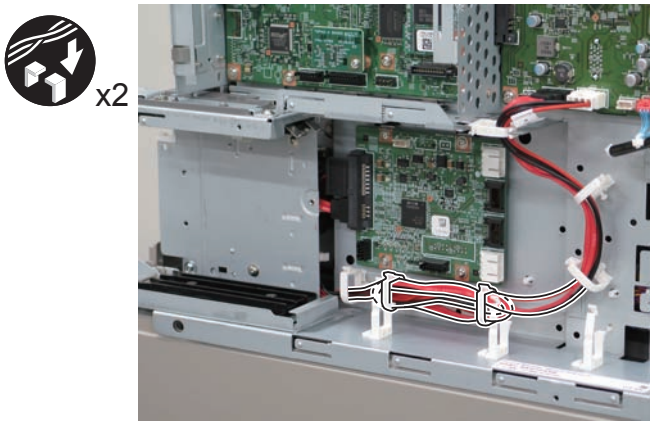
5) Free the cables from the 2 Wire Saddles at the front.




F-9-302

☐

6) Fold extra length of the cable and secure it with the 2 Wire Saddles.

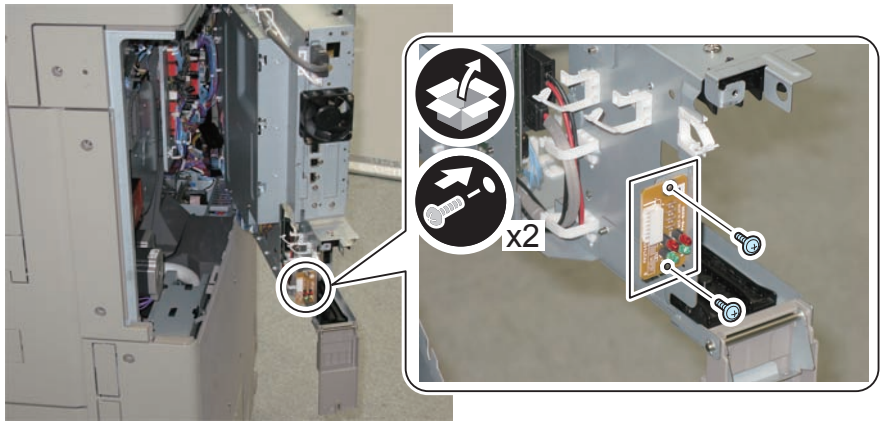



F-9-303

☐

7) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-304

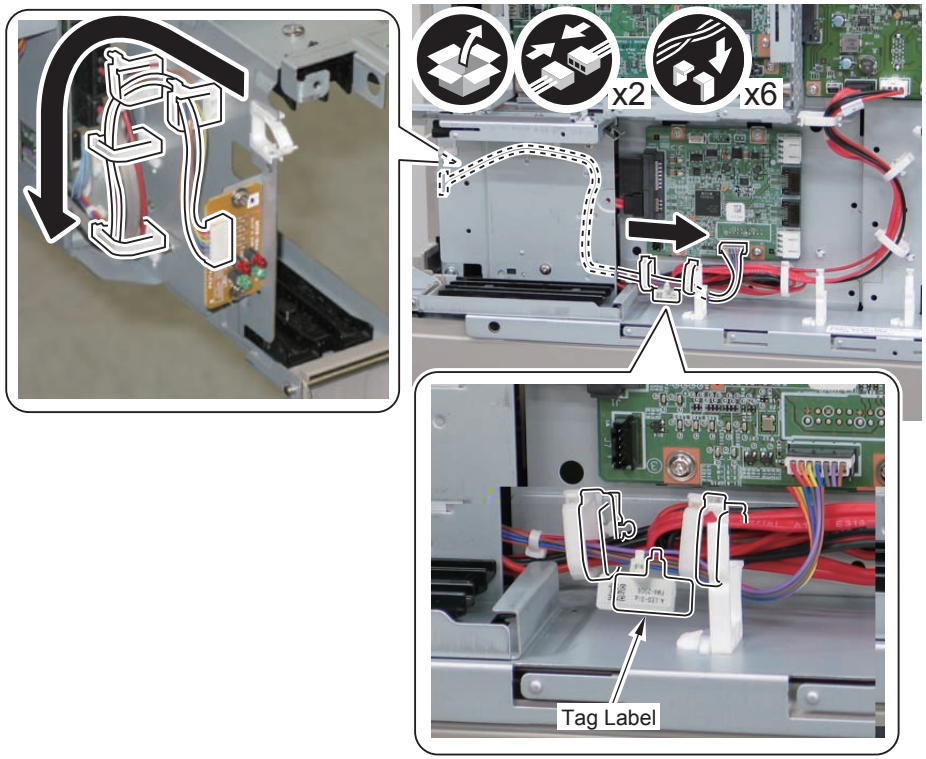
☐

8) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Mirroring Board or Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

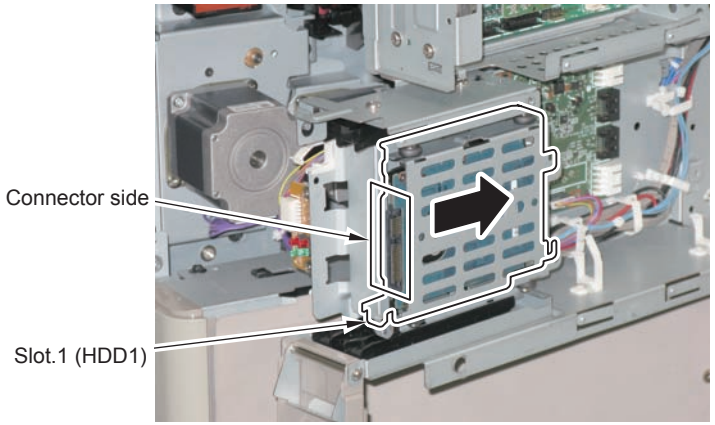
- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.




F-9-305

☐

9) Insert the removed HDD into the Slot.1.

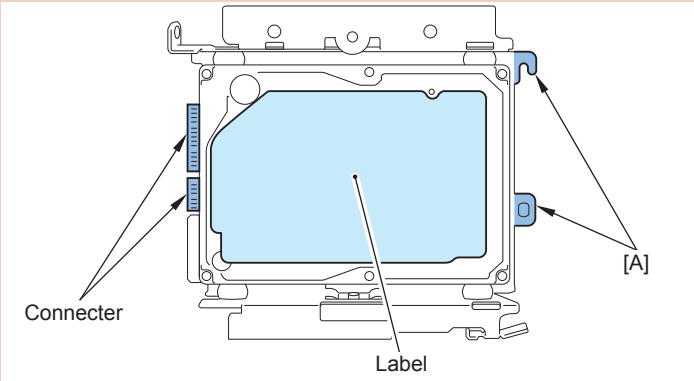



F-9-306

CAUTION:

When assembling the Option HDD, be sure to pay attention to the direction.

- Be sure that the label face of the Option HDD is up.
- Be sure that the [A] part of the HDD Support Plate is on the other side of the connecter.



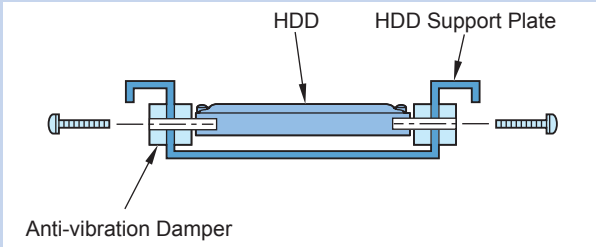

F-9-307

☐

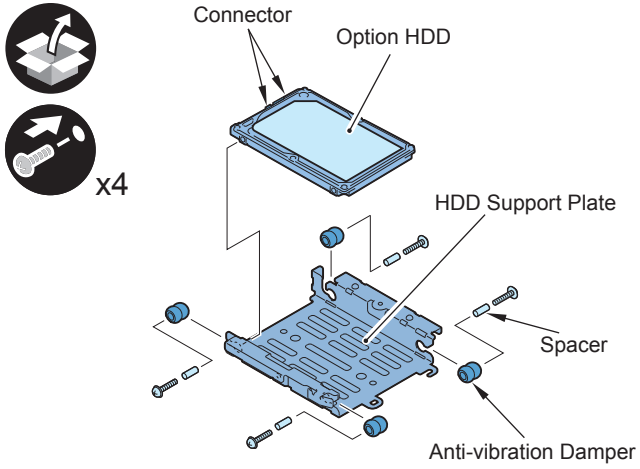
10) Assemble the Option HDD (160GB). (for the second HDD)

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



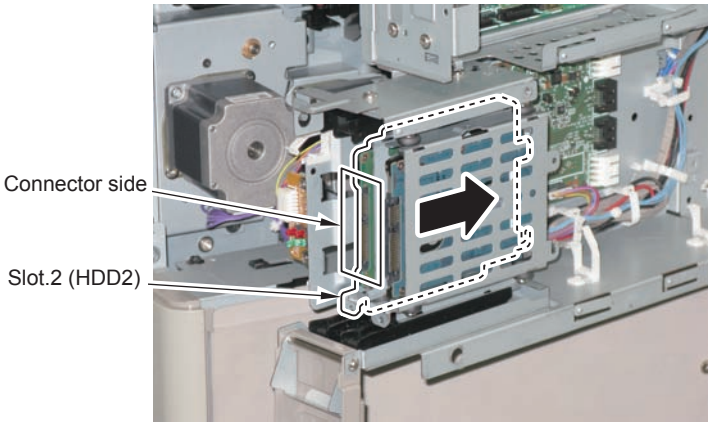

F-9-308




F-9-309

☐

11) Insert the assembled Option HDD into the Slot.2.

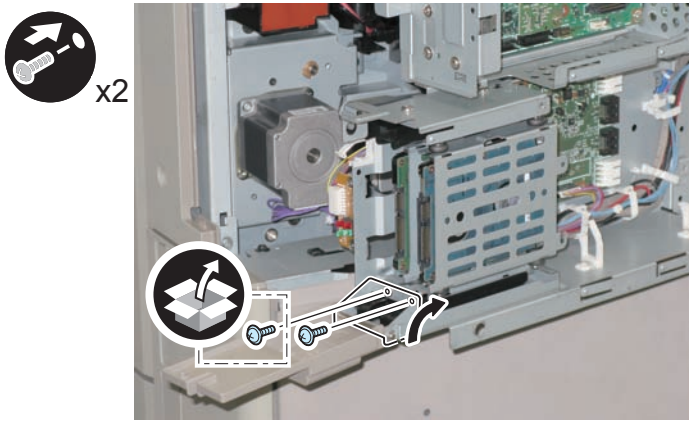



F-9-310

☐

12) Secure the HDD Fixed Plate.

- 1 screw (Use the screws removed in “Removing the Covers” step 6).)
- 1 Screw (TP; M3x6) (Use the contents included in the Option HDD.)

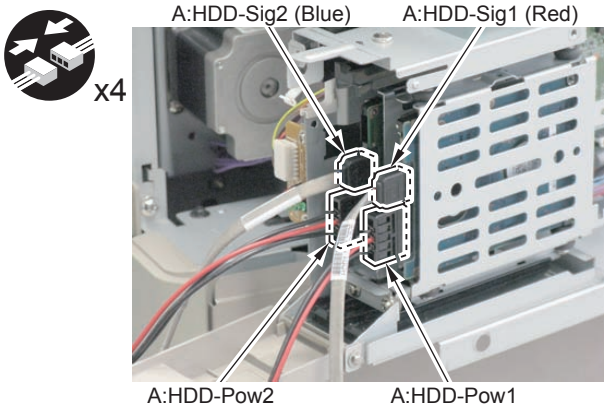



F-9-311

☐

13) Connect the Signal Cables (A:HDD-Sig1 Red) and (A:HDD-Sig2 Blue) and Power Supply Cables (A:HDD-Pow1) and (A:HDD-Pow2) included in the HDD Data Encryption/Mirroring Kit.

NOTE:
- Connect the Signal Cable (A:HDD-Sig2 Blue) and Power Supply Cable (A: HDD-Pow2) to the Slot.2.
- Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A: HDD-Pow1) to the Slot.1.




F-9-312

☐

14) Put the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) through [A] part.

15) Connect the 4 connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Mirroring Board or Encryption Board.

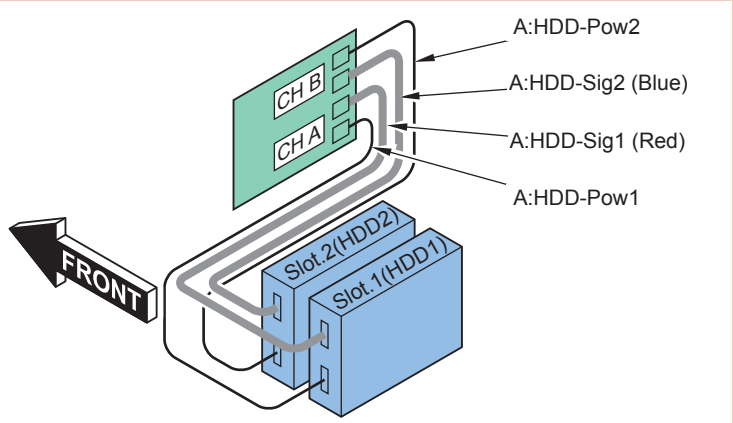
CAUTION:

- Slot.1 side:

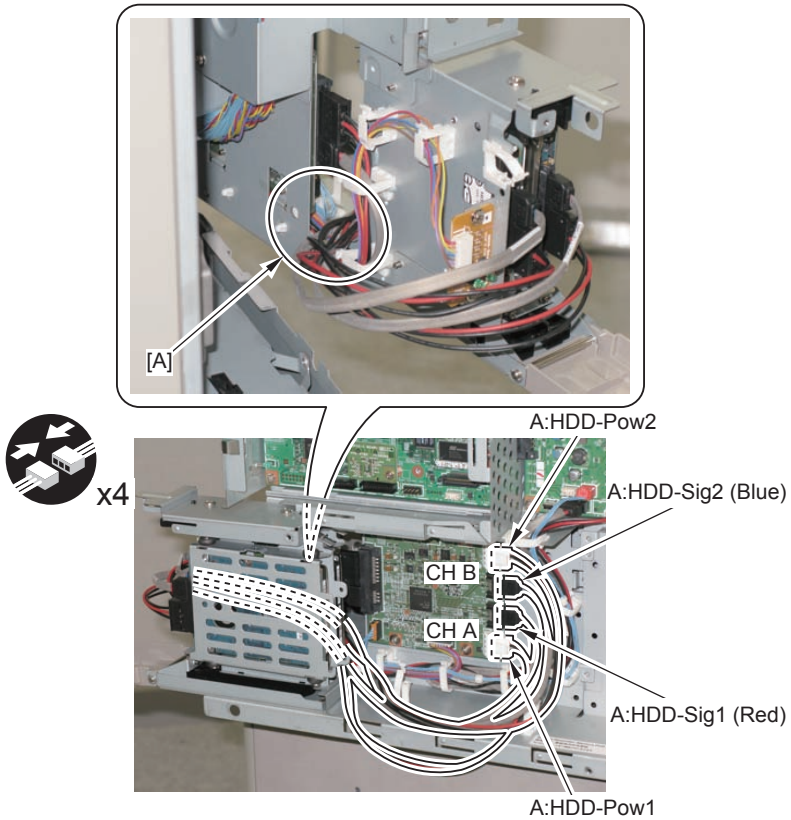
Be sure to connect "A:HDD-Sig1 (Red)" and "A:HDD-Pow1" to CH-A of the PCB.

- Slot.2 side:

Be sure to connect "A:HDD-Sig2 (Blue)" and "A:HDD-Pow2" to CH-B of the PCB.




F-9-313




F-9-314

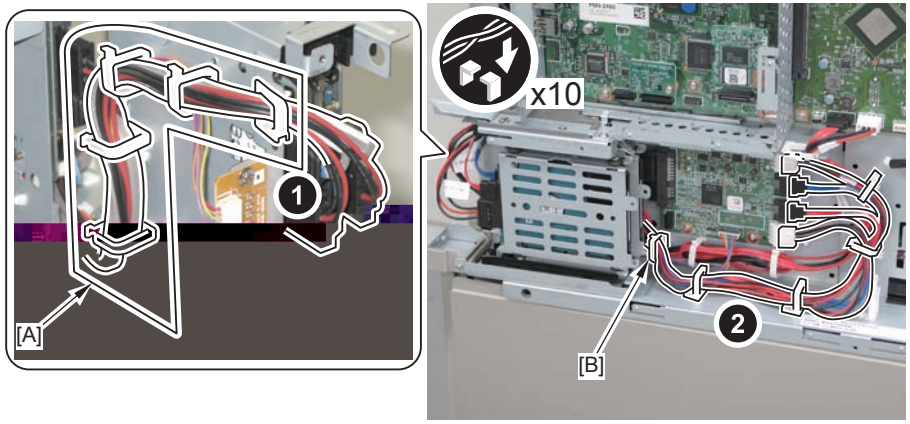
☐

16) Secure the Signal Cables (A:HDD-Sig1 Red) and (A:HDD-Sig2 Blue) and Power Supply Cables (A:HDD-Pow1) and (A:HDD-Pow2) as shown in the figure.

- 1 Edger Saddle
- 9 Wire Saddles

CAUTION:

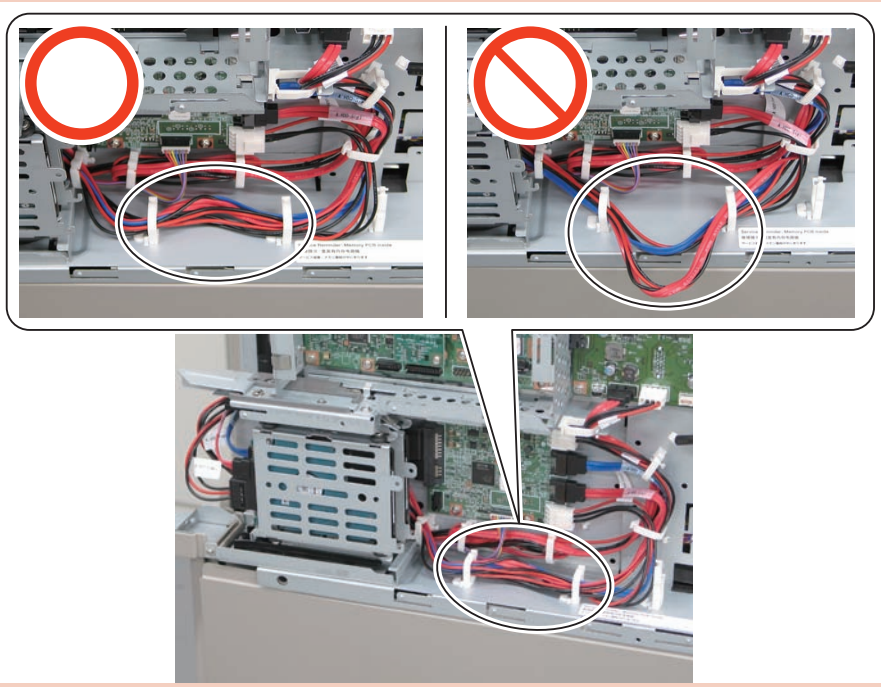
- Secure the cables so that there is no extra slack of the cables at [A] part.
- Be sure that the Wire Saddle [B] is properly securing the cables.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-315

CAUTION:

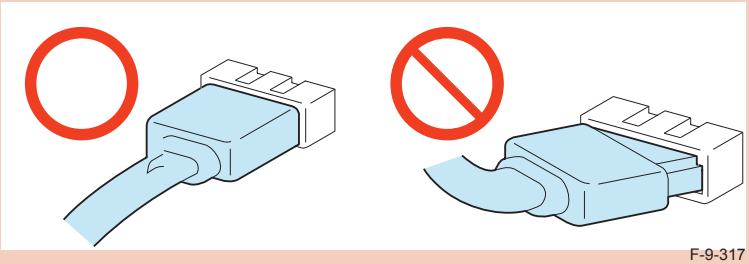
If there is extra slack of the cables, be sure to tuck them to the host machine side.



F-9-316

CAUTION:

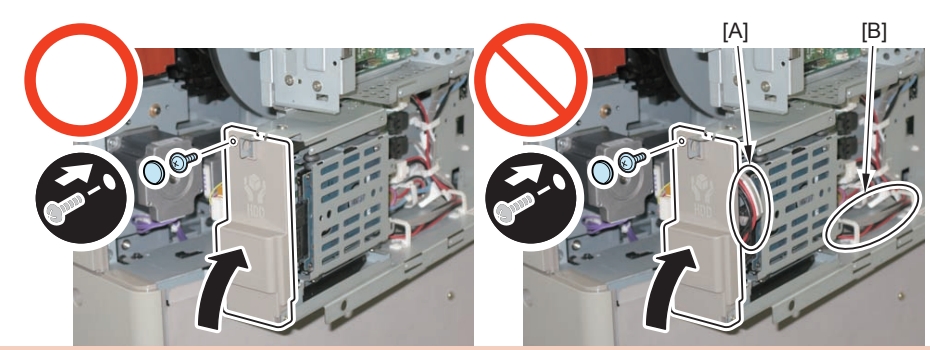
Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-317

☐
17) Close the HDD Cap.
- 1 Screw
- 1 Rubber Cap

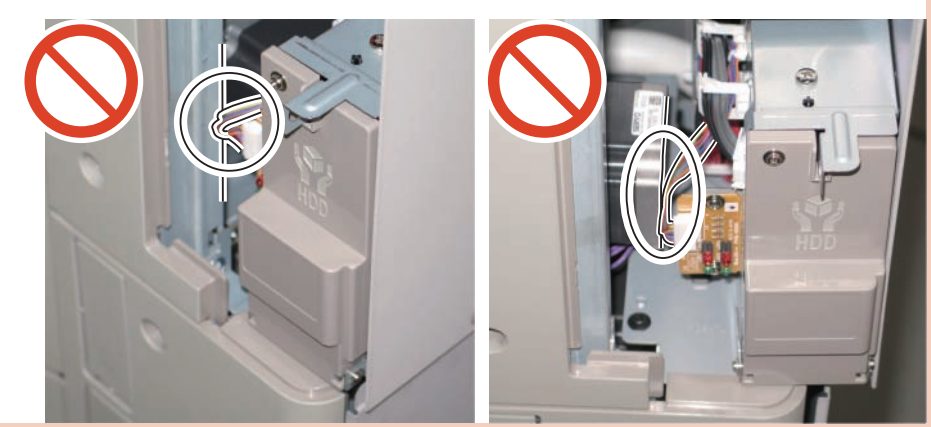
CAUTION:
- Be sure that the cables do not protrude from the [A] part of the HDD Cap.
- If the cables protrude from the [A] part, allow extra slack of the cables at the [B] part and tuck them to the host machine side.




F-9-318

☐
18) Close the Controller Box.

CAUTION:
When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



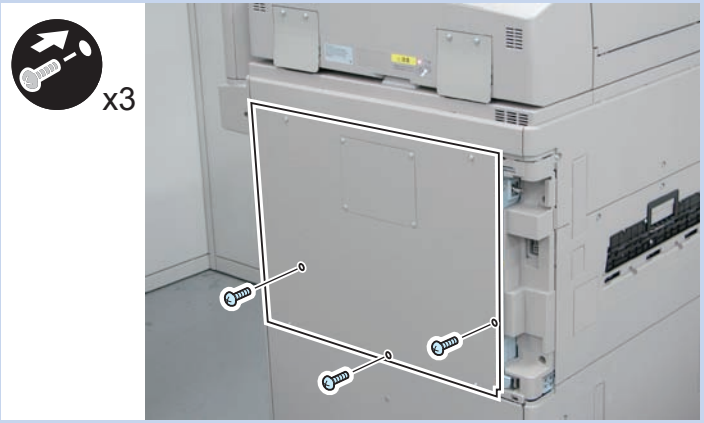
F-9-319

☐

19) Install the Rear Upper Cover.

- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.

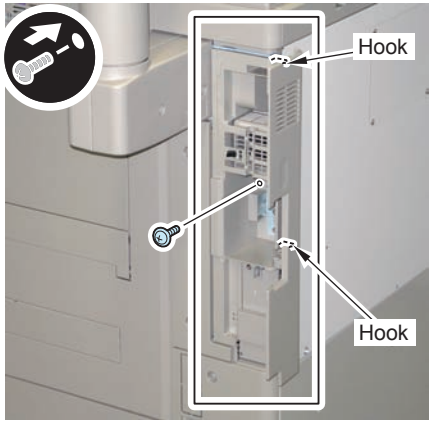



F-9-320

☐

20) Install the Side Cover.

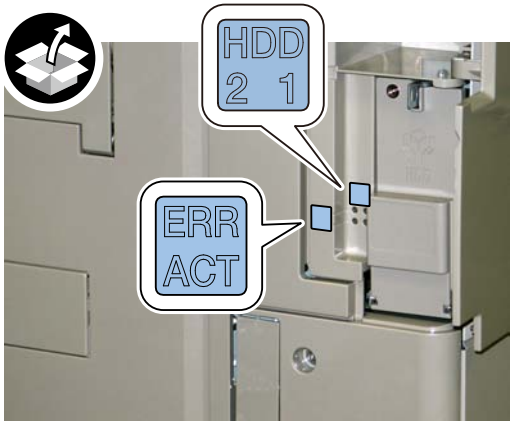
- 2Hooks
- 1 Screw




F-9-321

☐

21) Affix the LED Label.




F-9-322

☐

22) Close the Right Rear Cover 1.

23) Return the Left Rear Cover to its original position.

24) Connect the power plug to the outlet.

25) Turn ON the main power switch. (Only when installing HDD Mirroring Kit)

## Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit)

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

1) Make a setting of mirroring.
- Specify “1” under “Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID”.

2) Turn OFF/ON the main power of the host machine to enable the setting value.
3) Make sure that the UI screen is activated correctly.
4) Make sure that the LED blinks.
- HDD1 (Slot 1): The green LED blinks.
- HDD2 (Slot 2): The green and red LEDs blink.

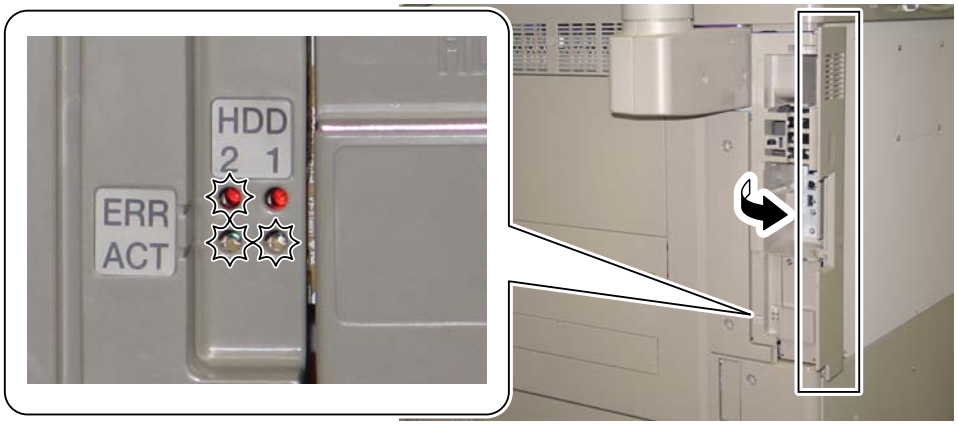
CAUTION:

Rebuild process starts after setting “1” for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

1) Check that the lighting red LED is HDD2.
2) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set “0”.
3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
4) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set "1".
5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.




F-9-323

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

9-158
9 Installation > [TYPE-4] Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > Execution of Auto Adjust Gradation (O

9-159
9 Installation > [TYPE-4] Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > Execution of Auto Adjust Gradation (O

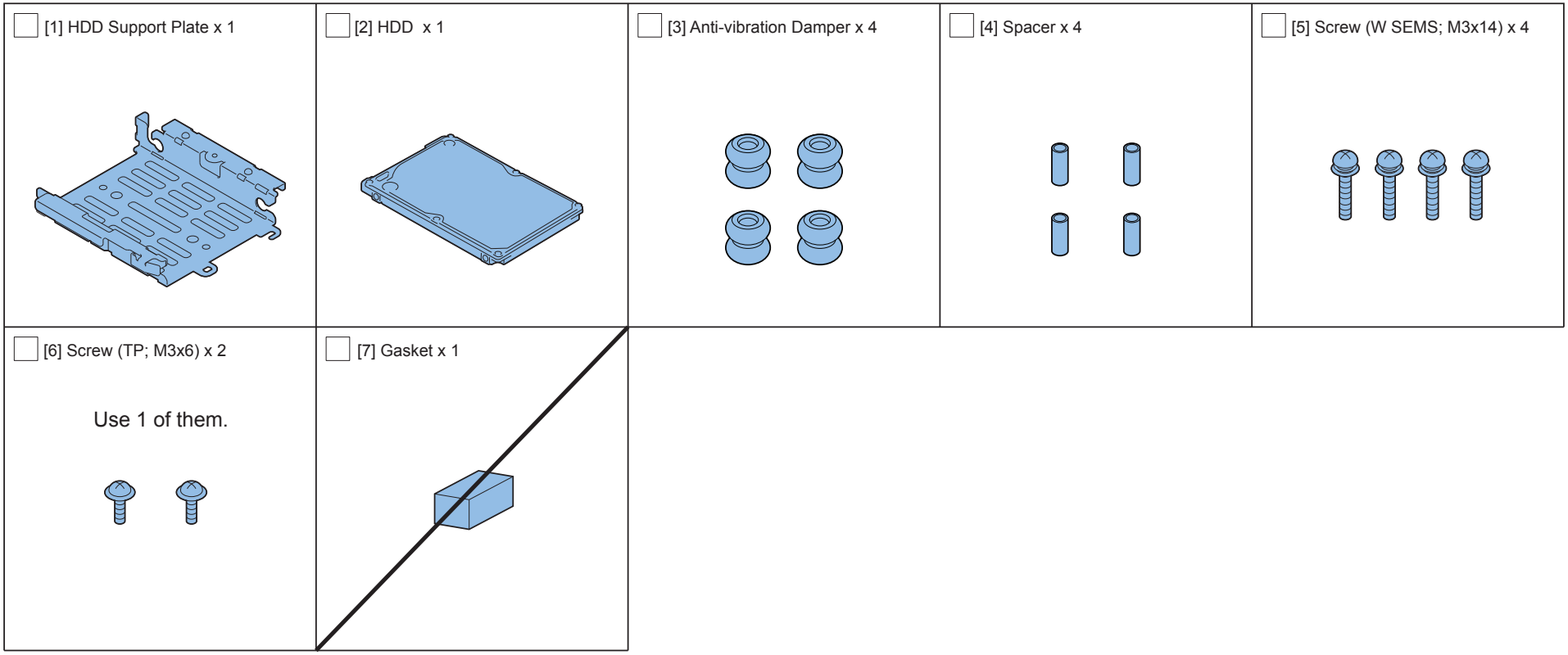
# [TYPE-5] 2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)

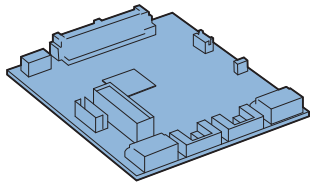
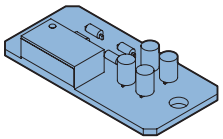
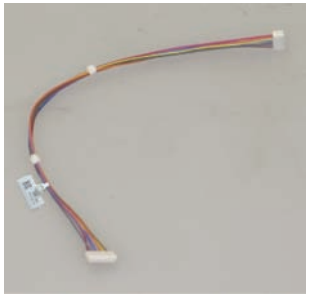
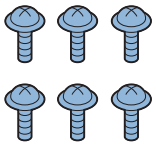
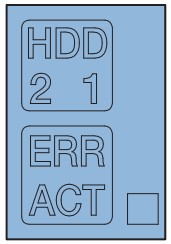



< CD/Guides >

- FCC/IC Sheet

F-9-324

## HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] Power Supply Cable (A:HDD-Pow1) X 1 | ☐ [4] Power Supply Cable (A:HDD-Pow2) X 1 | ☐ [5] Signal Cable (A:HDD-Sig1 (Red)) X 1 |
| ☐ [5] Signal Cable (A:HDD-Sig2 (Blue)) X 1 | ☐ [7] LED Cable (A:LED-Sig) X 1  | ☐ [8] Screw (TP; M3x6) X 6  | ☐ [9] LED Label X 1   | |

F-9-325

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Guide
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

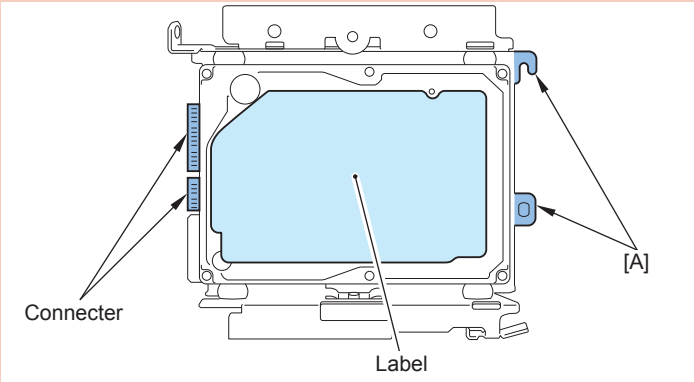
## Installation Procedure

### Assembling the Option HDD

CAUTION:

When assembling the Option HDD, be sure to pay attention to the direction.

- Be sure that the label face of the Option HDD is up.
- Be sure that the [A] part of the HDD Support Plate is on the other side of the connecter.



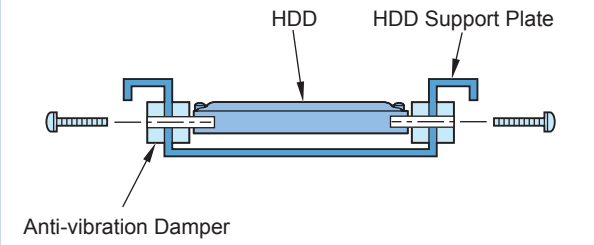

F-9-326

□

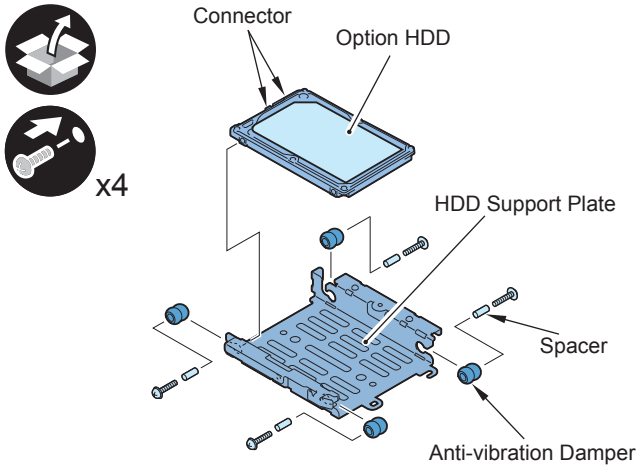
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.




F-9-327




F-9-328

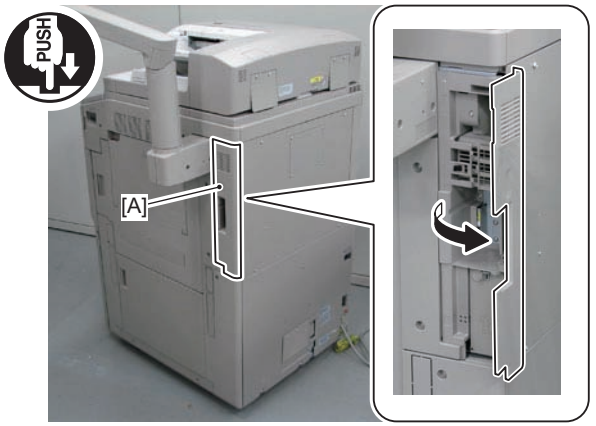
□

2) Assemble the other Option HDD (1TB) in the same way.

## Removing the Covers

□

1) Push [A] part, and open the Right Rear Cover 1.

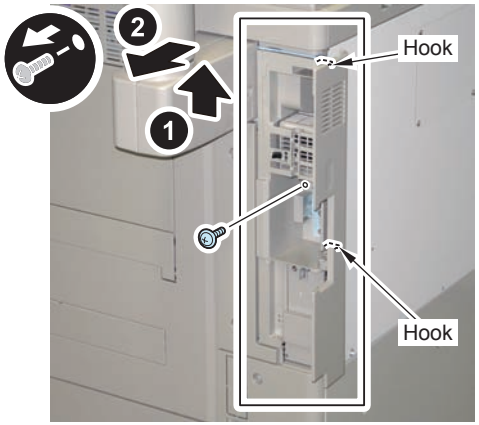



F-9-329

□

2) Remove the Side Cover.

- 1 Screw
- 2 Hooks

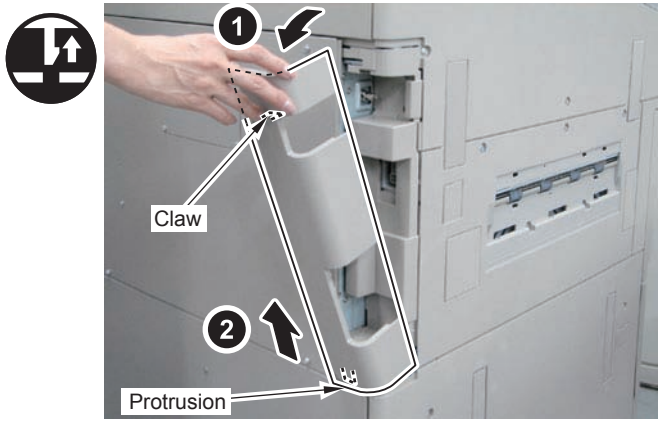



F-9-330

☐

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

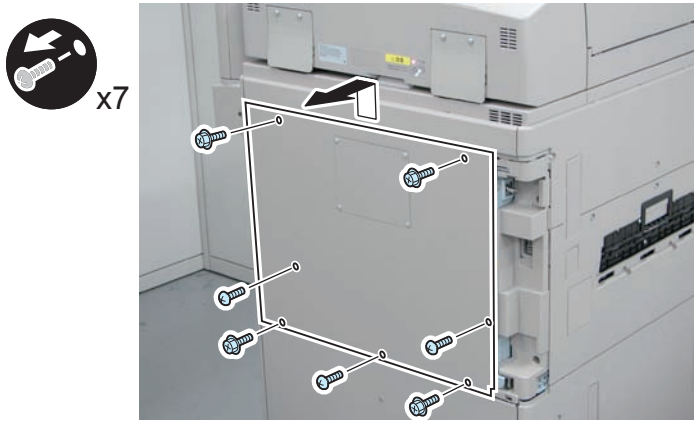



F-9-331

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

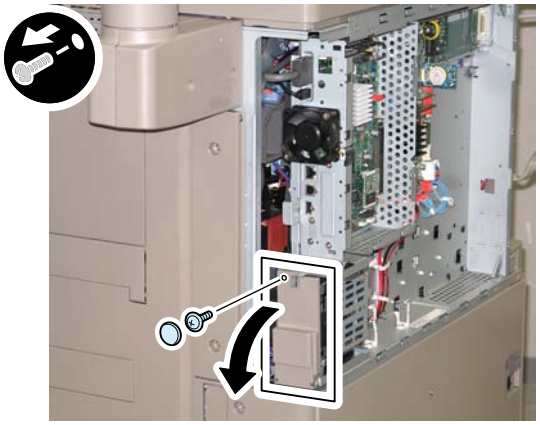



F-9-332

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw

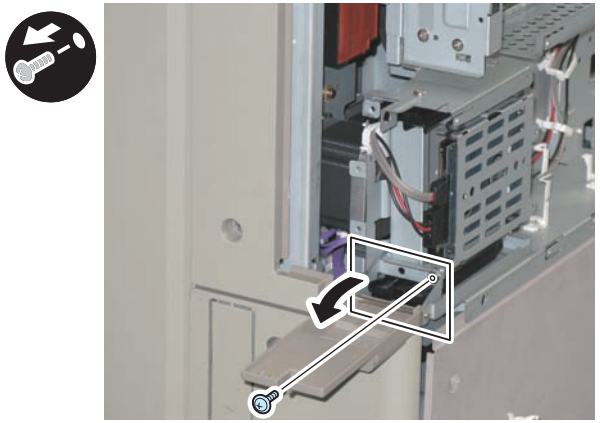


F-9-333

☐

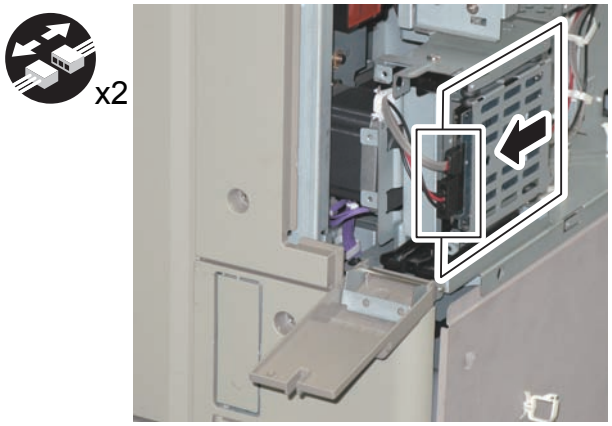
6) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will be used in “Installing the Mirroring Board or Encryption Board” step 10).)



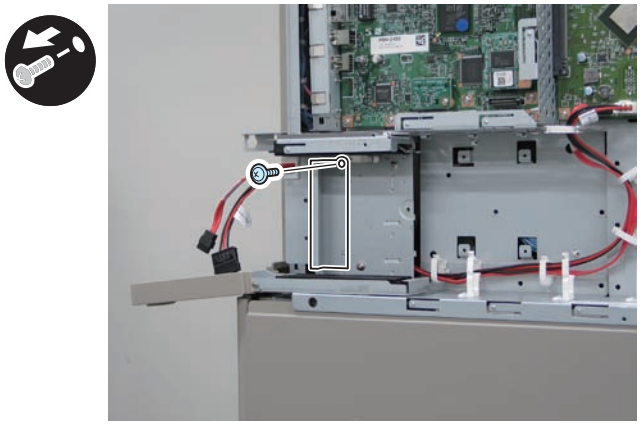
F-9-334

☐
7) Remove the HDD. (The removed HDD will not be used.)
- 2 Connectors




F-9-335

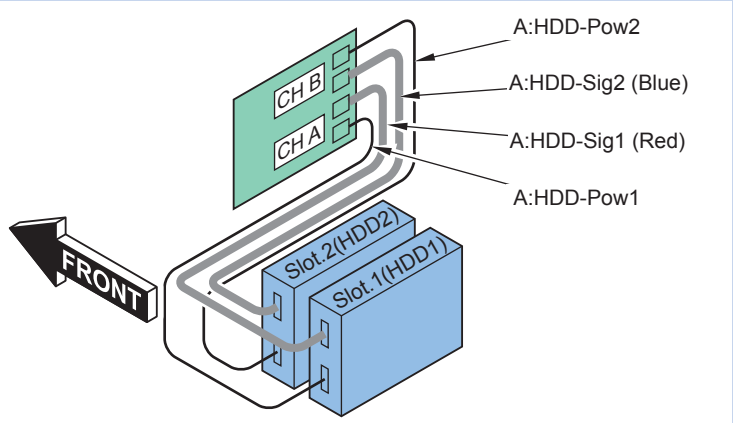
☐
9) Remove the Face Plate. (The removed Face Plate and screw will not be used.)
- 1 Screw



F-9-336

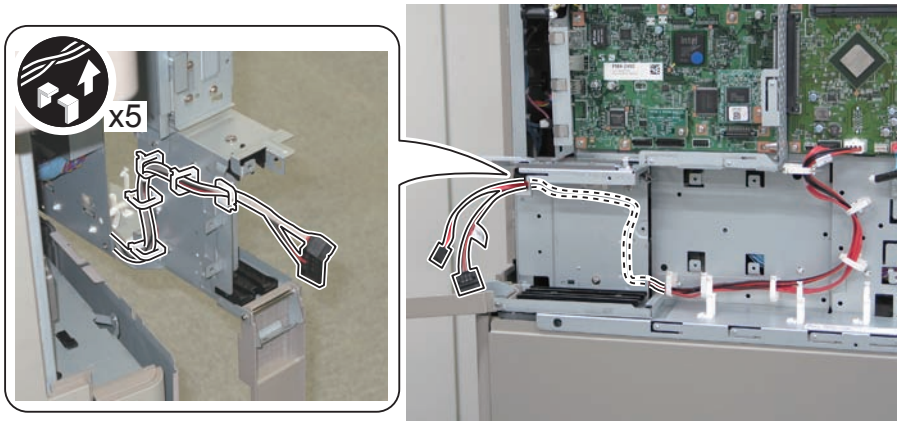
## Installing the Mirroring Board or Encryption Board

NOTE:
The following shows combination of the HDD and the Mirroring Board or Encryption Board.
- Connect “CH A” to Slot.1 (The new HDD)
- Connect “CH B” to Slot.2 (The new HDD)



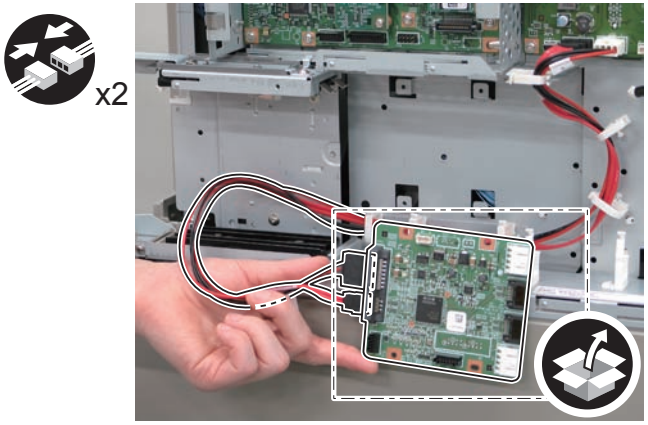

F-9-337

1) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.




F-9-338

2) Pull out the cables to the front, and connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) to the Mirroring Board or Encryption Board.

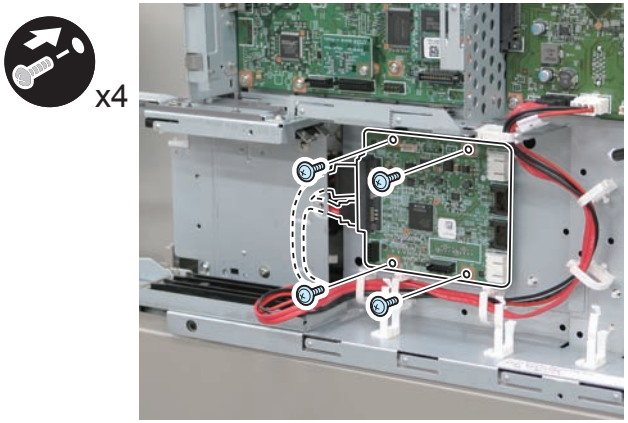



F-9-339

3) Install the Mirroring Board or Encryption Board.

- 4 Screws (TP; M3x6)

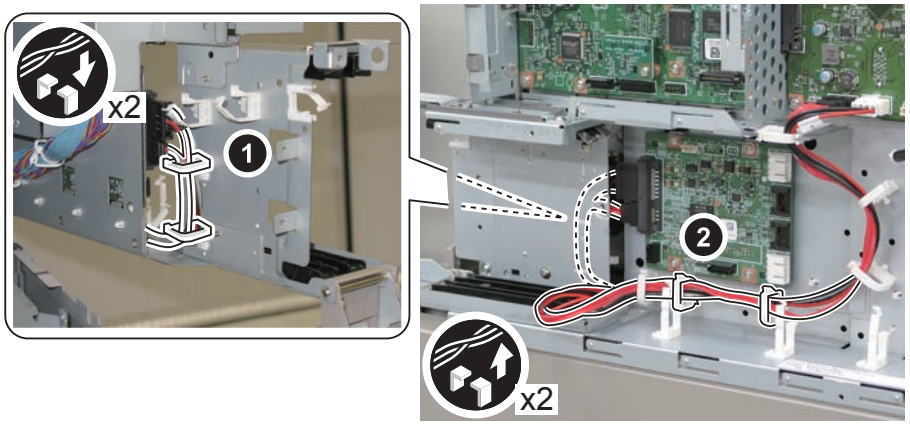
NOTE:
When installing the Encryption Board, the Signal Cable (A:Cont-Sig) and Power Supply Cable (A:Cont-Pow) along the wavy line should be located on the back side of the HDD Case Unit.




F-9-340

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

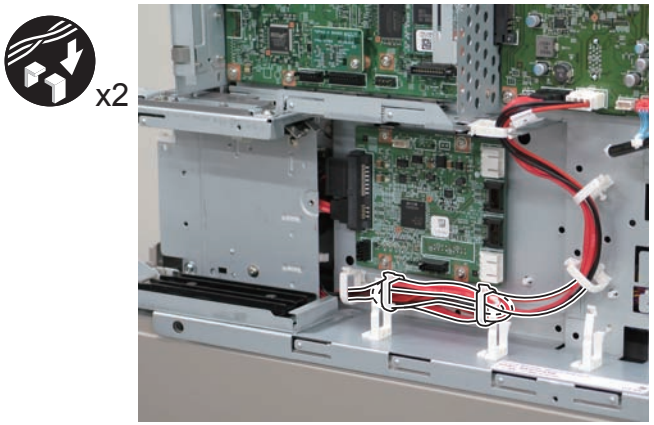
5) Free the cables from the 2 Wire Saddles at the front.




F-9-341

☐

6) Fold extra length of the cable and secure it with the 2 Wire Saddles.

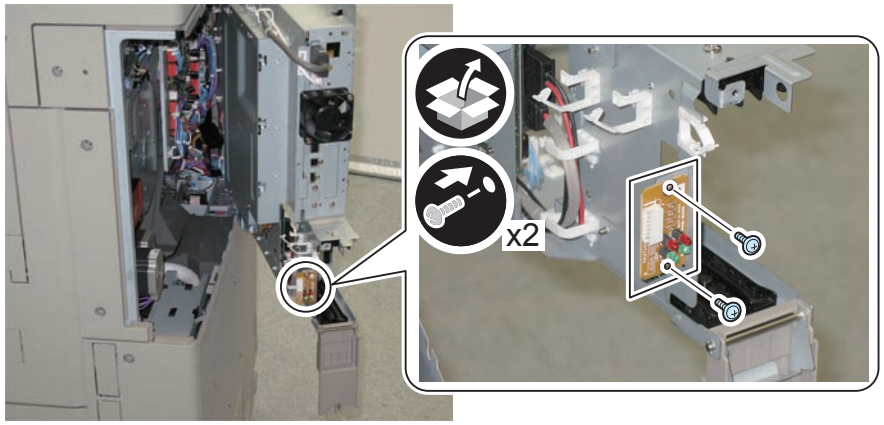



F-9-342

☐

7) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-343

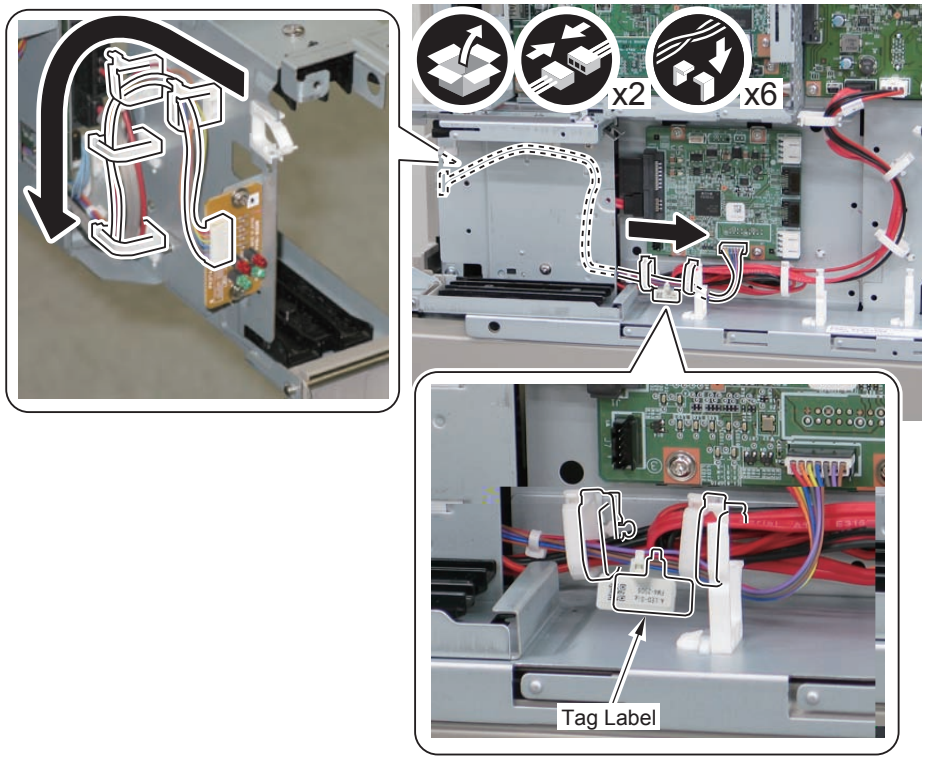
☐

8) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Mirroring Board or Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.

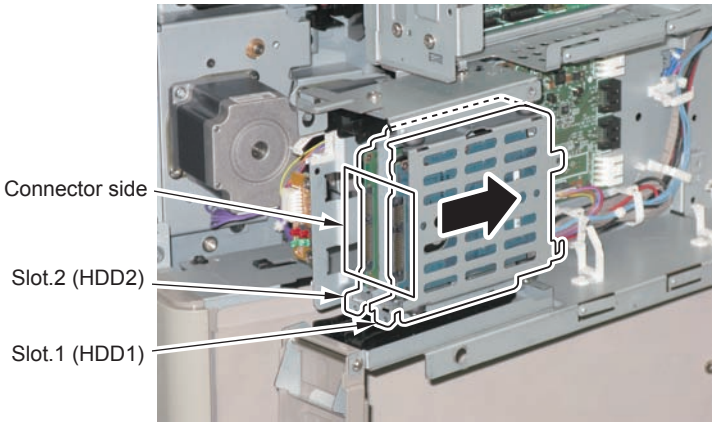



F-9-344

•

☐

9) Insert the assembled 2 Option HDDs.

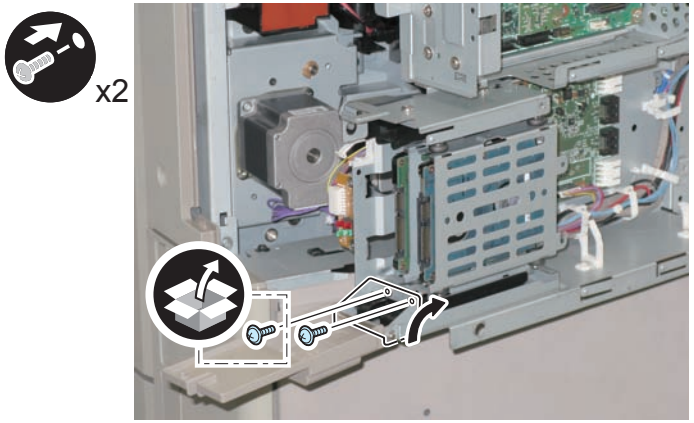



F-9-345

☐

10) Secure the HDD Fixed Plate.

- 1 screw (Use the screws removed in “Removing the Covers” step 6).)
- 1 Screw (TP; M3x6) (Use the contents included in the Option HDD.)

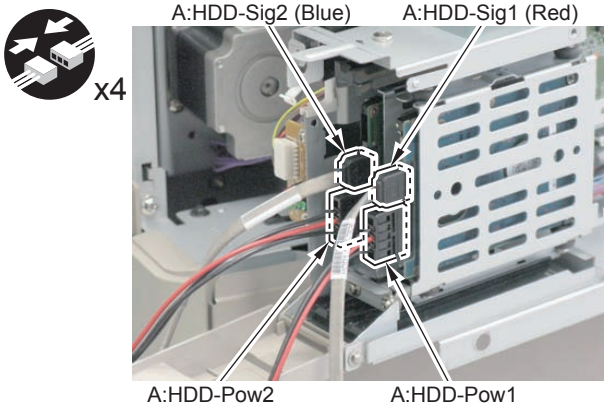



F-9-346

☐

11) Connect the Signal Cables (A:HDD-Sig1 Red) and (A:HDD-Sig2 Blue) and Power Supply Cables (A:HDD-Pow1) and (A:HDD-Pow2) included in the HDD Data Encryption/Mirroring Kit.

NOTE:
- Connect the Signal Cable (A:HDD-Sig2 Blue) and Power Supply Cable (A: HDD-Pow2) to the Slot.2.
- Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A: HDD-Pow1) to the Slot.1.




F-9-347

☐

12) Put the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) through [A] part.

13) Connect the 4 connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Mirroring Board or Encryption Board.

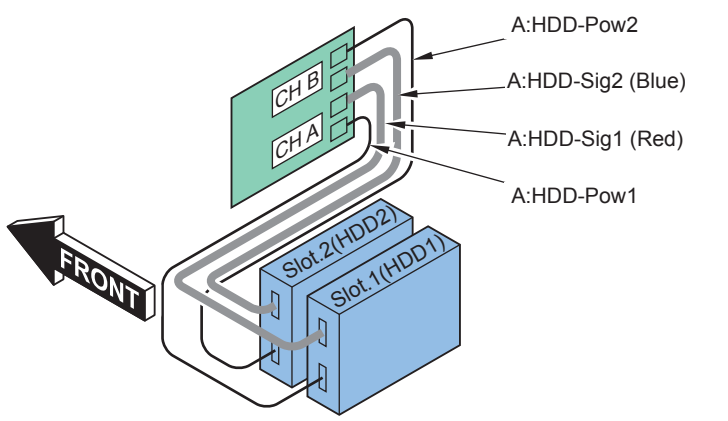
CAUTION:

- Slot.1 side:

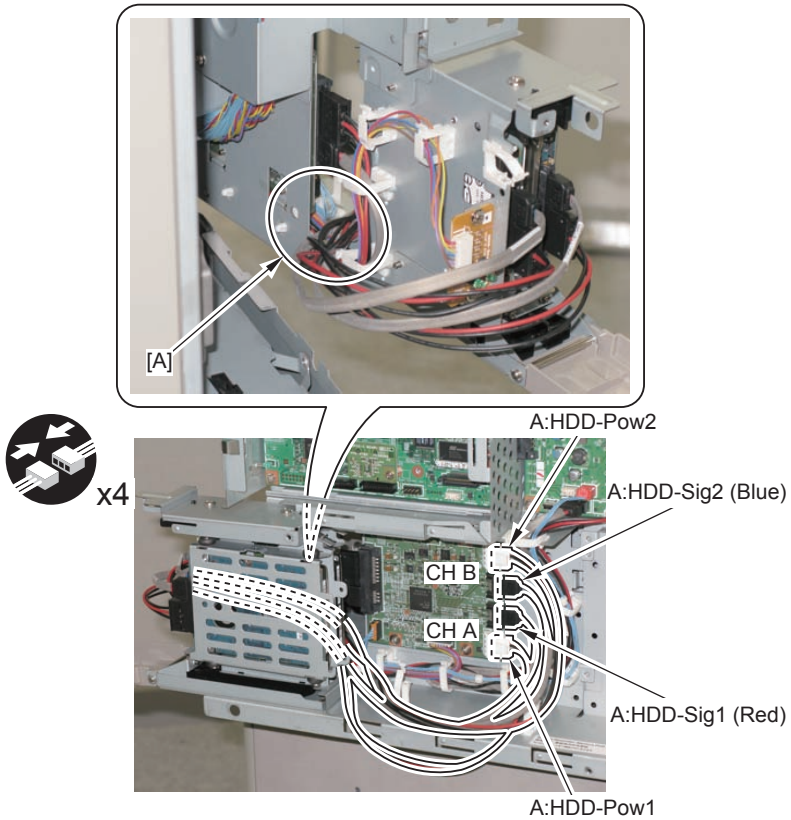
Be sure to connect "A:HDD-Sig1 (Red)" and "A:HDD-Pow1" to CH-A of the PCB.

- Slot.2 side:

Be sure to connect "A:HDD-Sig2 (Blue)" and "A:HDD-Pow2" to CH-B of the PCB.




F-9-348




F-9-349

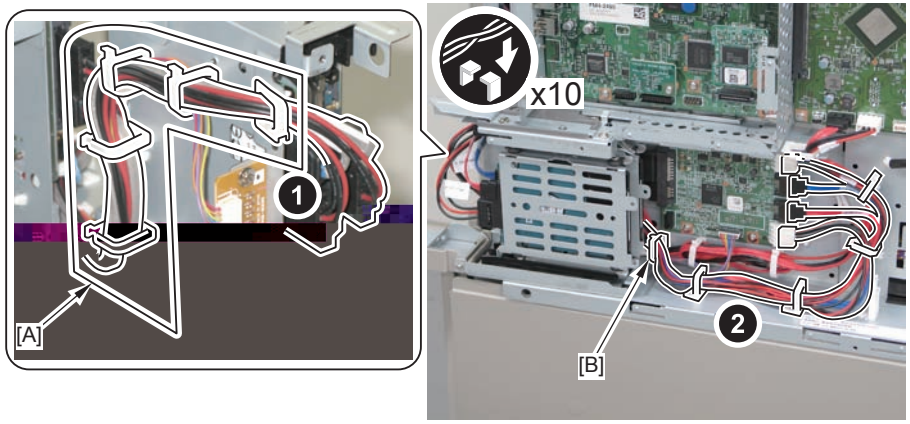
☐

14) Secure the Signal Cables (A:HDD-Sig1 Red) and (A:HDD-Sig2 Blue) and Power Supply Cables (A:HDD-Pow1) and (A:HDD-Pow2) as shown in the figure.

- 1 Edger Saddle
- 9 Wire Saddles

CAUTION:

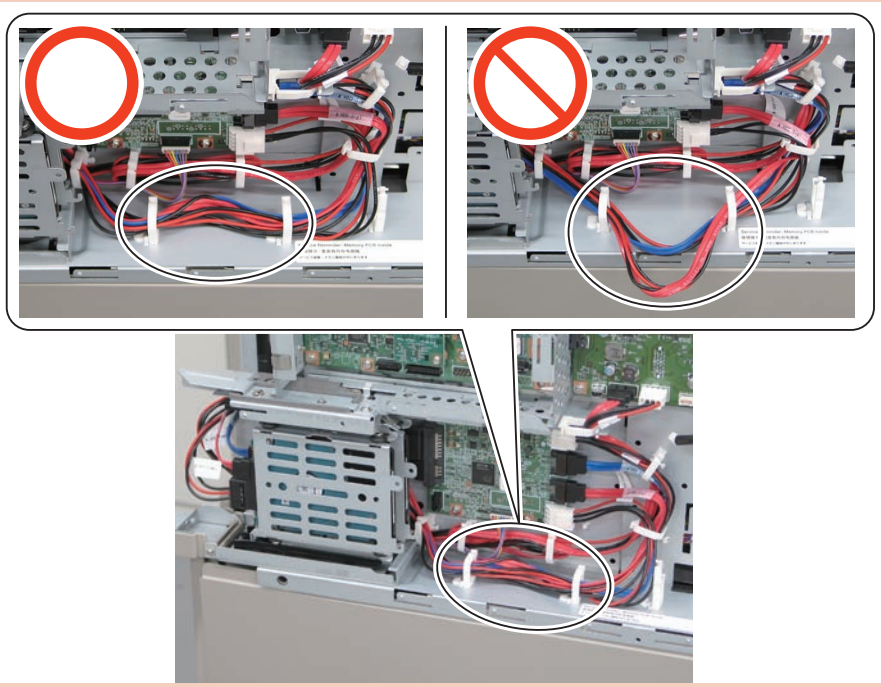
- Secure the cables so that there is no extra slack of the cables at [A] part.
- Be sure that the Wire Saddle [B] is properly securing the cables.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-350

CAUTION:

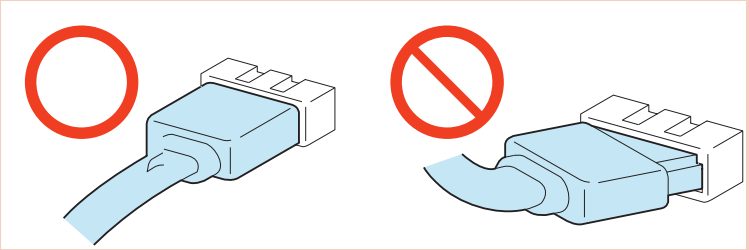
If there is extra slack of the cables, be sure to tuck them to the host machine side.



F-9-351

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-352

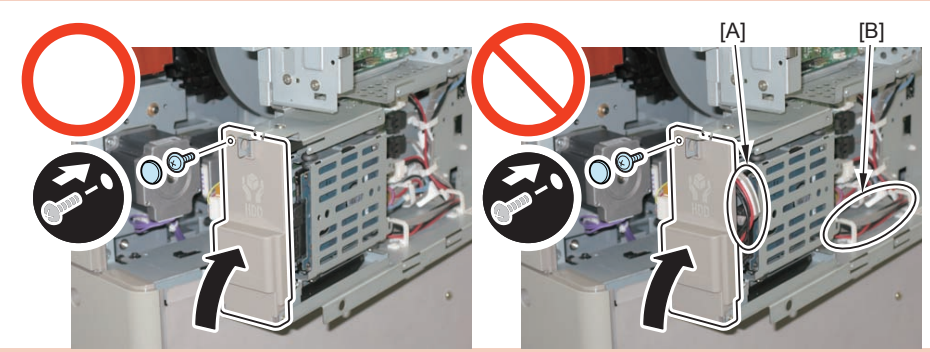
☐

15) Close the HDD Cap.

- 1 Screw
- 1 Rubber Cap

CAUTION:

- Be sure that the cables do not protrude from the [A] part of the HDD Cap.
- If the cables protrude from the [A] part, allow extra slack of the cables at the [B] part and tuck them to the host machine side.



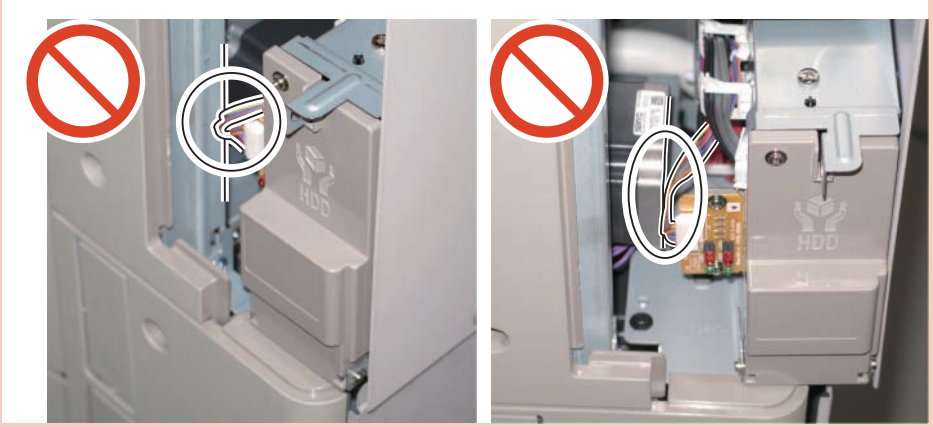

F-9-353

☐

16) Close the Controller Box.

CAUTION:

When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



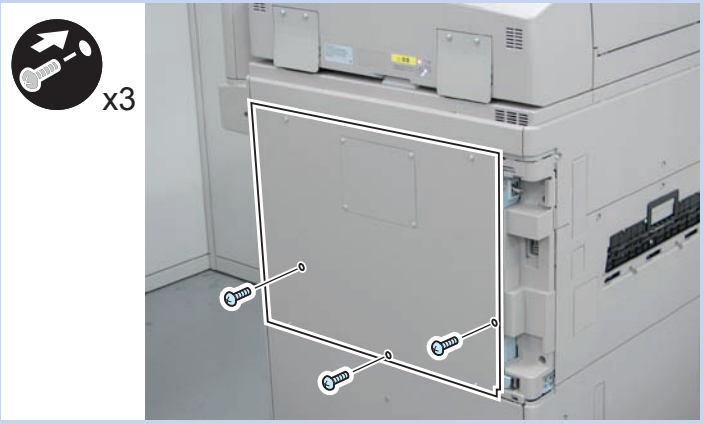
F-9-354

☐

17) Install the Rear Upper Cover.

- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.

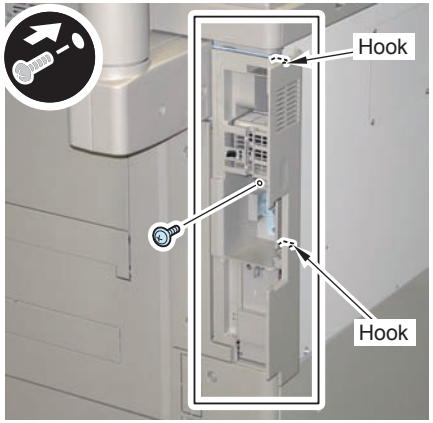



F-9-355

☐

18) Install the Side Cover.

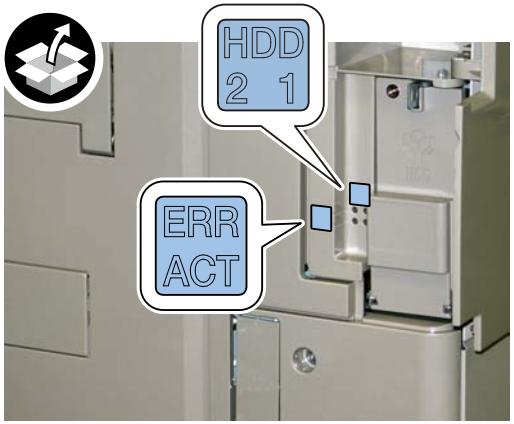
- 2 Hooks
- 1 Screw




F-9-356

☐

19) Affix the LED Label.




F-9-357

☐

20) Close the Right Rear Cover 1.

21) Return the Left Rear Cover to its original position.

22) Connect the power plug to the outlet.

## Installing the System Software Using the SST (Only when installing HDD Data Encryption & Mirroring Kit)

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version (Only when installing HDD Data Encryption & Mirroring Kit)

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

## Checking the Security Mark (Only when installing HDD Data Encryption & Mirroring Kit)

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Setting the Mirroring

1) Make a setting of mirroring.
- Specify “1” under “Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID”.

2) Turn OFF/ON the main power of the host machine to enable the setting value.
3) Make sure that the UI screen is activated correctly.
4) Make sure that the LED blinks.
- HDD1 (Slot 1): The green LED blinks.
- HDD2 (Slot 2): The green and red LEDs blink.

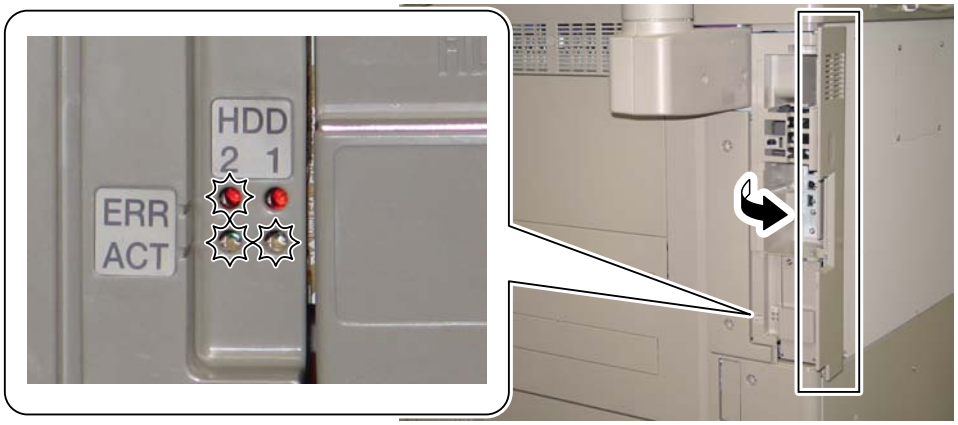
CAUTION:

Rebuild process starts after setting “1” for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

1) Check that the lighting red LED is HDD2.
2) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set “0”.
3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
4) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set "1".
5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.




F-9-358

## Reporting to the System Administrator at the End of the Work (Only when installing HDD Data Encryption & Mirroring Kit)

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Adjust Gradation (Only when installing HDD Data Encryption & Mirroring Kit)

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

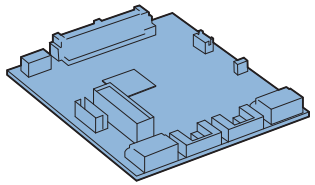
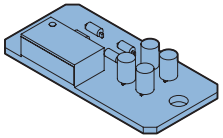
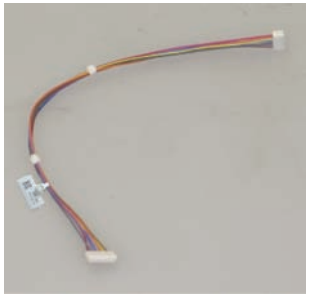
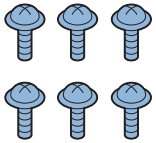
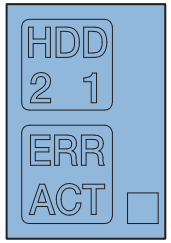
9-183
9 Installation > [TYPE-5] 2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > Execution of Auto Adjust Gradation (C

# [TYPE-6] HDD Data Encryption & Mirroring Kit

## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] Power Supply Cable (A:HDD-Pow1) X 1 | ☐ [4] Power Supply Cable (A:HDD-Pow2) X 1 | ☐ [5] Signal Cable (A:HDD-Sig1 (Red)) X 1 |
| ☐ [5] Signal Cable (A:HDD-Sig2 (Blue)) X 1 | ☐ [7] LED Cable (A:LED-Sig) X 1  | ☐ [8] Screw (TP; M3x6) X 6  | ☐ [9] LED Label X 1   | |

F-9-359

< CD/Guides >

- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

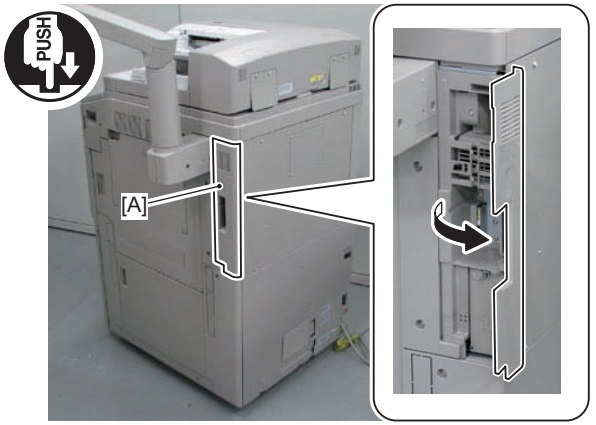
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the Covers

□

1) Push [A] part, and open the Right Rear Cover 1.

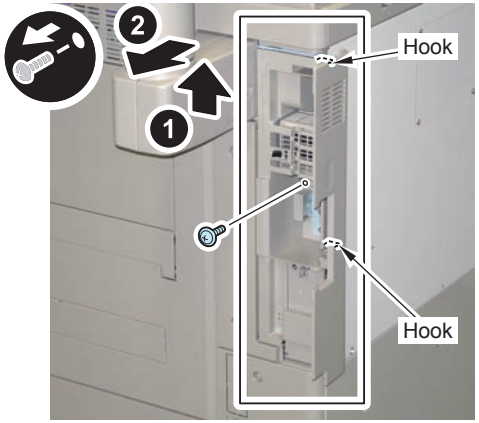



F-9-360

□

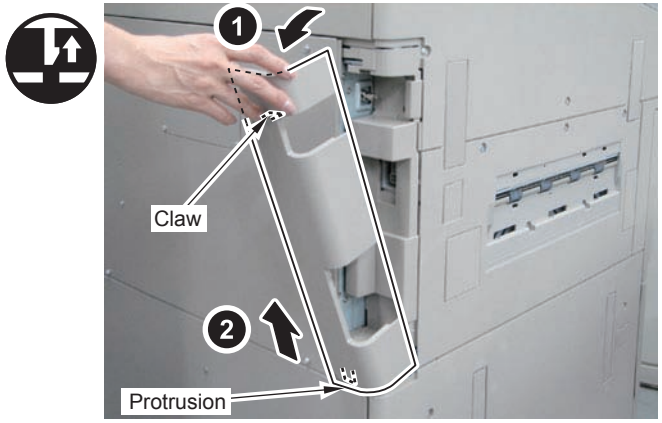
2) Remove the Side Cover.

- 1 Screw
- 2 Hooks



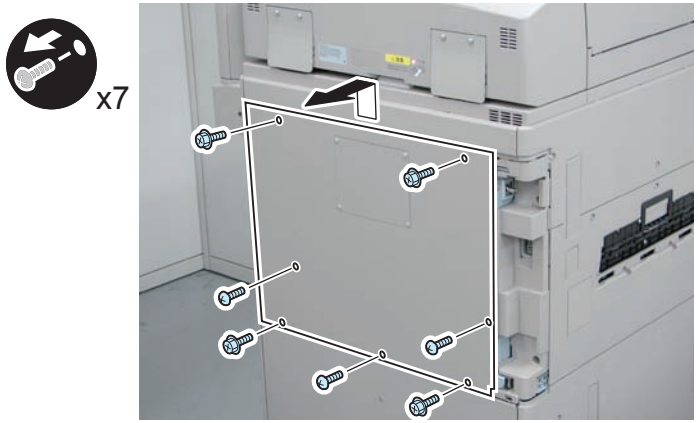

F-9-361

☐
3) Remove the Left Rear Cover.
- 1 Claw
- 1 Protrusions



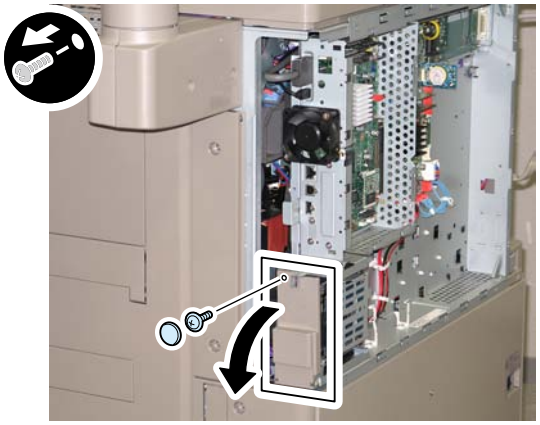

F-9-362

☐
4) Remove the Rear Upper Cover.
- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)



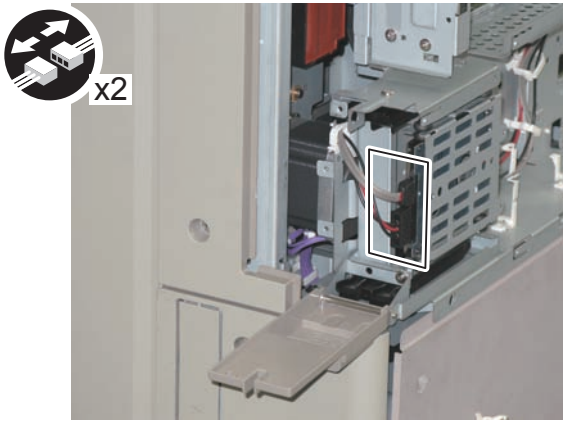

F-9-363

☐
5) Open the HDD Cap.
- 1 Rubber Cap
- 1 Screw



F-9-364

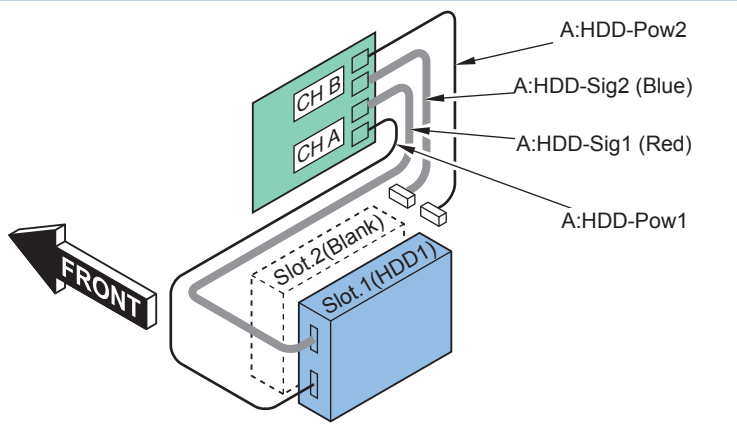
☐
6) Disconnect 2 connectors from the HDD.




F-9-365

## Installing the Encryption Board

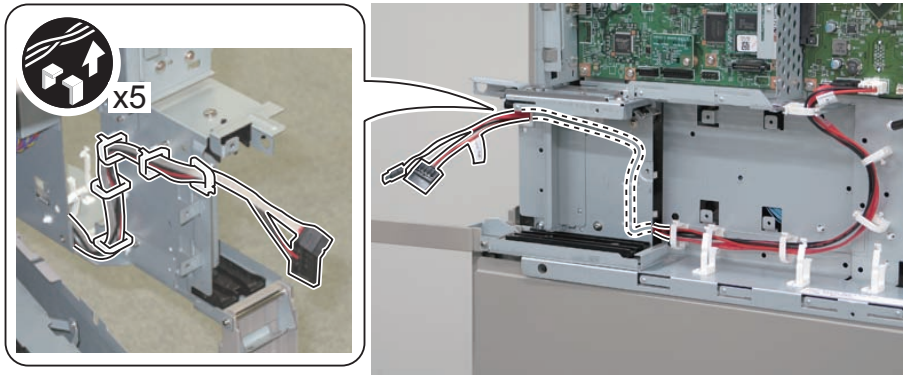
NOTE:
The following shows combination of the HDD and the Encryption Board.
- Connect “CH A” to Slot.1 (The original HDD)
- No HDD to Slot.2




F-9-366

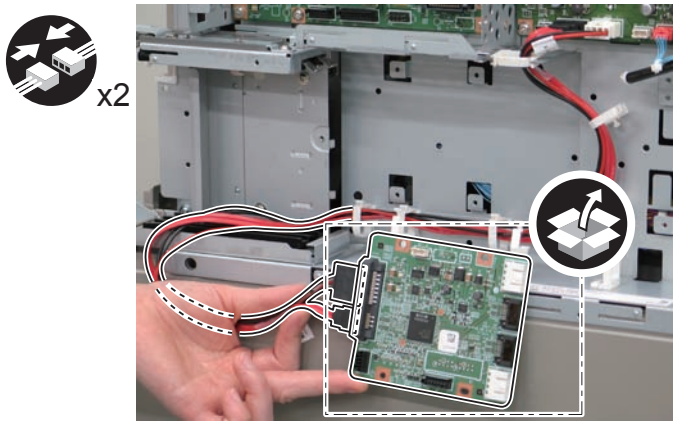
NOTE:
The HDD has been removed in the figures of the following steps 1) to 9), but it is not necessary to remove the HDD to perform this procedure.

☐
1) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.




F-9-367

☐
2) Pull out the cables to the front, and connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) to the Encryption Board.



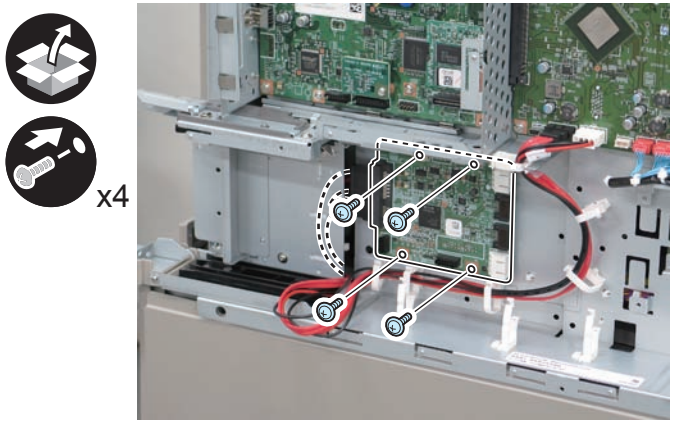

F-9-368

☐

3) Install the Encryption Board.

- 4 Screws (TP; M3x6)

NOTE:
When installing the Encryption Board, the Signal Cable (A:Cont-Sig) and Power Supply Cable (A:Cont-Pow) along the wavy line should be located on the back side of the HDD Case Unit.

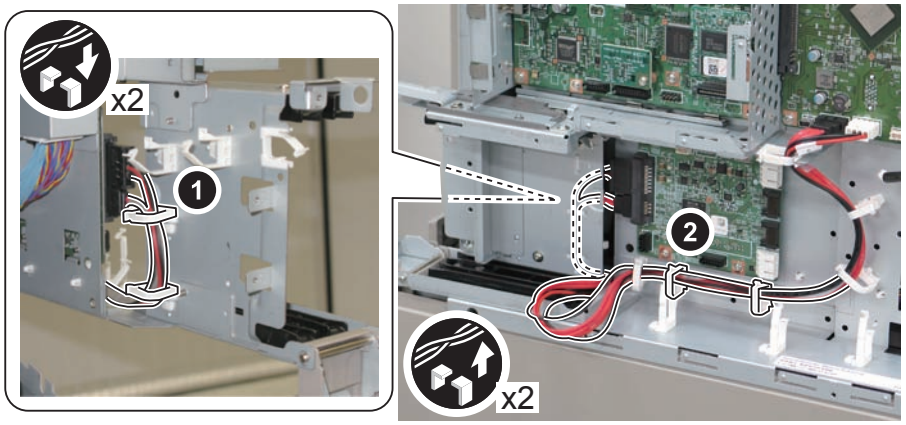



F-9-369

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

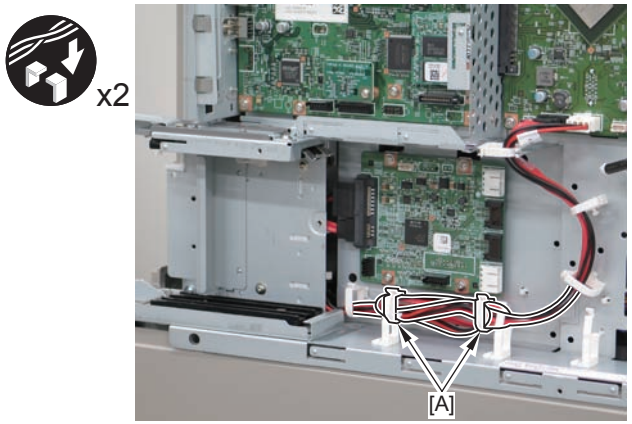
5) Free the cables from the 2 Wire Saddles at the front.




F-9-370

☐

6) Fold extra length of the cable and secure it with the 2 Wire Saddles [A].

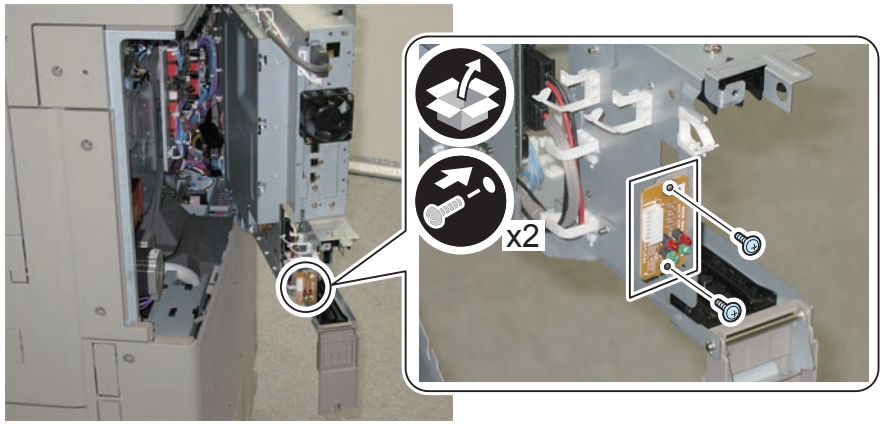



F-9-371

☐

7) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-372

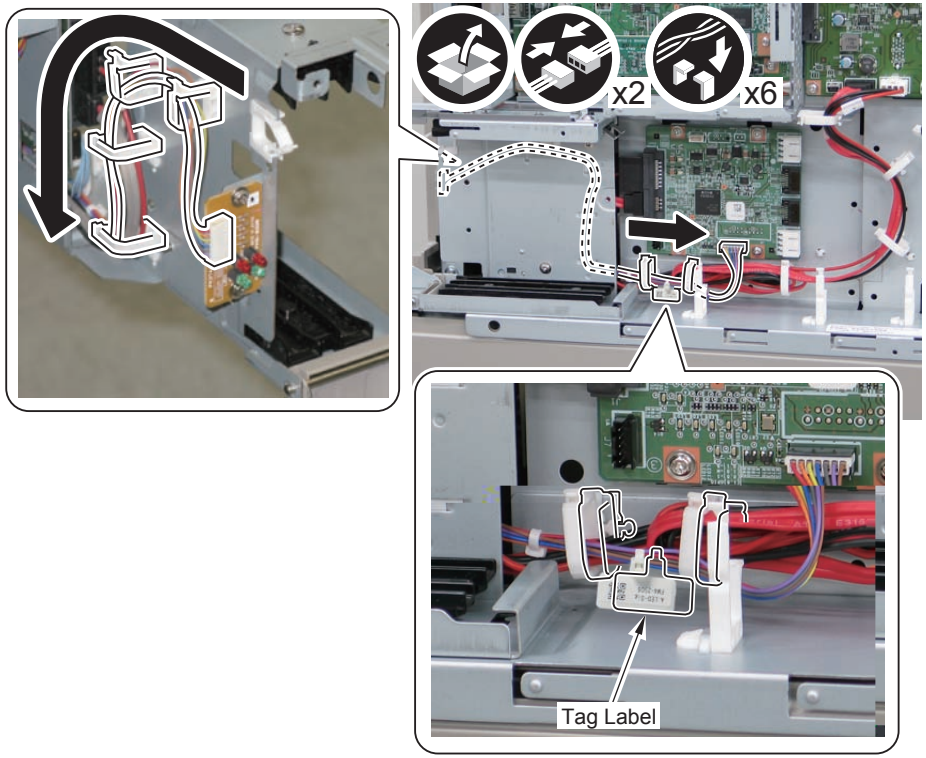
☐

8) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED and the Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

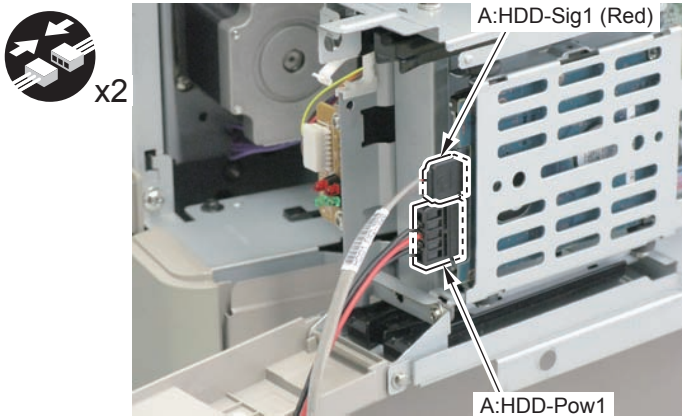
- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.




F-9-373

☐

9) Connect the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1) to Slot.1.




F-9-374

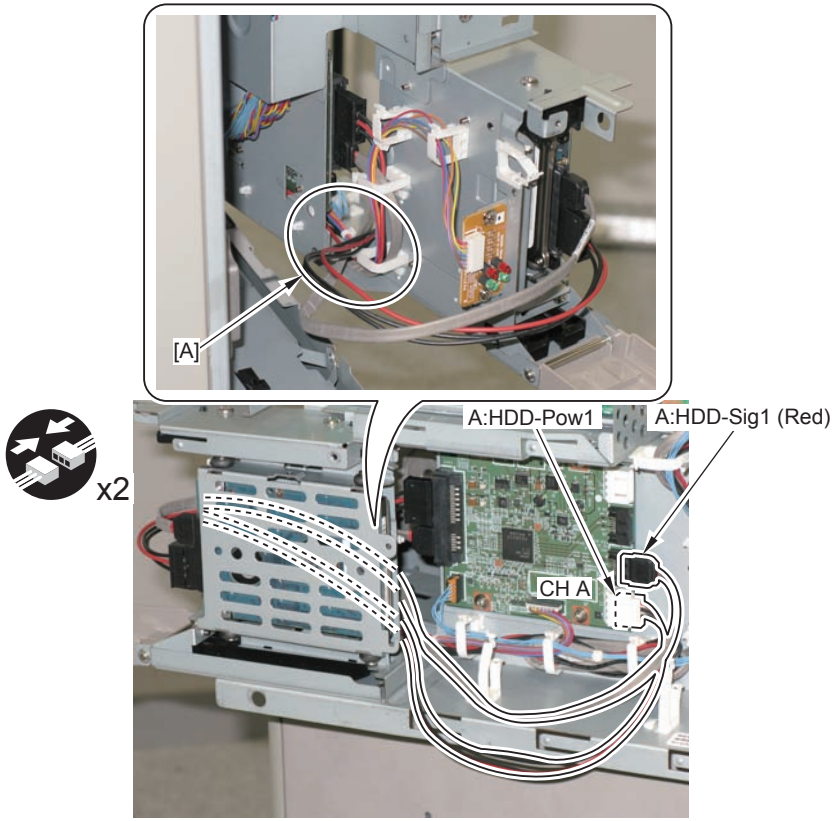
☐

10) Put the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1) through [A] part.

11) Connect the 2 connectors of the Signal Cables(A:HDD-Sig1 Red) and the Power Supply Cables (A:HDD-Pow1) to the Encryption Board.

CAUTION:

Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A: HDD-Pow1) to the CH-A of the Encryption Board.




F-9-375

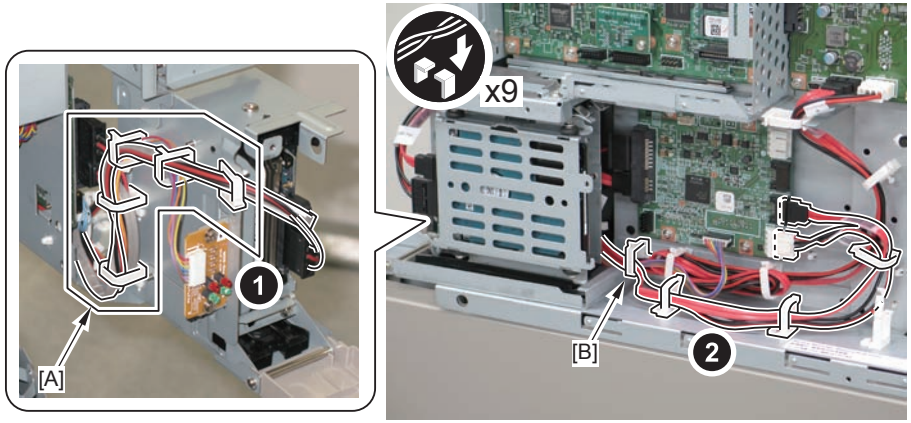
☐

12) Secure the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1).

- 1 Edger Saddle
- 8 Wire Saddles

CAUTION:

- Secure the cables so that there is no extra slack of the cables at [A] part.
- Be sure that the Wire Saddle [B] is properly securing the cables.

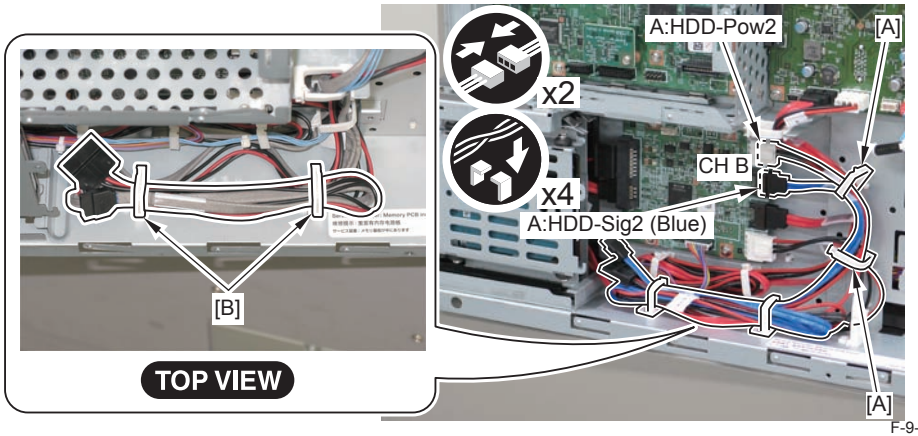



F-9-376

☐

13) Connect the Signal Cable (A:HDD-Sig2 Blue) and the Power Supply Cable (A:HDD-Pow2) to CH B, and secure them in place using the 2 Wire Saddles [A].

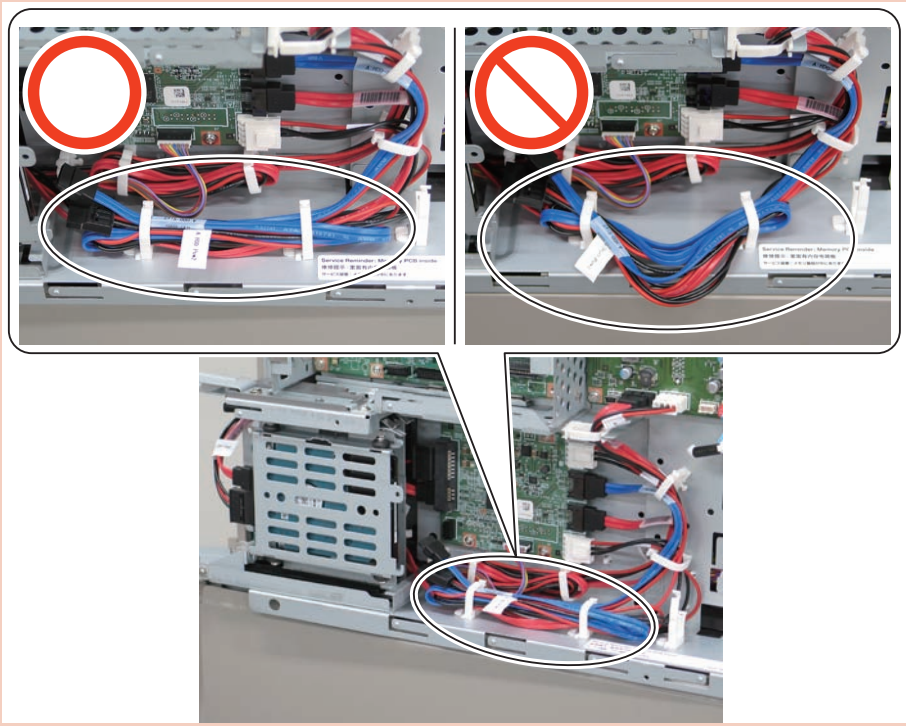
14) Fold extra length of the cables and secure them in place using the 2 Wire Saddles [B].




F-9-377

CAUTION:

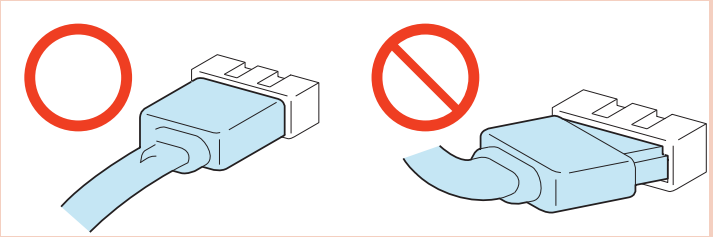
If there is extra slack of the cables, be sure to tuck them to the host machine side.



F-9-378

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



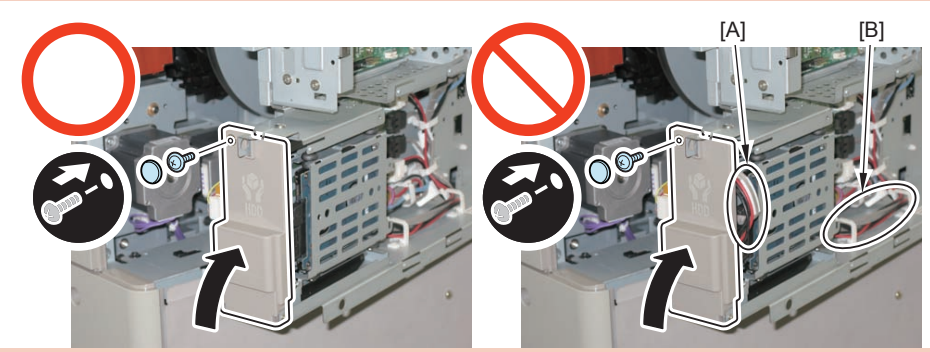
F-9-379

☐
15) Close the HDD Cap.

- 1 Screw
- 1 Rubber Cap

CAUTION:

- Be sure that the cables do not protrude from the [A] part of the HDD Cap.
- If the cables protrude from the [A] part, allow extra slack of the cables at the [B] part and tuck them to the host machine side.

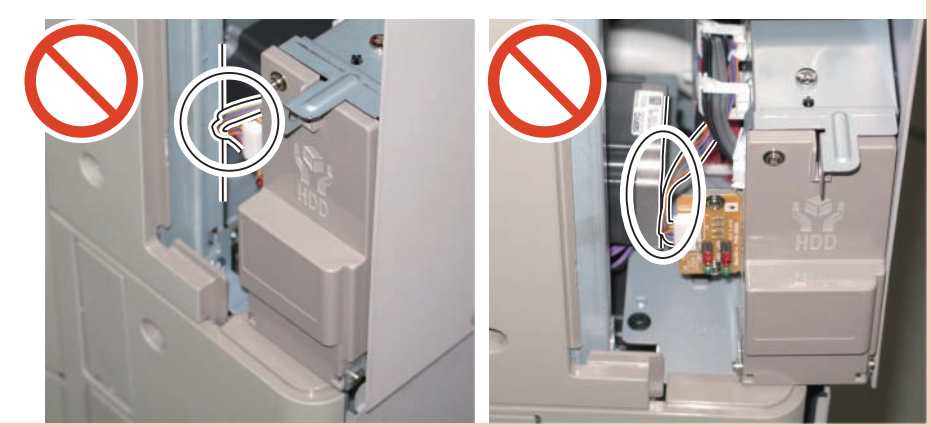



F-9-380

☐
16) Close the Controller Box.

CAUTION:

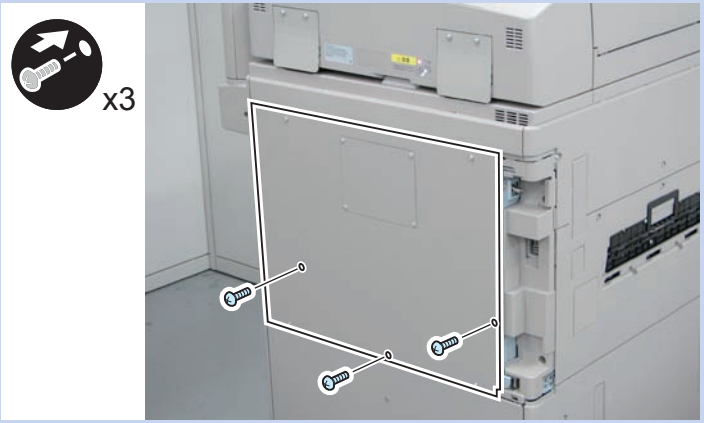
When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



F-9-381

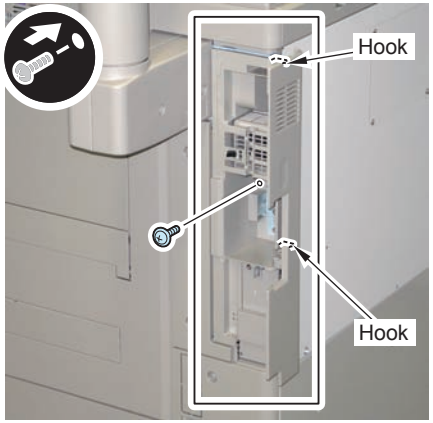
☐
17) Install the Rear Upper Cover.
- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.



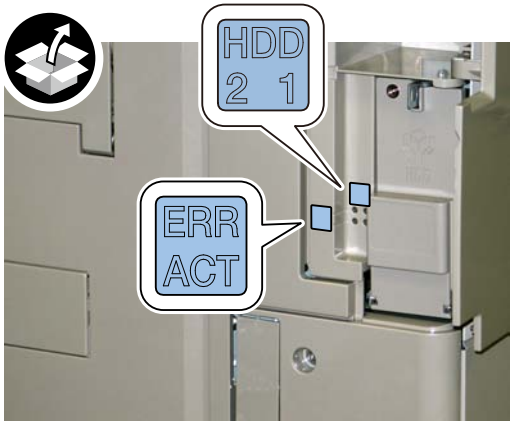

F-9-382

☐
18) Install the Side Cover.
- 2 Hooks
- 1 Screw




F-9-383

☐
19) Affix the LED Label.




F-9-384

☐
20) Close the Right Rear Cover 1.
21) Return the Left Rear Cover to its original position.
22) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

## Checking the Security Mark

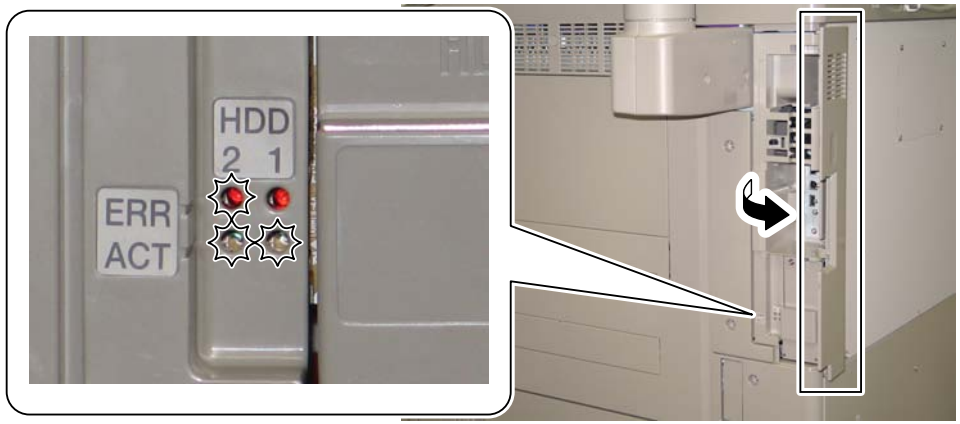
The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>
When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.

- The green LED of HDD1 (Slot1) is flashing.




F-9-385

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

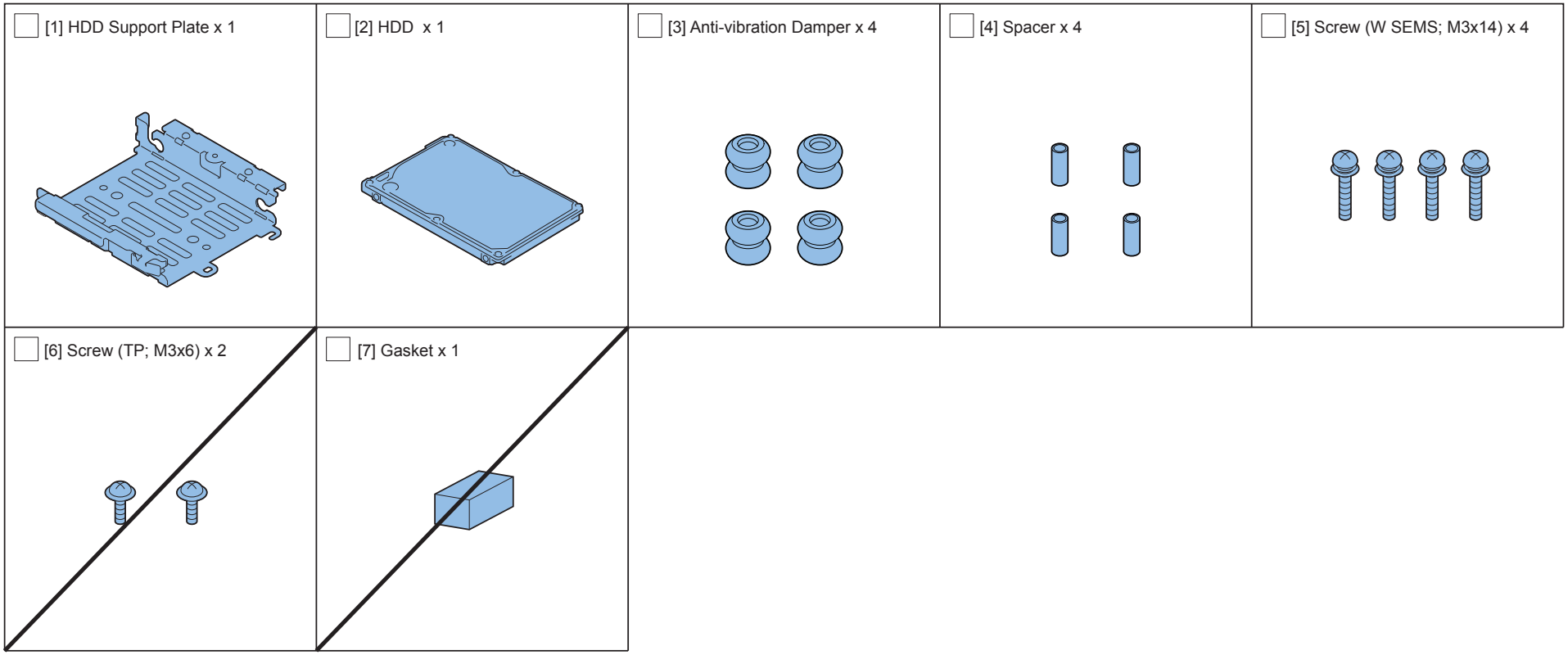
# [TYPE-7] Option HDD (1TB) + HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)

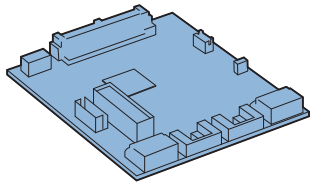
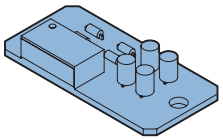
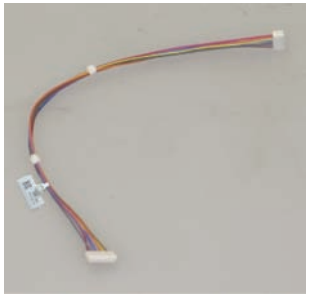
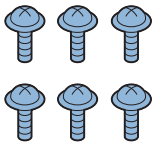
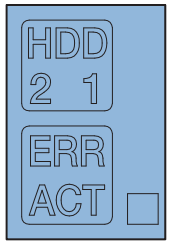



F-9-386

< CD/Guides >

- FCC/IC Sheet

## HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] Power Supply Cable (A:HDD-Pow1) X 1 | ☐ [4] Power Supply Cable (A:HDD-Pow2) X 1 | ☐ [5] Signal Cable (A:HDD-Sig1 (Red)) X 1 |
| ☐ [5] Signal Cable (A:HDD-Sig2 (Blue)) X 1 | ☐ [7] LED Cable (A:LED-Sig) X 1  | ☐ [8] Screw (TP; M3x6) X 6  | ☐ [9] LED Label X 1   | |

F-9-387

< CD/Guides >

- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

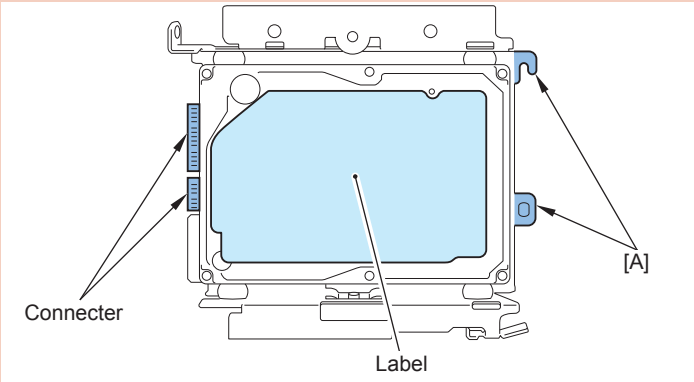
## Installation Procedure

### Assembling the Option HDD

CAUTION:

When assembling the Option HDD, be sure to pay attention to the direction.

- Be sure that the label face of the Option HDD is up.
- Be sure that the [A] part of the HDD Support Plate is on the other side of the connecter.



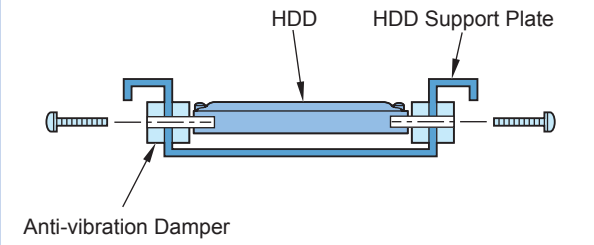

F-9-388

□

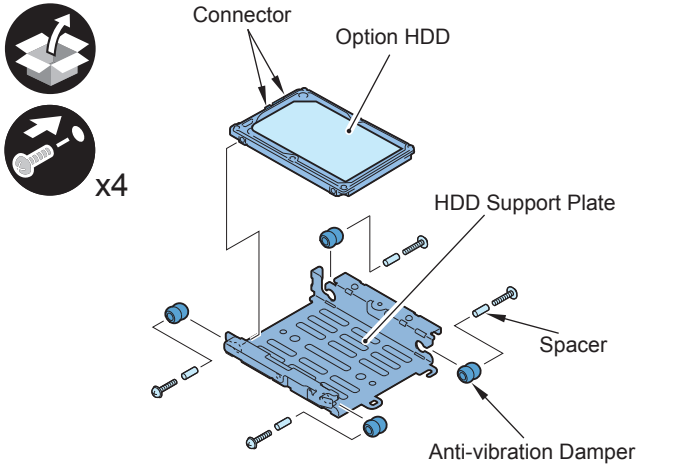
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.




F-9-389

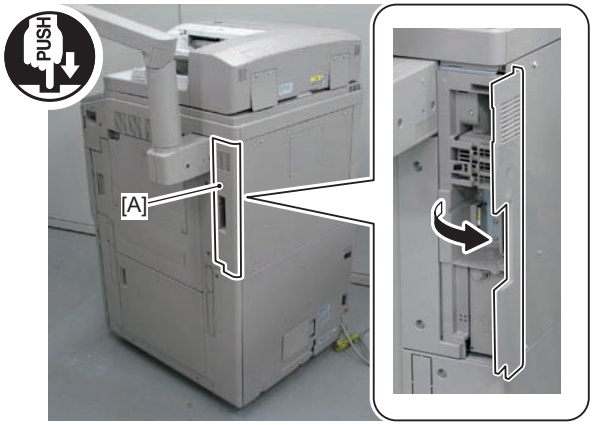



F-9-390

## Removing the Covers

□

1) Push [A] part, and open the Right Rear Cover 1.

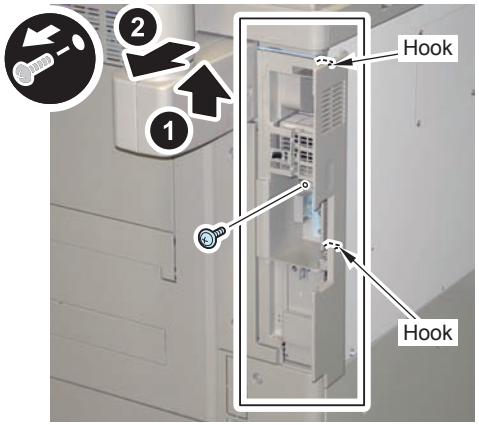



F-9-391

□

2) Remove the Side Cover.

- 1 Screw
- 2 Hooks

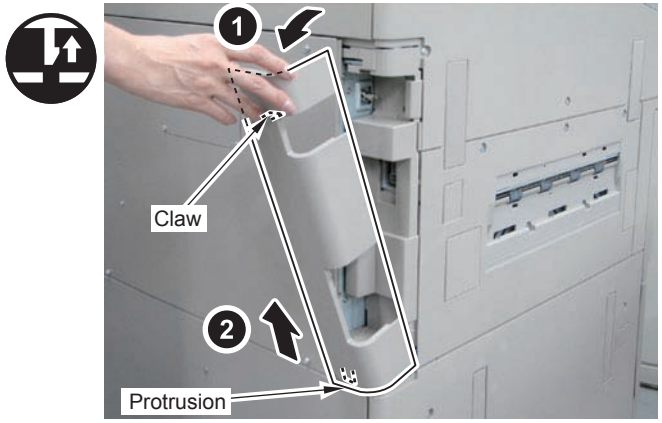



F-9-392

☐

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

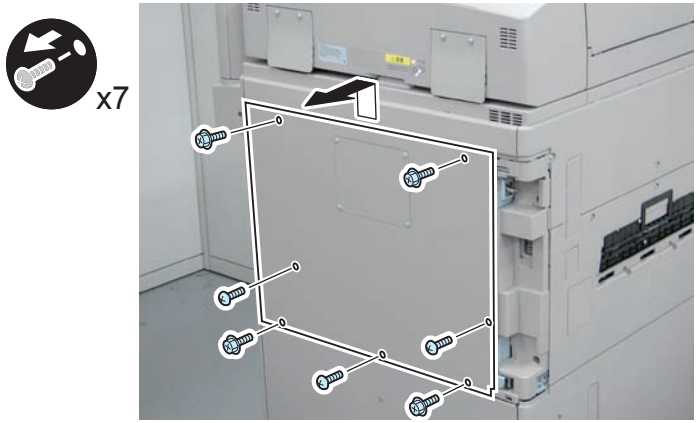



F-9-393

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

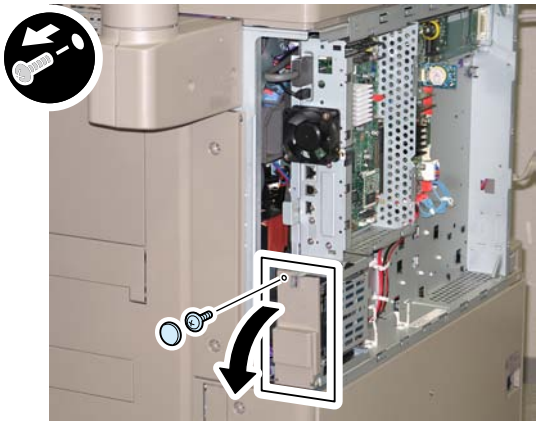



F-9-394

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw

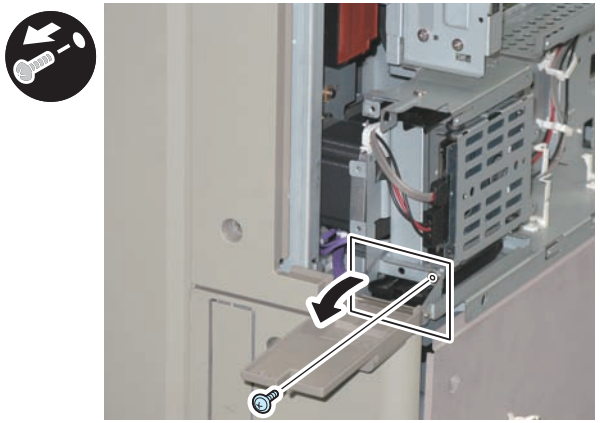


F-9-395

☐

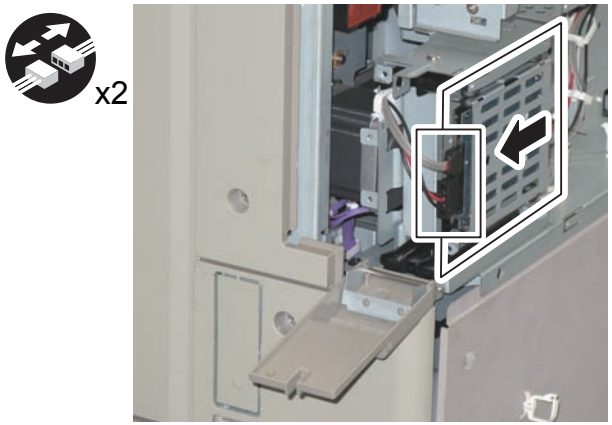
6) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will be used in “Installing the Encryption Board” step 10).)



F-9-396

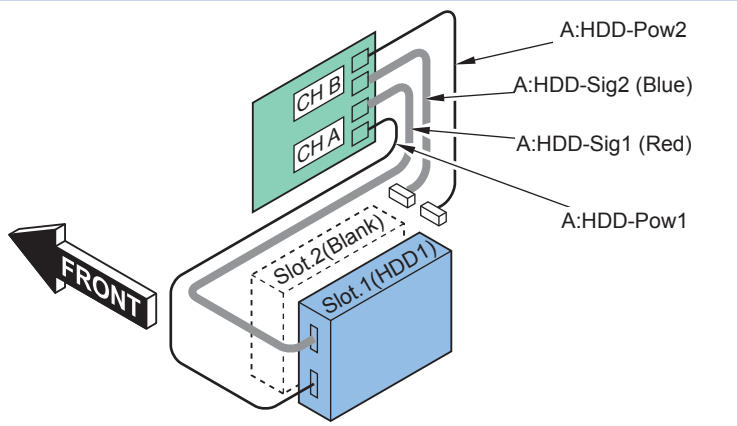
☐
7) Remove the HDD. (The removed HDD will not be used.)
- 2 Connectors




F-9-397

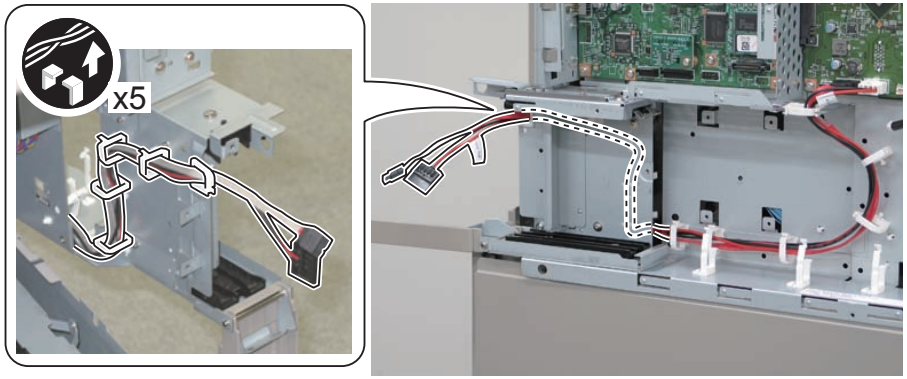
## Installing the Encryption Board

NOTE:
The following shows combination of the HDD and the Encryption Board.
- Connect "CH A" to Slot.1 (The new HDD)
- No HDD to Slot.2



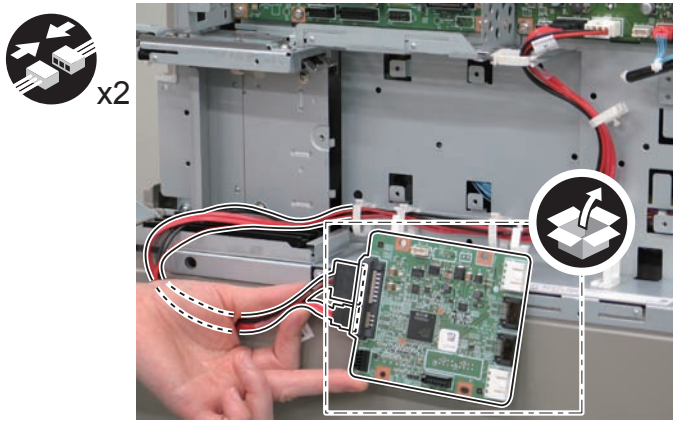

F-9-398

☐
1) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.




F-9-399

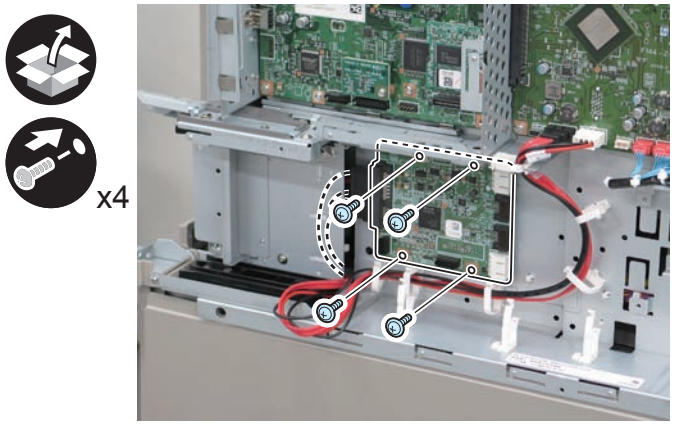
☐
2) Pull out the cables to the front, and connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) to the Encryption Board.




F-9-400

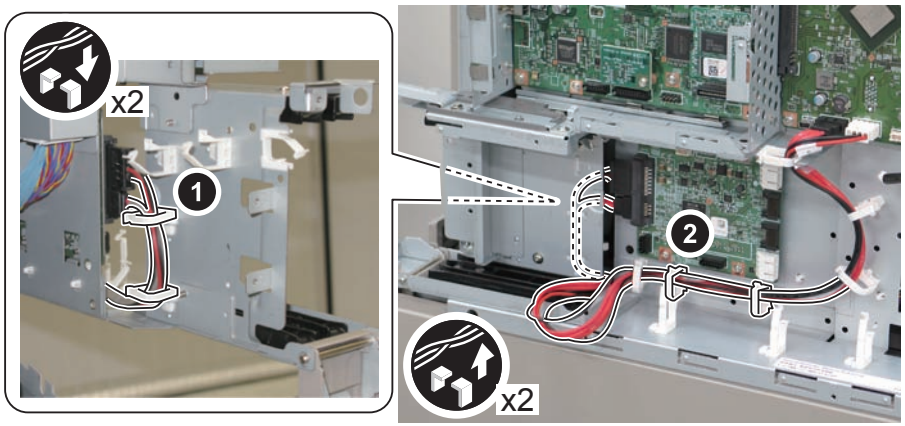
☐
3) Install the Encryption Board.
- 4 Screws (TP; M3x6)

NOTE:
When installing the Encryption Board, the Signal Cable (A:Cont-Sig) and Power Supply Cable (A:Cont-Pow) along the wavy line should be located on the back side of the HDD Case Unit.



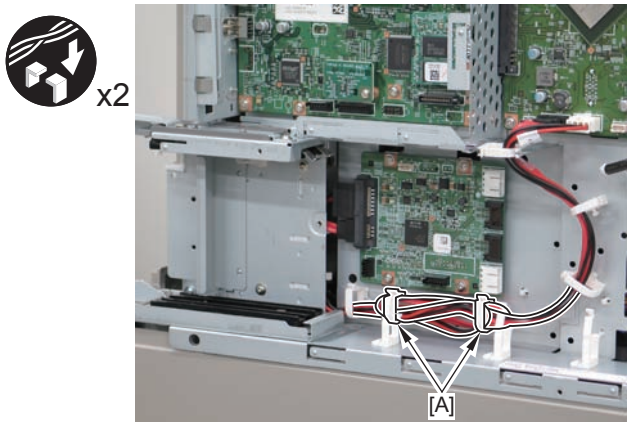

F-9-401

☐
4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.
5) Free the cables from the 2 Wire Saddles at the front.



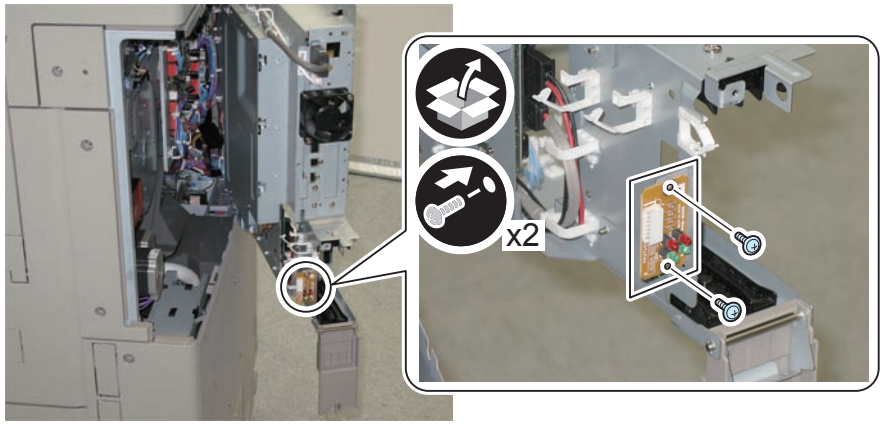

F-9-402

☐
6) Fold extra length of the cable and secure it with the 2 Wire Saddles [A].




F-9-403

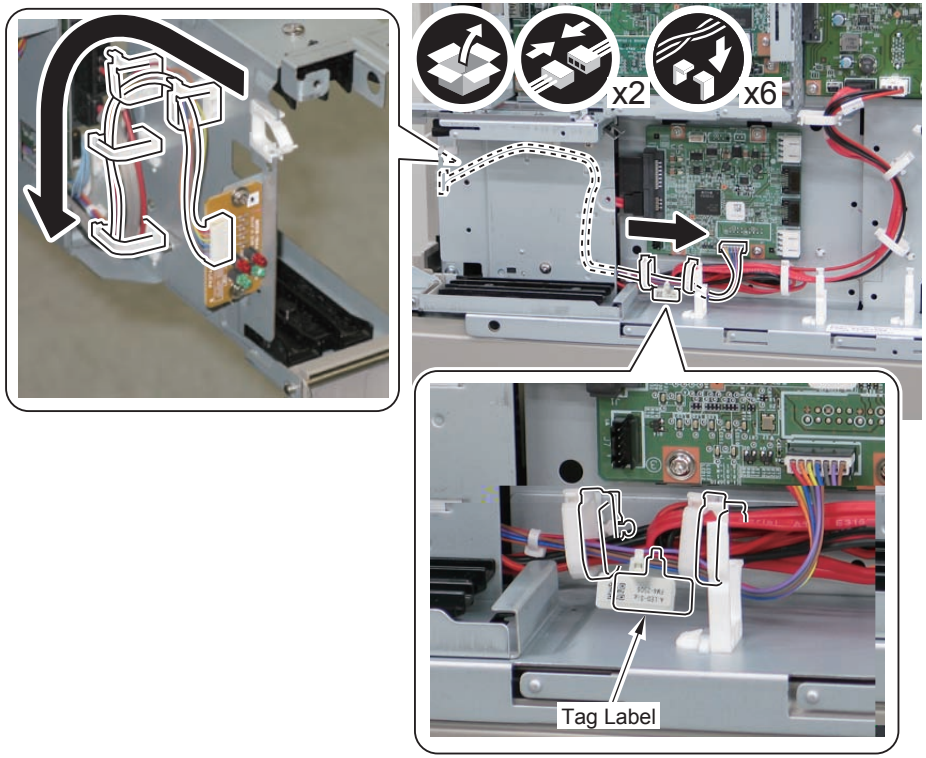
☐
7) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.
- 2 Screws (TP; M3x6)




F-9-404

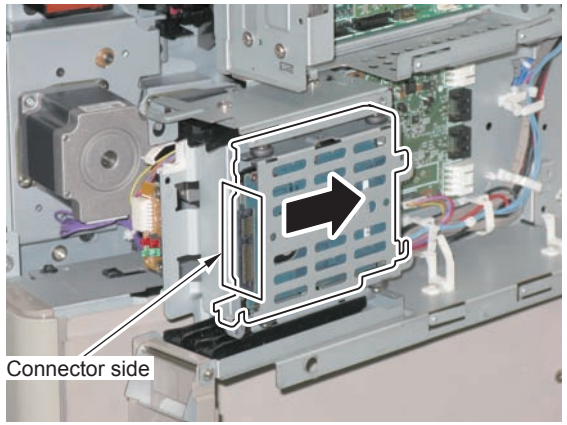
☐
8) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Encryption Board.
- 2 Connectors
- 6 Wire Saddles

CAUTION:
- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.



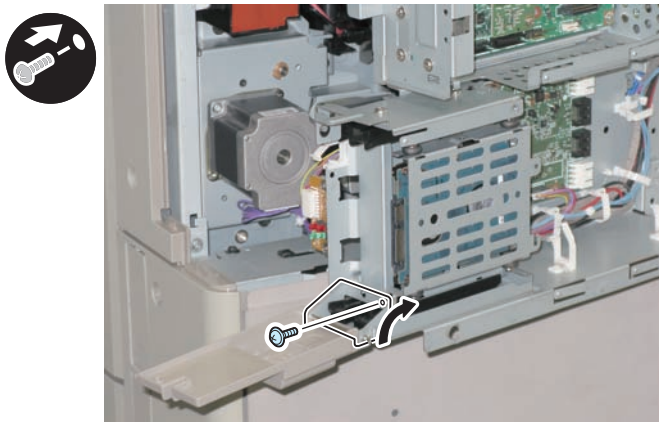

F-9-405

☐
9) Insert the assembled HDD.




F-9-406

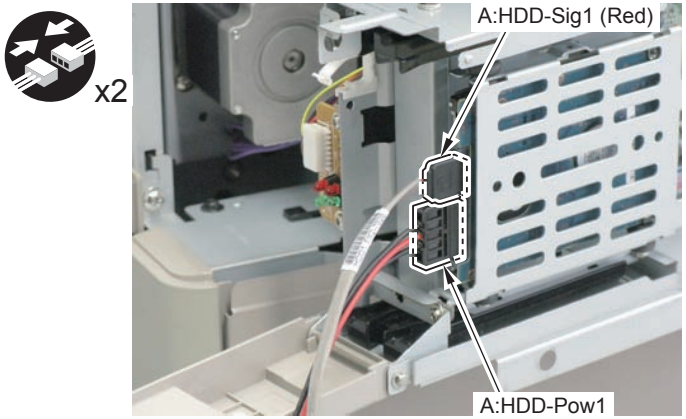
☐
10) Secure the HDD Fixed Plate.
- 1 Screw (Use the screws removed in “Removing the Covers” step 6).)



F-9-407

☐

11) Connect the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1) to Slot.1.




F-9-408

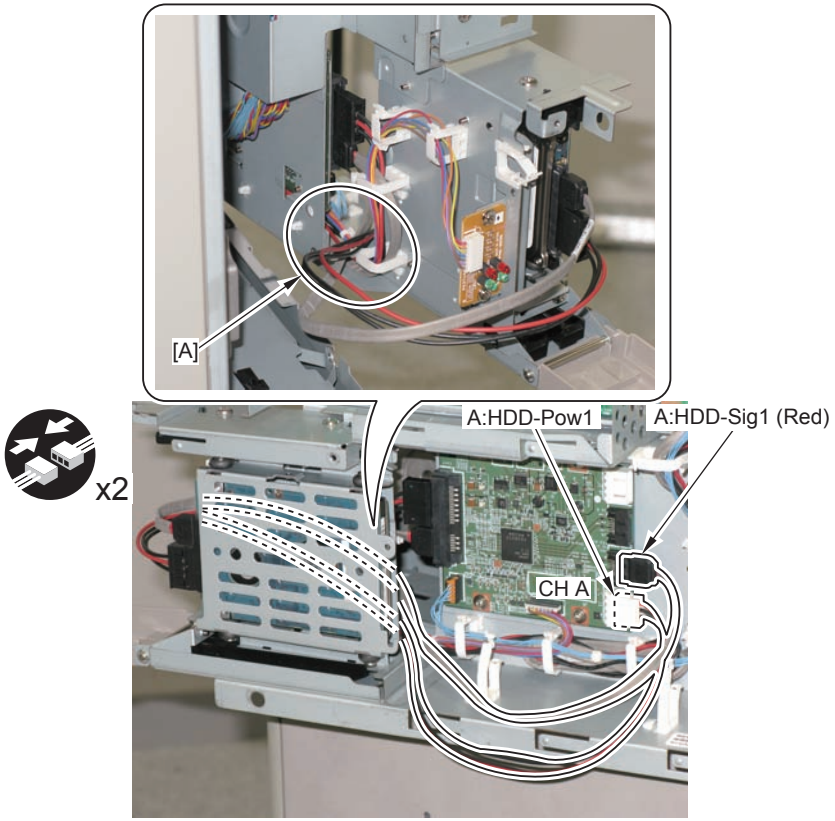
☐

12) Put the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1) through [A] part.

13) Connect the 2 connectors of the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1) to the Encryption Board.

CAUTION:

Connect the Signal Cable (A:HDD-Sig1 Red) and Power Supply Cable (A: HDD-Pow1) to the CH-A of the Encryption Board.




F-9-409

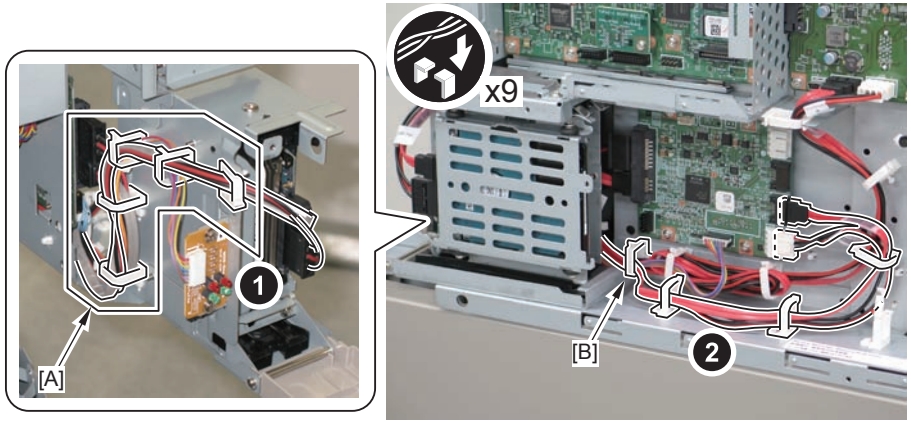
☐

14) Secure the Signal Cable (A:HDD-Sig1 Red) and the Power Supply Cable (A:HDD-Pow1).

- 1 Edger Saddle
- 8 Wire Saddles

CAUTION:

- Secure the cables so that there is no extra slack of the cables at [A] part.
- Be sure that the Wire Saddle [B] is properly securing the cables.

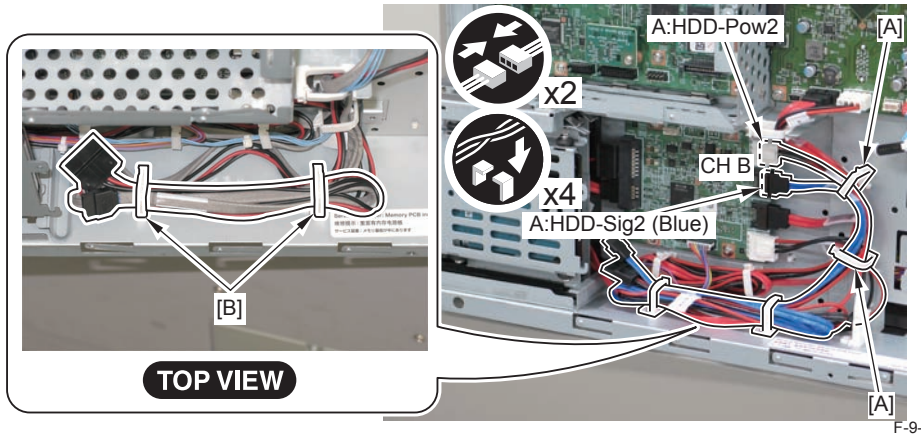



F-9-410

☐

15) Connect the Signal Cable (A:HDD-Sig2 Blue) and the Power Supply Cable (A:HDD-Pow2) to CH B, and secure them in place using the 2 Wire Saddles [A].

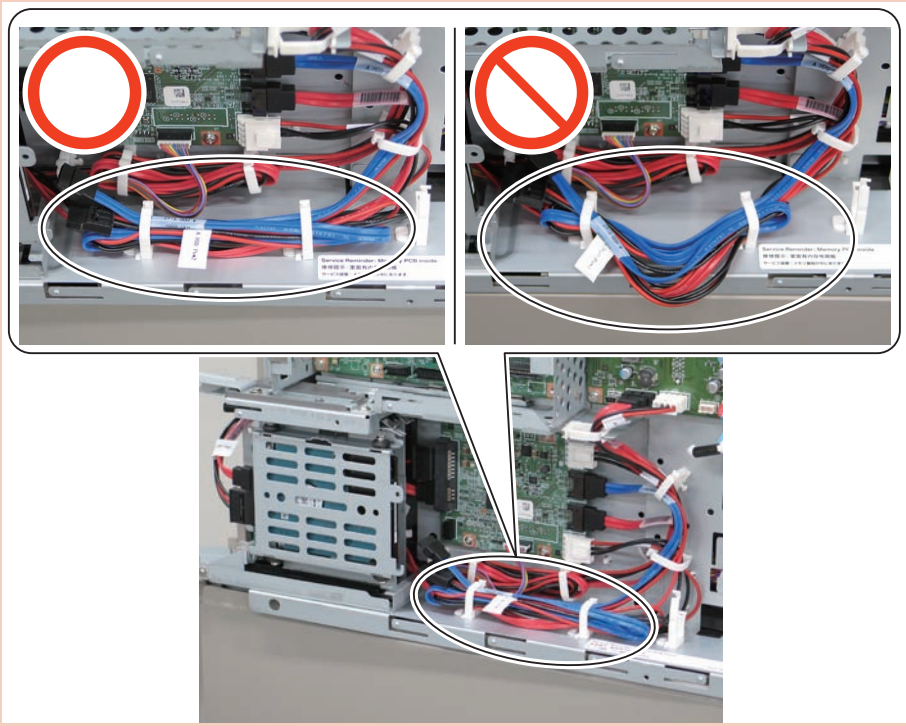
16) Fold extra length of the cables and secure them in place using the 2 Wire Saddles [B].




F-9-411

CAUTION:

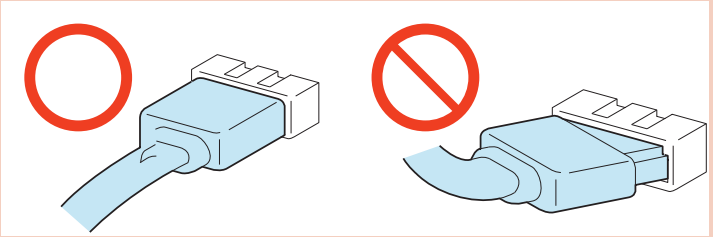
If there is extra slack of the cables, be sure to tuck them to the host machine side.



F-9-412

CAUTION:

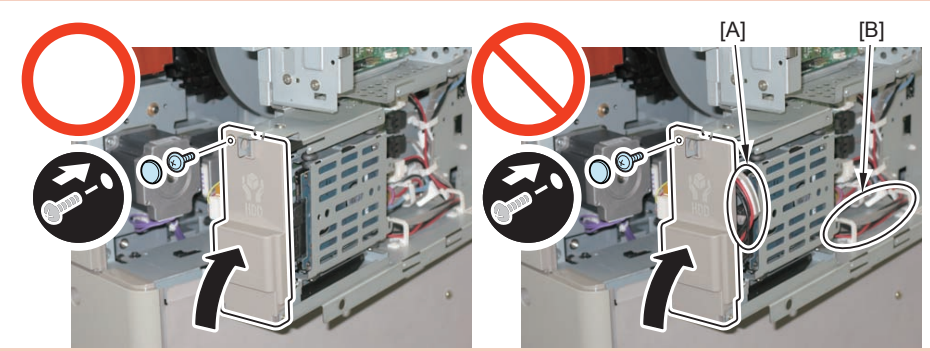
Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-413

☐
17) Close the HDD Cap.
- 1 Screw
- 1 Rubber Cap

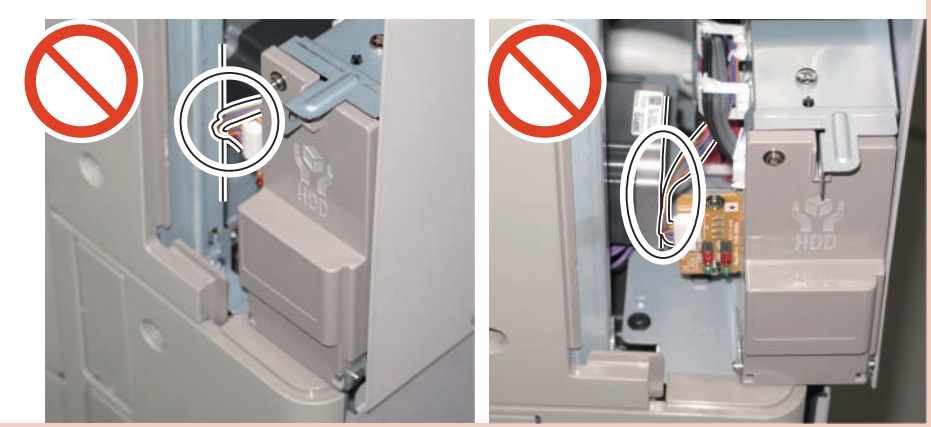
CAUTION:
- Be sure that the cables do not protrude from the [A] part of the HDD Cap.
- If the cables protrude from the [A] part, allow extra slack of the cables at the [B] part and tuck them to the host machine side.



F-9-414

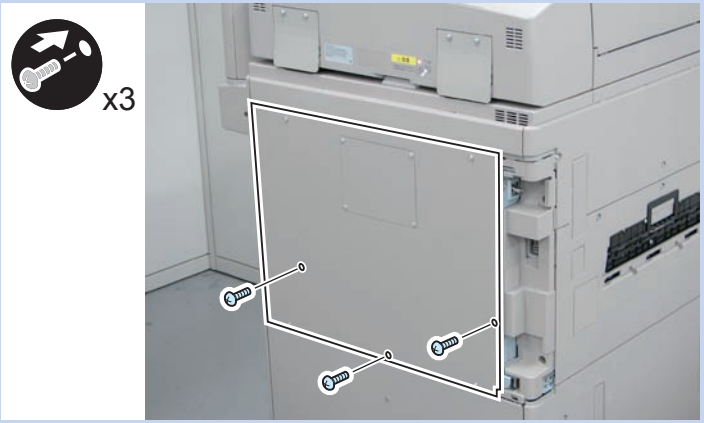
☐
18) Close the Controller Box.

CAUTION:
When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.


F-9-415

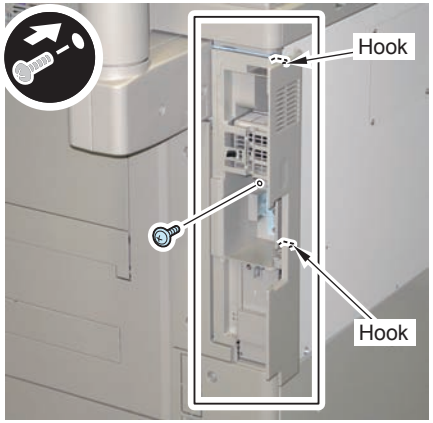
☐
19) Install the Rear Upper Cover.
- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.



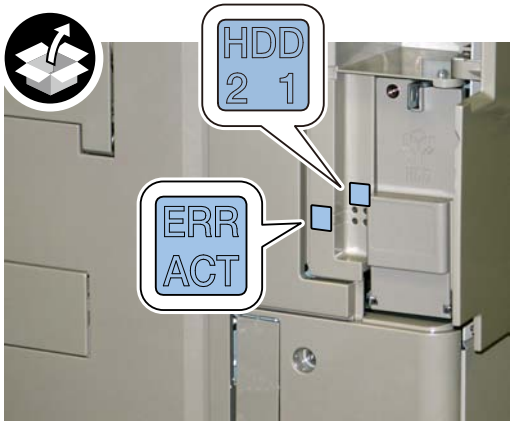

F-9-416

☐
20) Install the Side Cover.
- 2 Hooks
- 1 Screw




F-9-417

☐
21) Affix the LED Label.




F-9-418

☐
22) Close the Right Rear Cover 1.
23) Return the Left Rear Cover to its original position.
24) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

## Checking the Security Mark

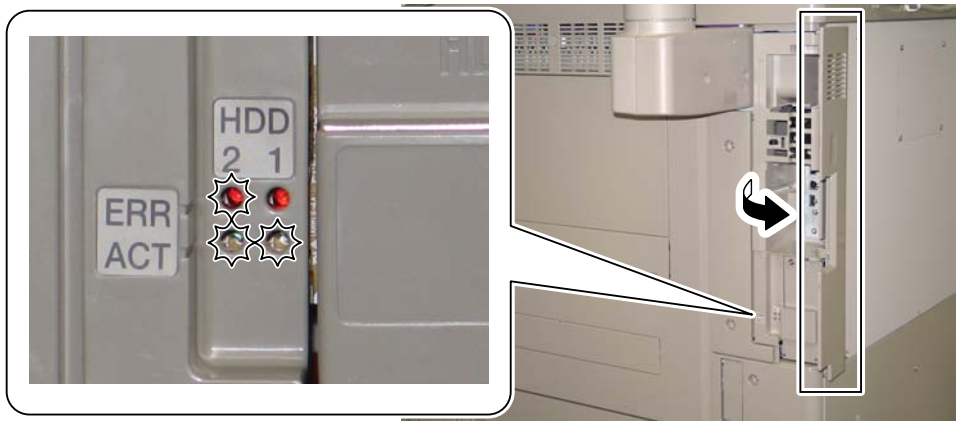
The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>
When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.

- The green LED of HDD1 (Slot1) is flashing.




F-9-419

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

9-215
9 Installation > [TYPE-7] Option HDD (1TB) + HDD Data Encryption & Mirroring Kit > Execution of Auto Gradation Adjustment

9-218
9 Installation > [TYPE-7] Option HDD (1TB) + HDD Data Encryption & Mirroring Kit > Execution of Auto Gradation Adjustment

9-220
9 Installation > [TYPE-7] Option HDD (1TB) + HDD Data Encryption & Mirroring Kit > Execution of Auto Gradation Adjustment

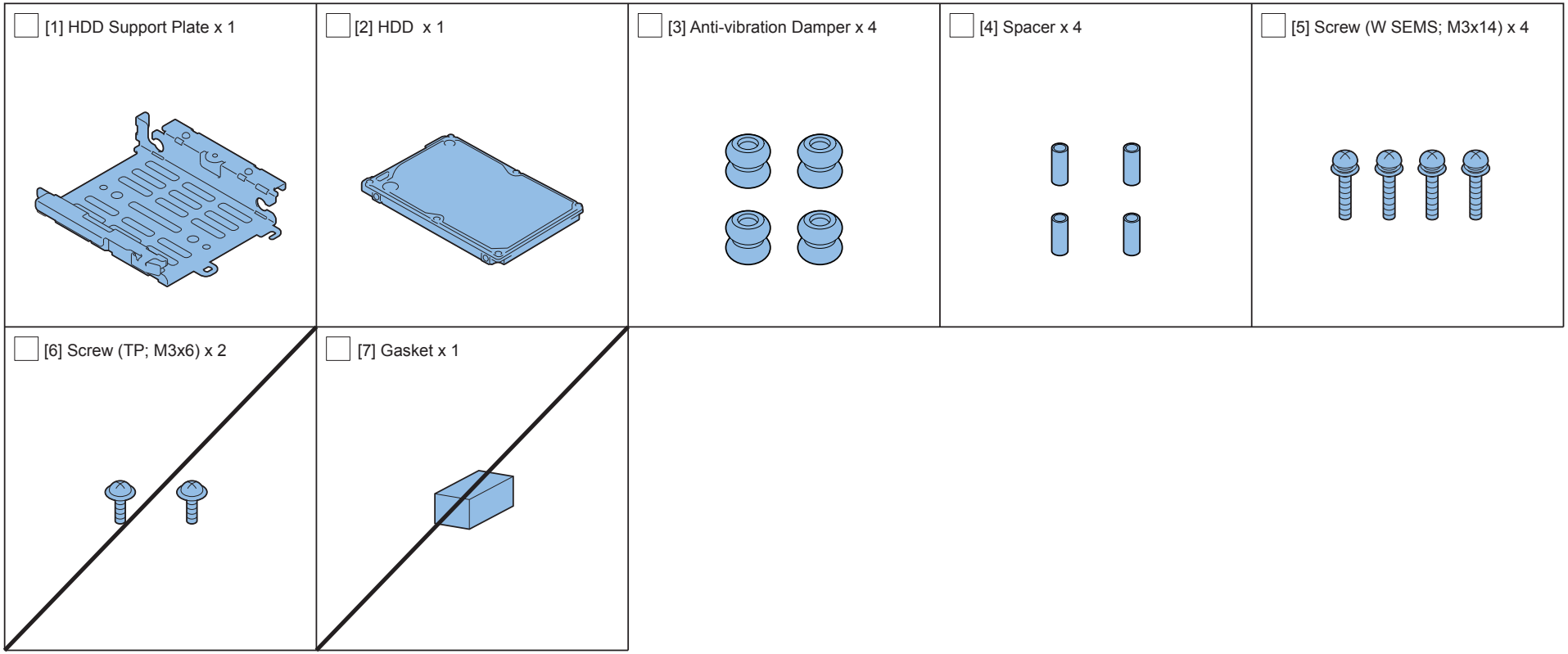
# [TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (160GB)

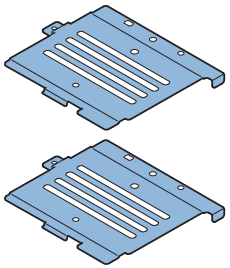
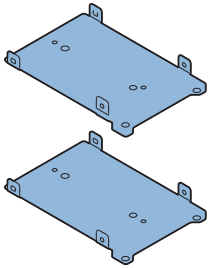
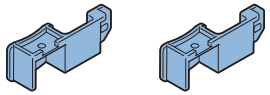
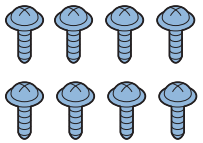
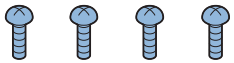
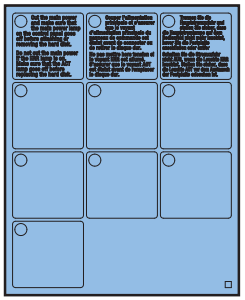
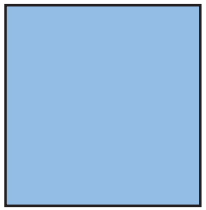



F-9-420

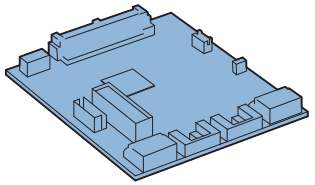
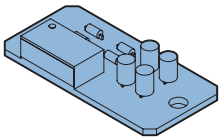
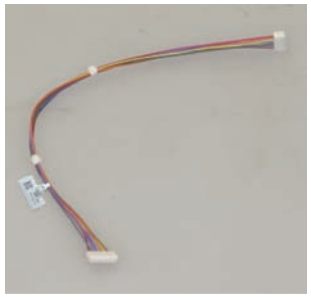
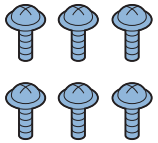
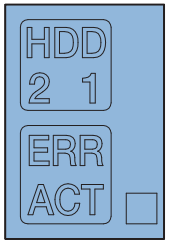
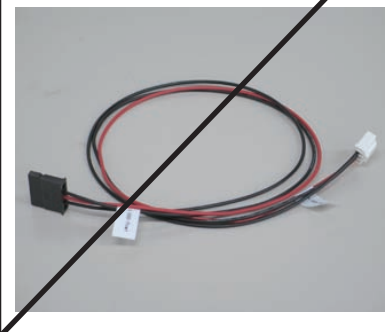
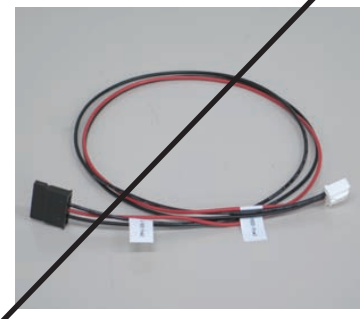
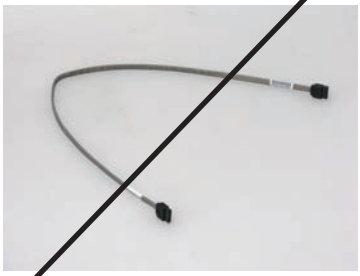
< CD/Guides >

- FCC/IC Sheet

## Removable HDD Kit

| | | | | |
|---|---|---|---|---|
| | | |  |  |
|  | | |  |  |
|  |  | | | |

## HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] LED Cable (A:LED-Sig) X 1  | ☐ [4] Screw (TP; M3x6) X 6  | ☐ [5] LED Label X 1   |
| ☐ [6] Power Supply Cable (A:HDD-Pow1) X 1  | ☐ [7] Power Supply Cable (A:HDD-Pow2) X 1  | ☐ [8] Signal Cable (A:HDD-Sig1 (Red)) X 1 | ☐ [9] Signal Cable (A:HDD-Sig2 (Blue)) X 1  | |

F-9-422

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Guide
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

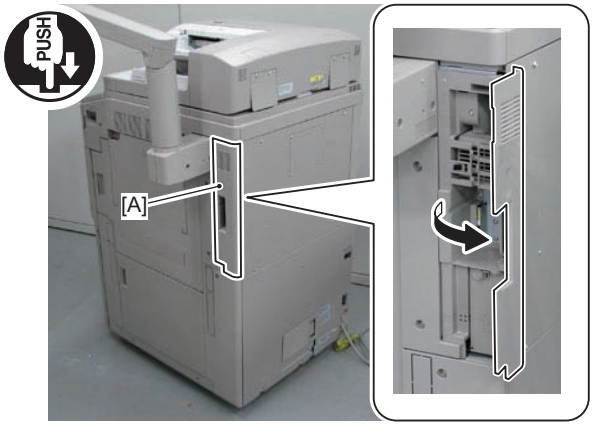
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the HDD and HDD Case Unit

□

1) Push [A] part, and open the Right Rear Cover 1.

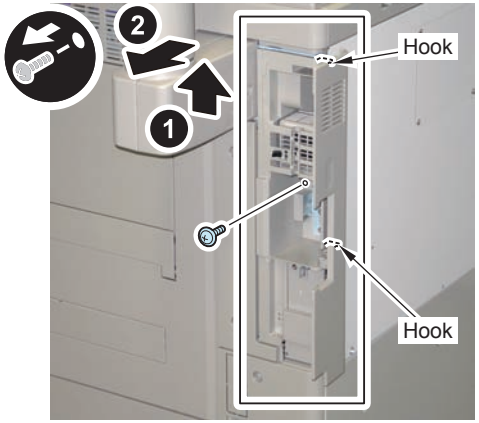



F-9-423

□

2) Remove the Side Cover.

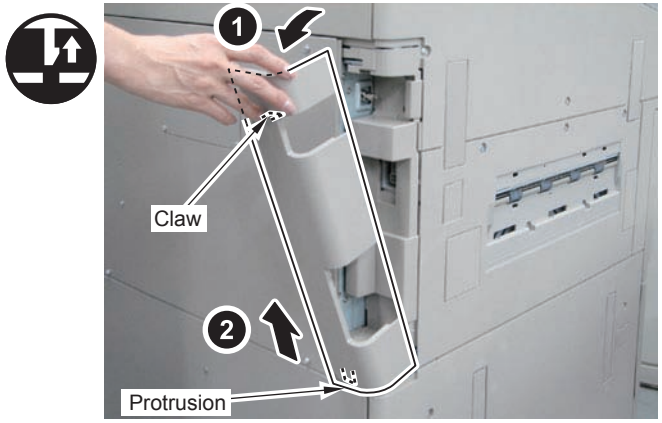
- 1 Screw
- 2 Hooks




F-9-424

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

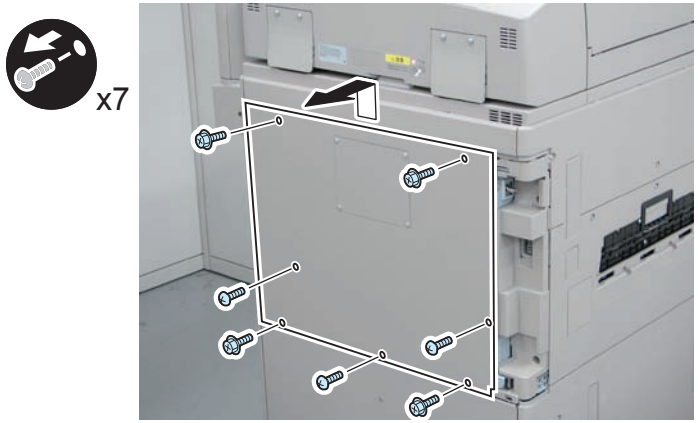



F-9-425

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

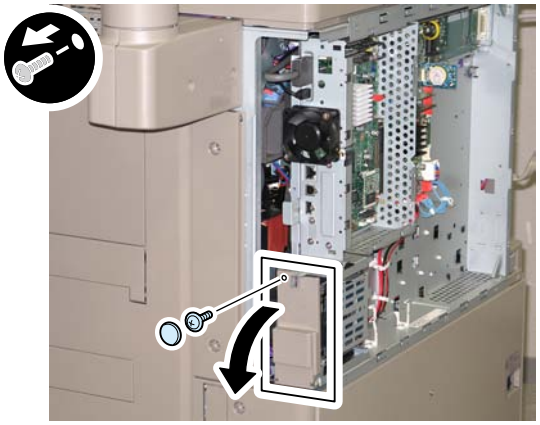



F-9-426

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-427

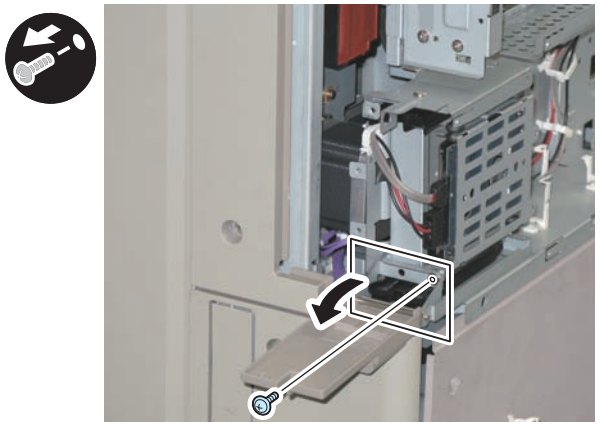
☐

6) Return the rubber cap to the HDD Cap.

☐

7) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will not be used.)

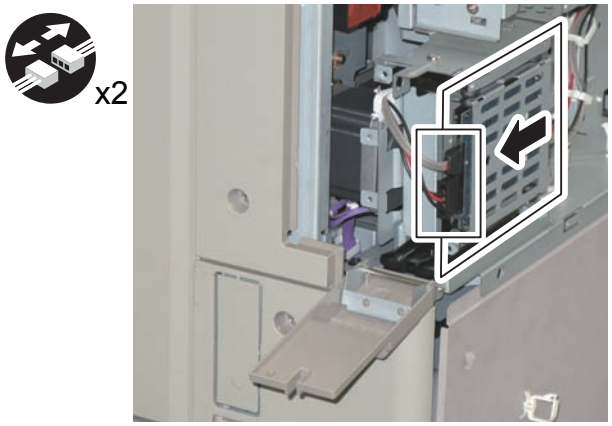


F-9-428

□

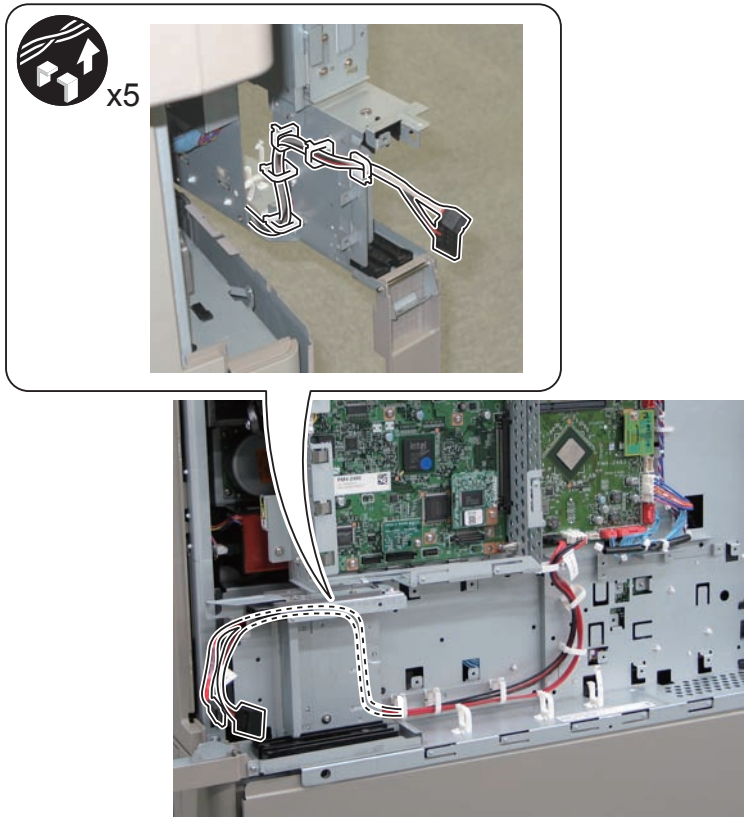
8) Remove the HDD.

- 2 Connectors




F-9-429

9) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.

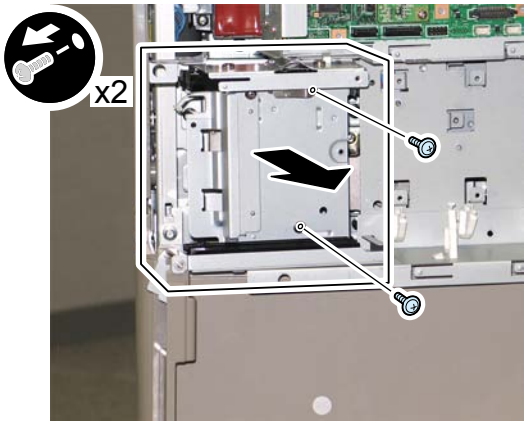



F-9-430

□

10) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the Mirroring Board or Encryption Board and HDD Case Unit” step 3).)



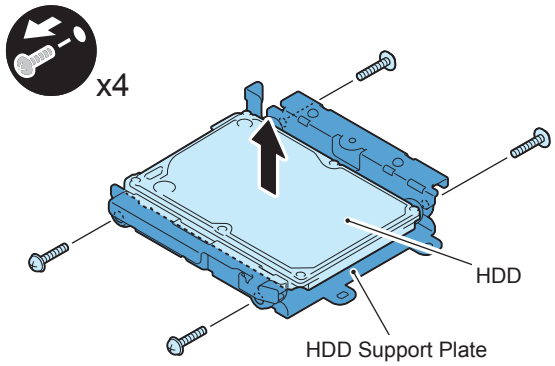

F-9-431

## Disassembling and Assembling of the HDD Removed from the Host Machine (the First HDD)

□

1) Disassemble the removed HDD.

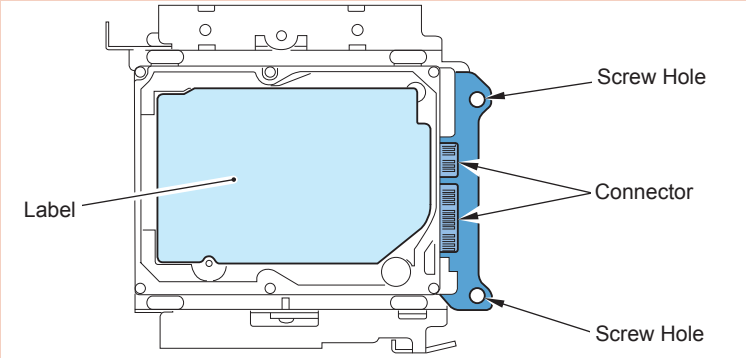
- 4 Screws (W Sems)
- 1 HDD Support Plate




F-9-432

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.



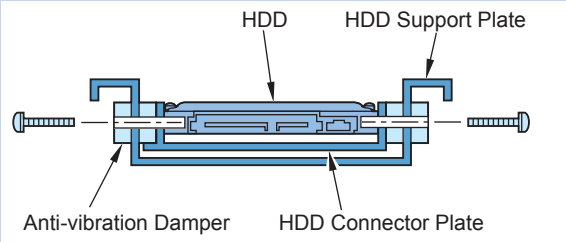

F-9-433

NOTE:
Use the parts disassembled in step 1) and parts included in the Removable HDD Kit.

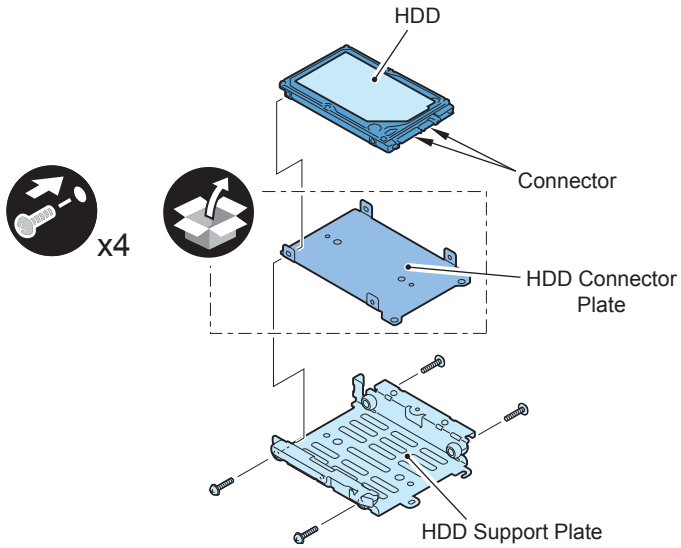
□
2) Assemble the HDD disassembled in step 1).

- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



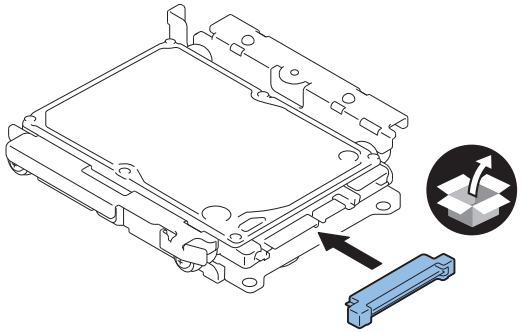

F-9-434




F-9-435

□
3) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-436

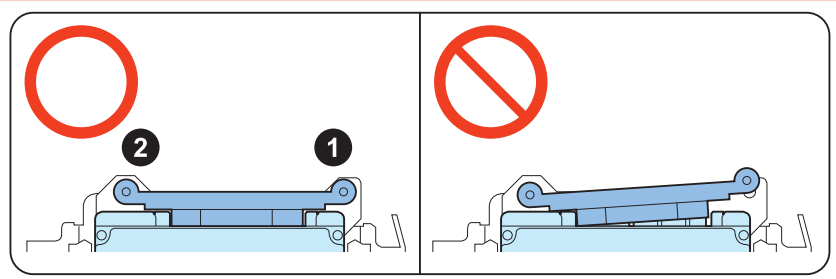
☐

4) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

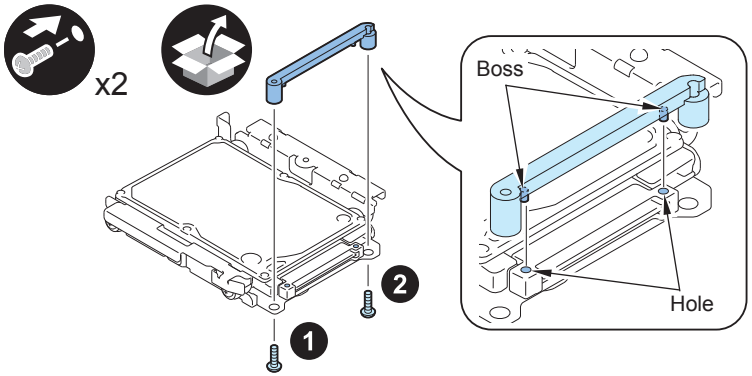
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-437




F-9-438

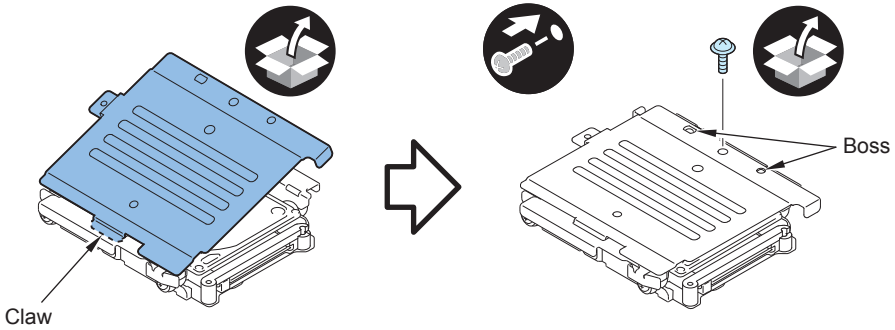
☐

5) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-439

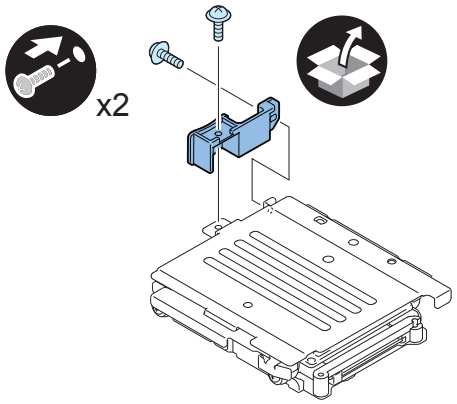
□

6) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

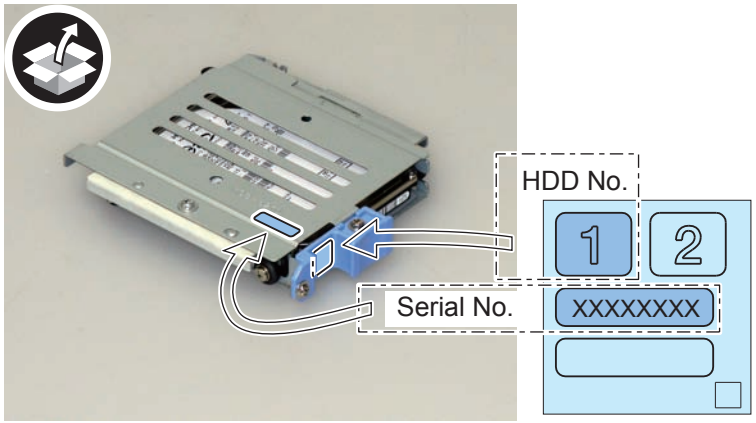



F-9-440

□

7) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

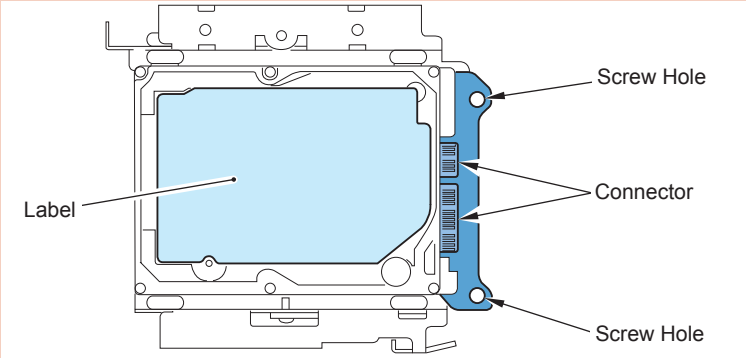



F-9-441

## Assembling the Option HDD (the Second HDD)

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.




F-9-442

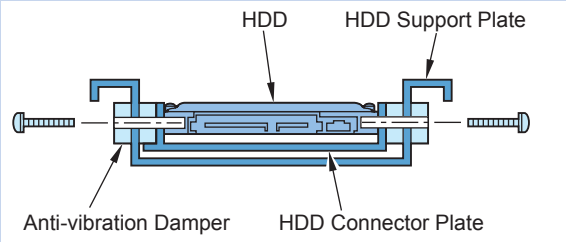
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

□

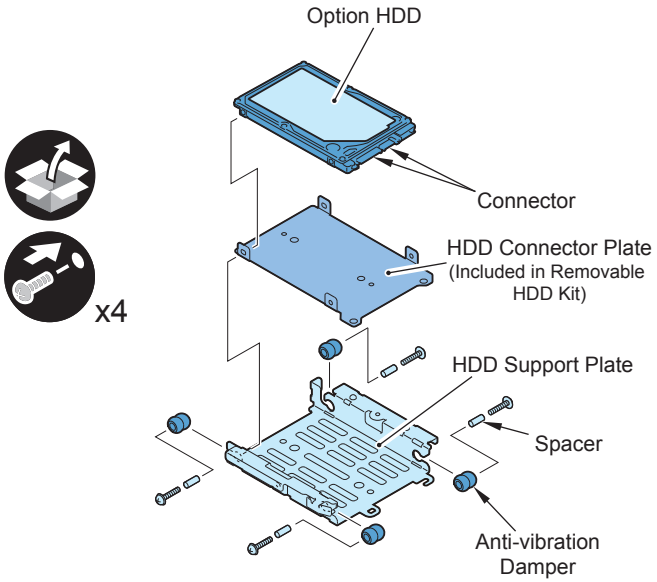
1) Assemble the Option HDD.

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



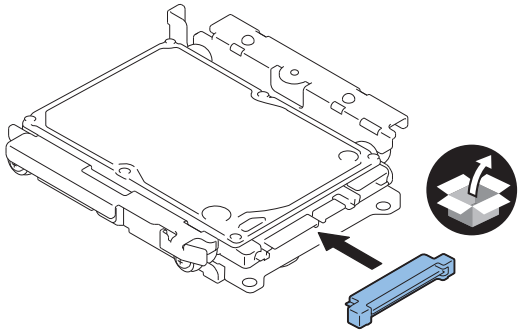

F-9-443




F-9-444

□
2) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-445

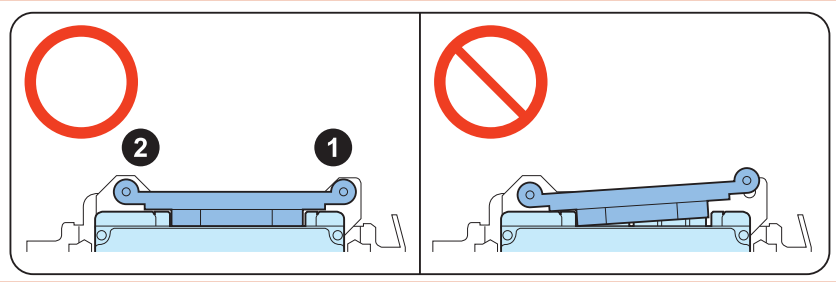
☐

3) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

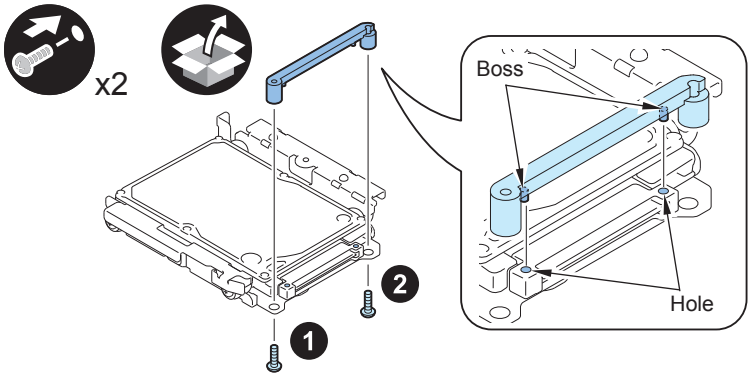
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-446




F-9-447

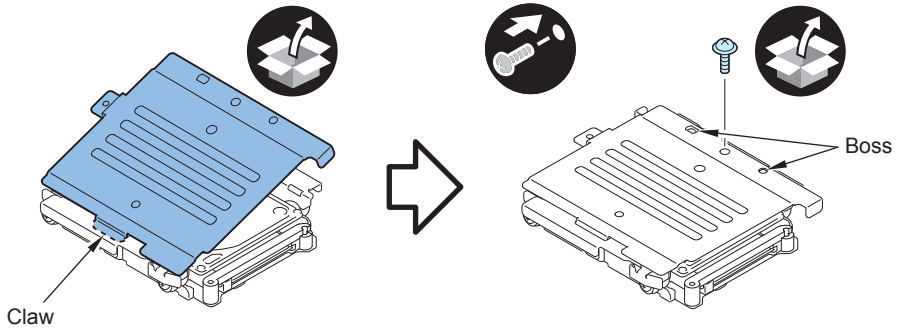
☐

4) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

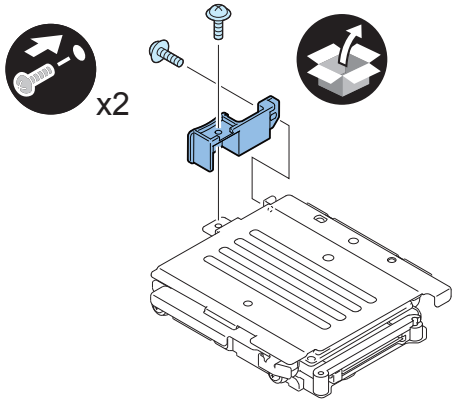
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-448

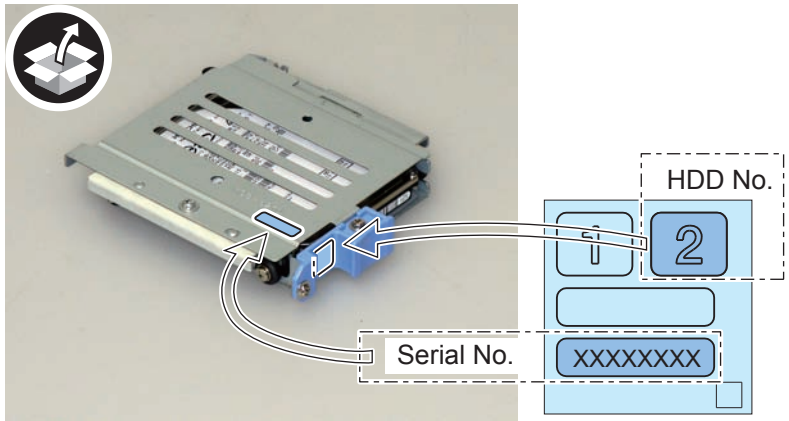
□
5) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-449

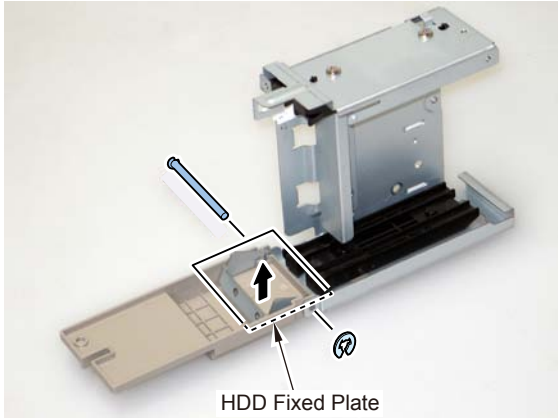
□
6) Affix the HDD No.2 of the R-HDD Label to the handle of the Removable HDD.
7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.




F-9-450

## Changing Configuration inside of HDD Case Unit

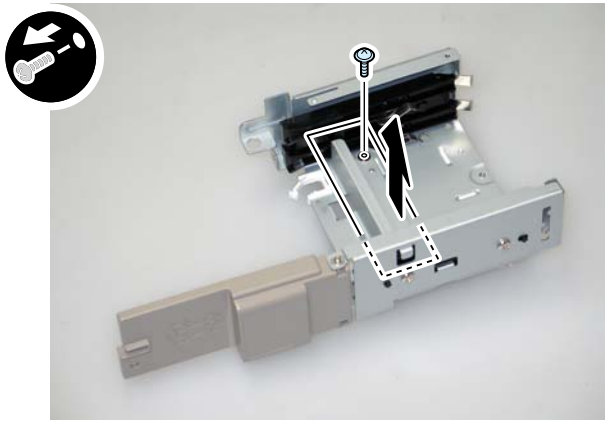
□
1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)




F-9-451

□
2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

□
3) Remove the Face Plate. (The removed Face Plate and Screw will not be used.)
- 1 Screw

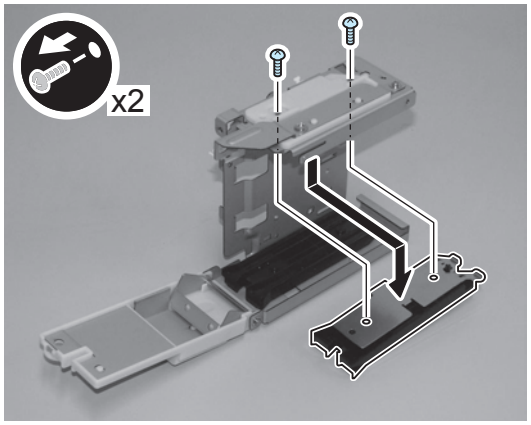


F-9-452

☐

4) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 7).)

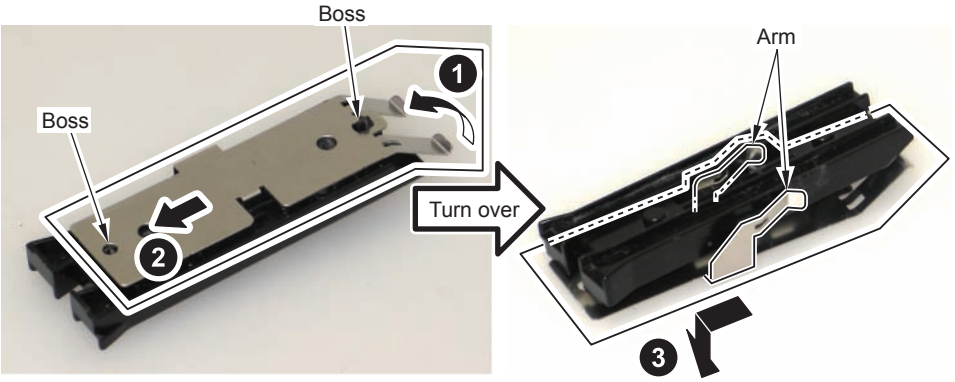



F-9-453

☐

5) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



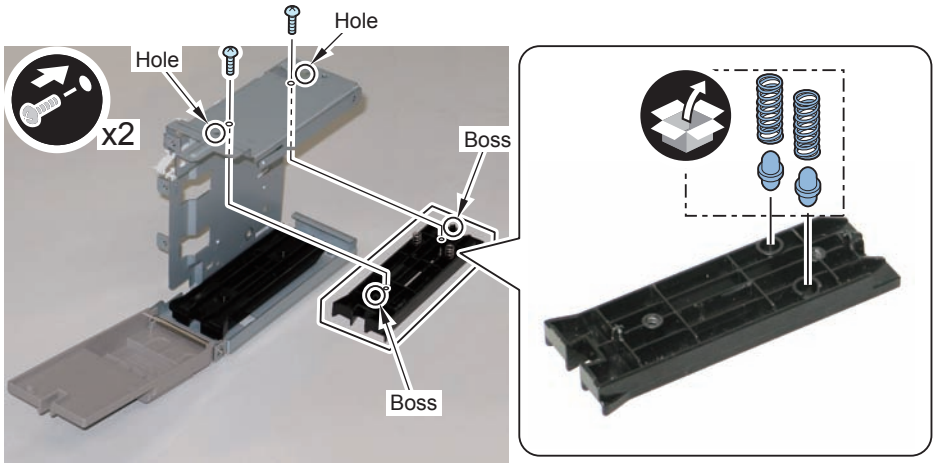

F-9-454

☐

6) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

7) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 4).)




F-9-455

☐

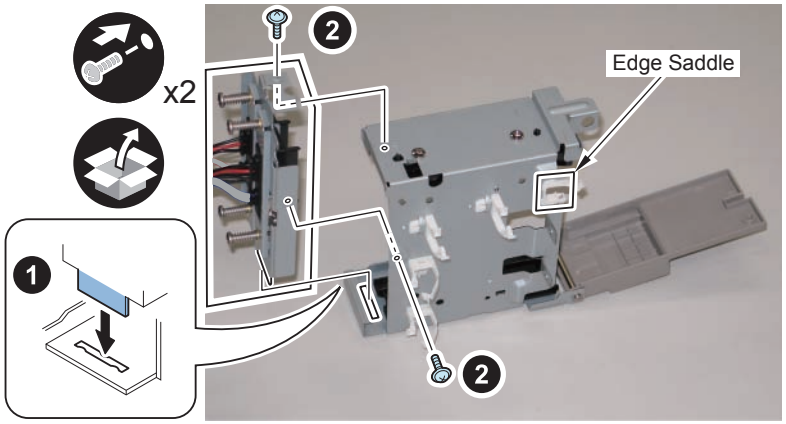
8) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

9) Close the Edge Saddle.

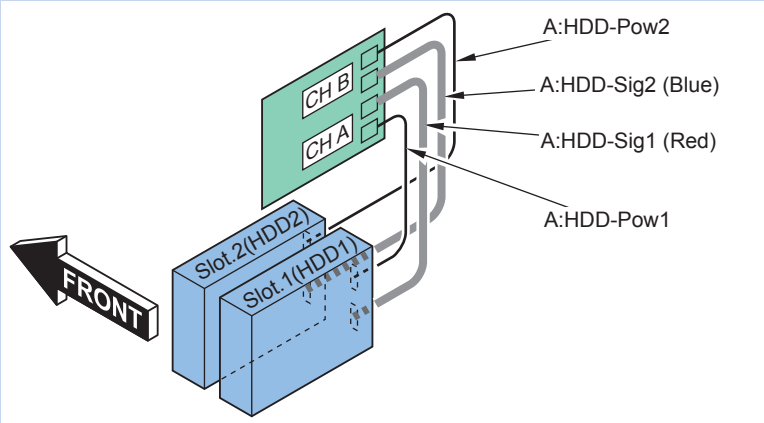



F-9-456

## Installing the Mirroring Board or Encryption Board and HDD Case Unit

NOTE:
The following shows combination of the HDD and the Mirroring Board or Encryption Board.

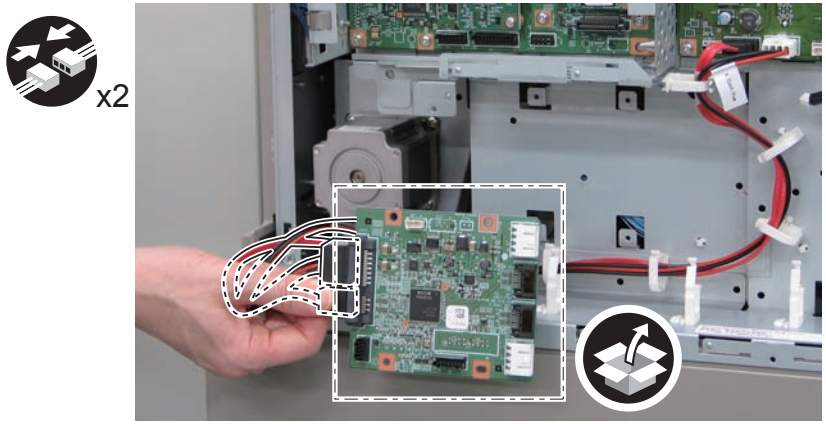
- Connect “CH A” to Slot.1 (The original HDD)
- Connect “CH B” to Slot.2 (The new HDD)




F-9-457

☐

1) Connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine to the Encryption Board.

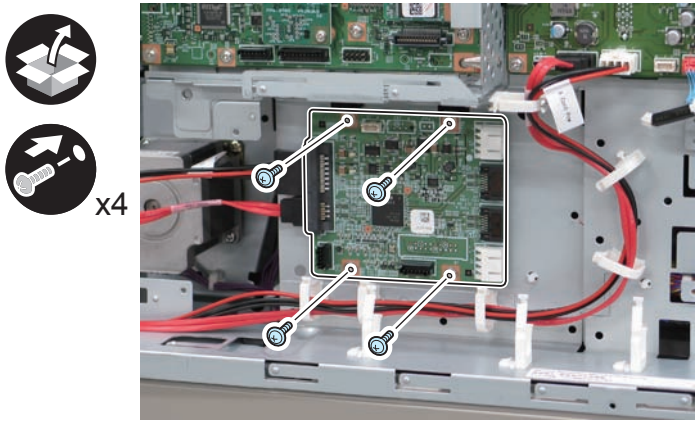



F-9-458

☐

2) Install the Encryption Board.

- 4 Screws (TP; M3x6)




F-9-459

☐

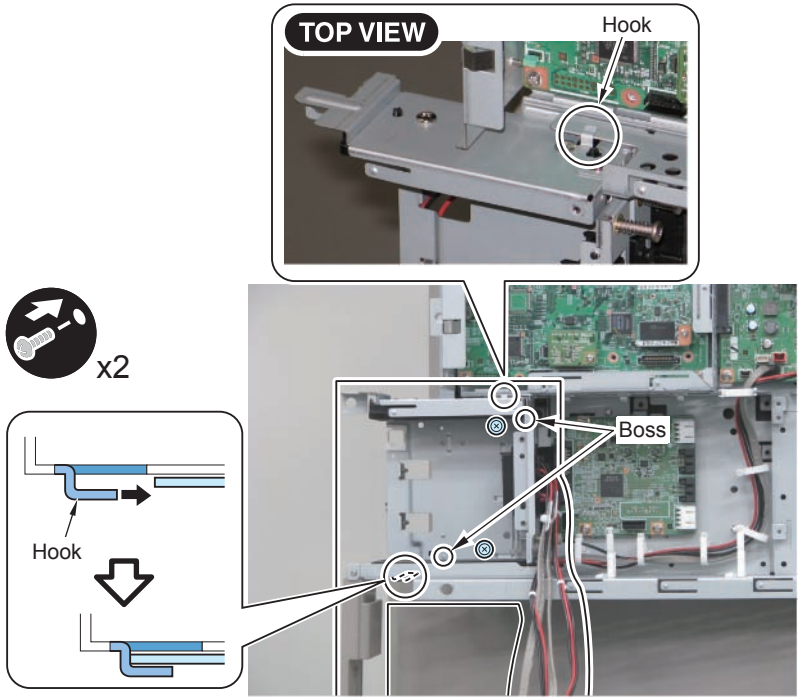
3) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.

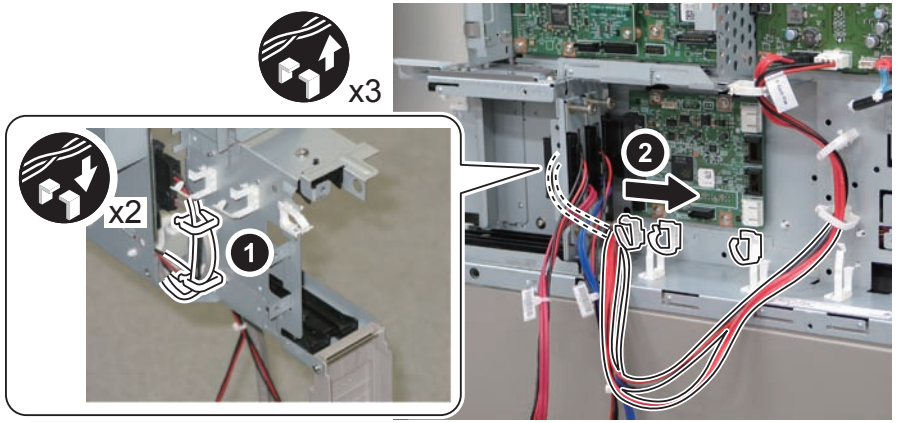



F-9-460

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

5) Free the cables from the 3 Wire Saddles at the front, and pull out the extra lengths of the cables to the front.

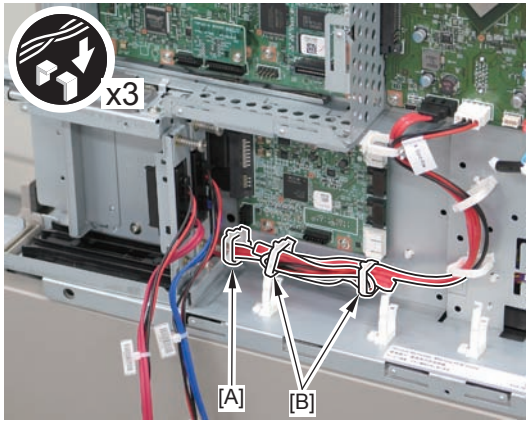



F-9-461

☐

6) Put cables through the Wire Saddle [A] and secure it.

7) Fold extra length of the Cable and secure it in place using the 2 Wire Saddles [B].

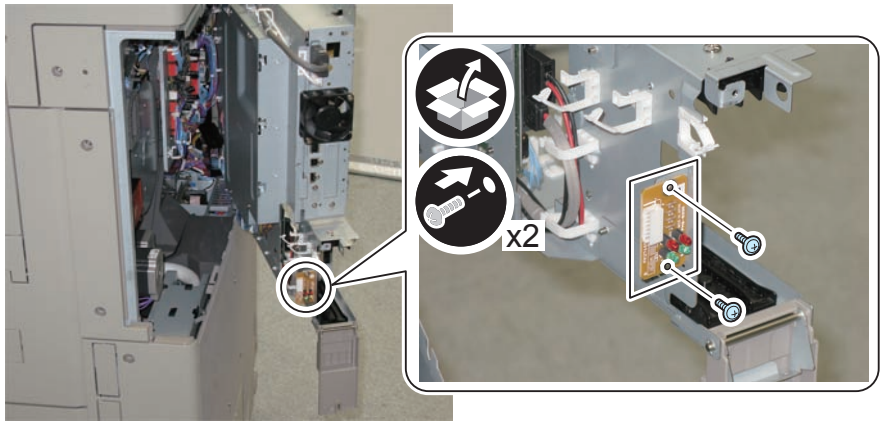



F-9-462

☐

8) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-463

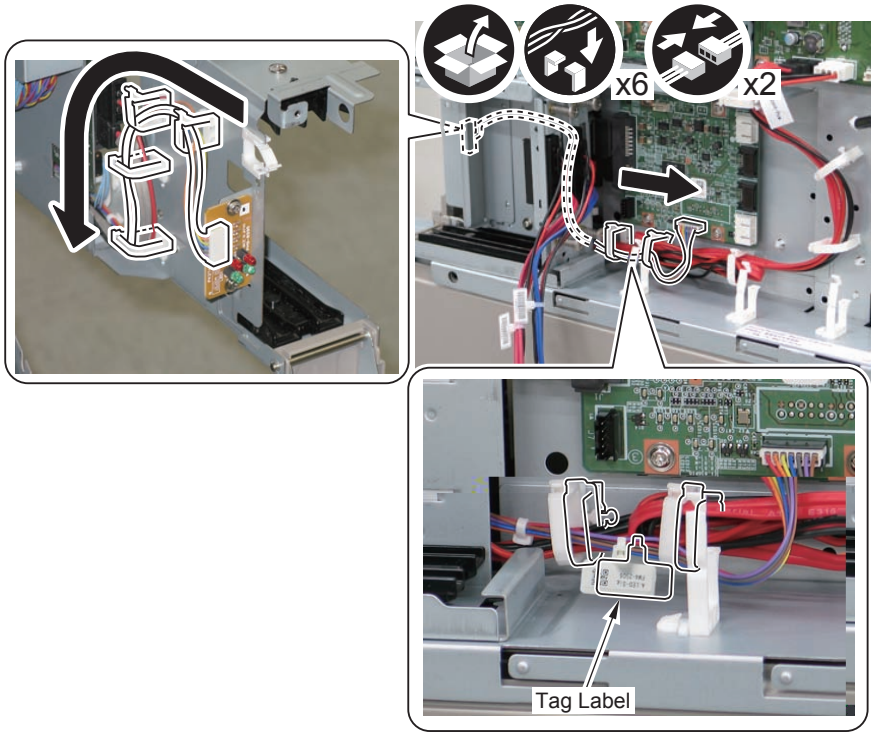
☐

9) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.



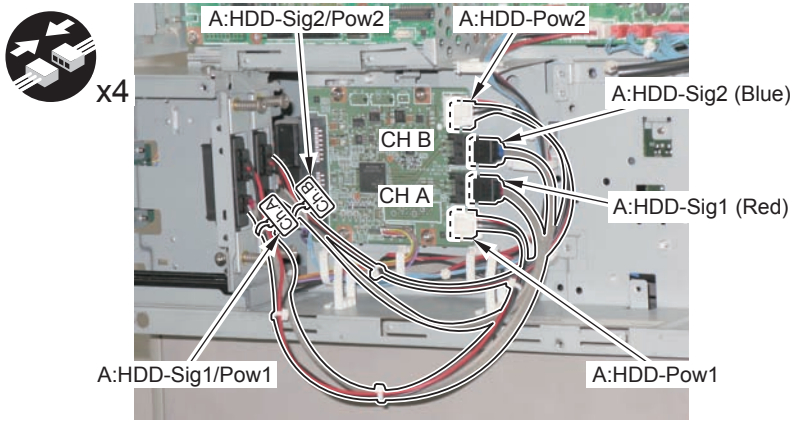

F-9-464

☐

10) Connect the 4 Connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Encryption Board.

CAUTION:

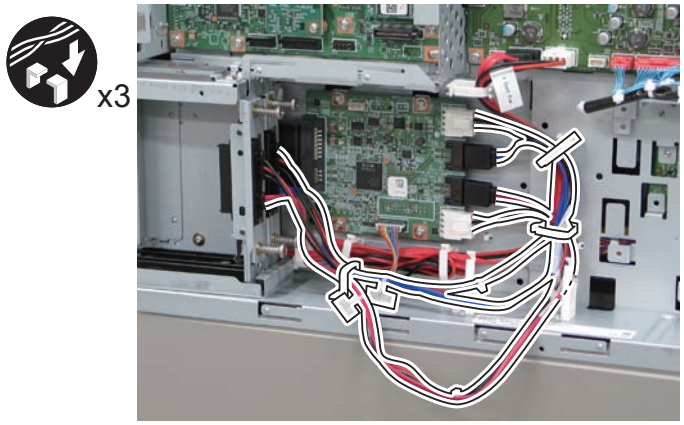
- Connect "A:HDD-Sig1/Pow1" to the location of CH-A.
- Connect "A:HDD-Sig2/Pow2" to the location of CH-B.




F-9-465

□

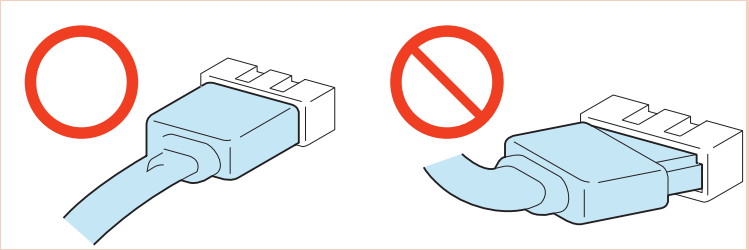
11) Secure the "A:HDD-Sig2/Pow2" cable and "A:HDD-Sig1/Pow1" cable using the total of 3 Wire Saddles as shown in the figure.




F-9-466

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-467

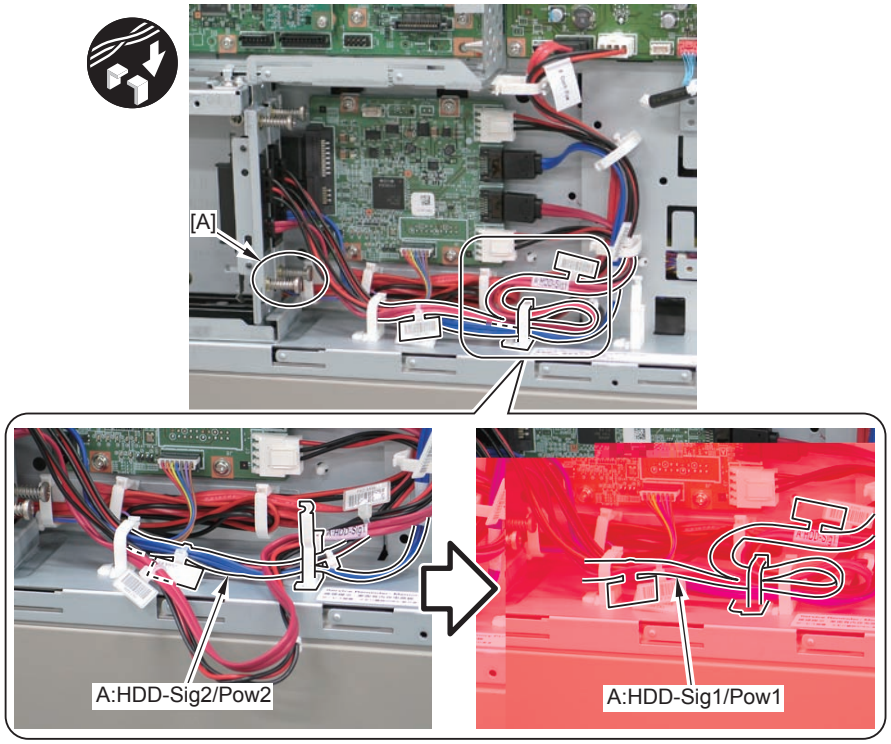
□

12) Put the "A:HDD-Sig2/Pow2" cables through the Wire Saddle.

13) Fold the extra length of the "A:HDD-Sig1/Pow1" cables, and secure it with the Wire Saddle.

CAUTION:

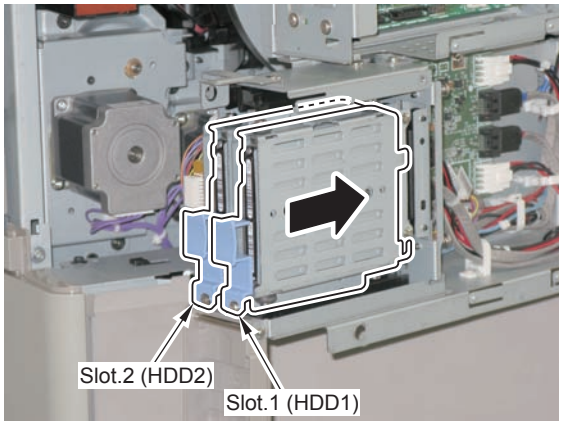
- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-468

☐
14) Insert the assembled Removable HDD.

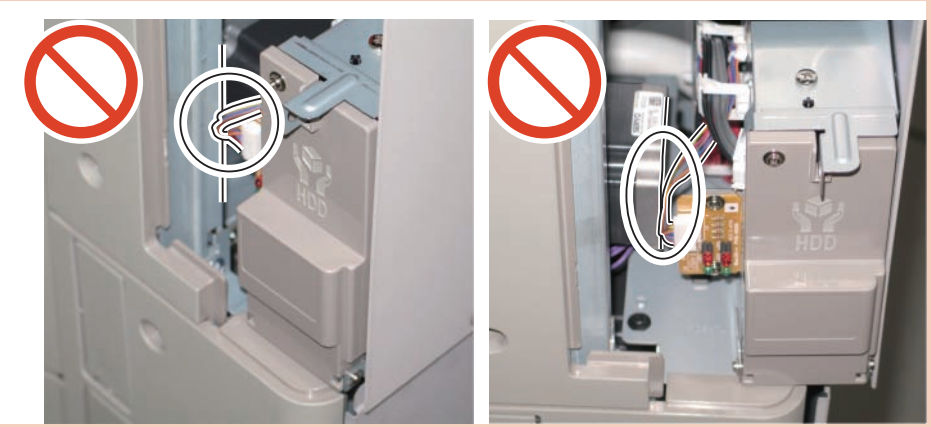
CAUTION:
Be sure to insert the HDD No.1 to the Slot.1, and the HDD No.2 to the Slot.2.




F-9-469

☐
15) Close the Controller Box.

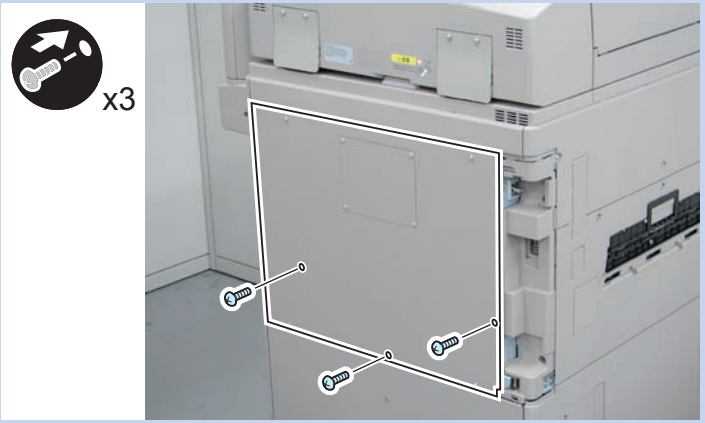
CAUTION:
When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



F-9-470

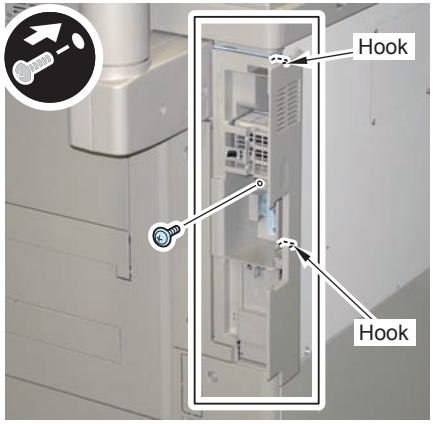
☐
16) Install the Rear Upper Cover.
- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.




F-9-471

☐
17) Install the Side Cover.
- 2 Hooks
- 1 Screw

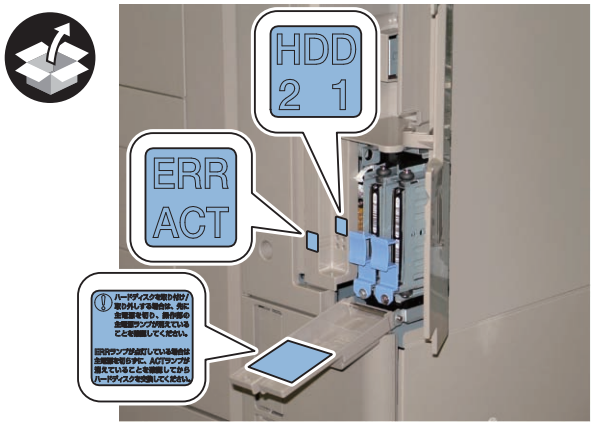



F-9-472

□

18) Affix the LED Label.

19) Affix the HDD Caution Label in the appropriate language on the HDD Cap.




F-9-473

□

20) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.
- Size (width x depth x height) : 67mm x 14mm x 64mm

F-9-474

□

21) Close the Right Rear Cover 1.

22) Return the Left Rear Cover to its original position.

23) Connect the power plug to the outlet.

24) Turn ON the main power switch. (Only when installing HDD Mirroring Kit)

# After Installing HDD Data Encryption & Mirroring Kit

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC

Service support tool in the version that supports this host machine must be installed.

2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

## Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Setting for Mirroring

1) Make a setting of mirroring.
- Specify "1" under "Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID".

2) Turn OFF/ON the main power of the host machine to enable the setting value.
3) Make sure that the UI screen is activated correctly.
4) Make sure that the LED blinks.
- HDD1 (Slot 1): The green LED blinks.
- HDD2 (Slot 2): The green and red LEDs blink.

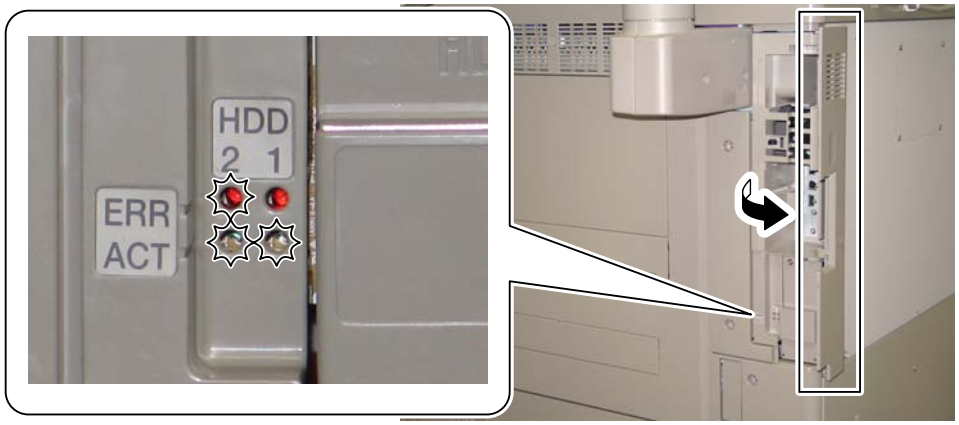
CAUTION:

Rebuild process starts after setting "1" for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

1) Check that the lighting red LED is HDD2.
2) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set "0".
3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
4) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set "1".
5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.




F-9-475

# After Installing HDD Data Encryption & Mirroring Kit

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

9-244
9 Installation > [TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > After Installing

9-245
9 Installation > [TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > After Installing

9-246
9 Installation > [TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > After Installing

9-247
9 Installation > [TYPE-8] Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit > After Installing

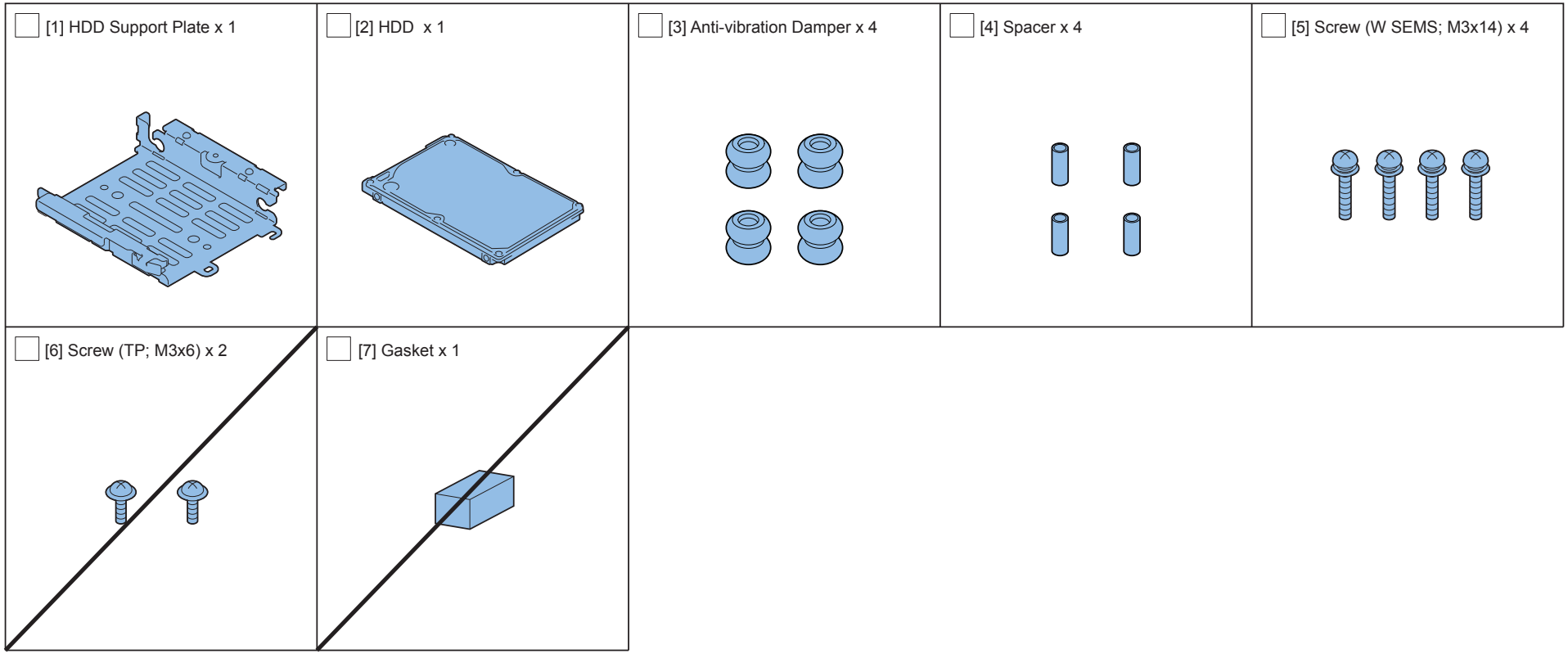
# [TYPE-9] 2 Option HDDs (1TB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

## Points to Note when HDD Data Encryption & Mirroring Kit has been Installed

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)

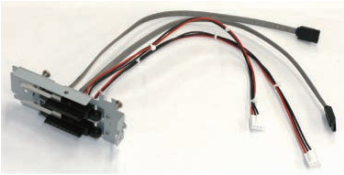
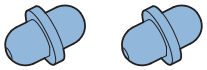
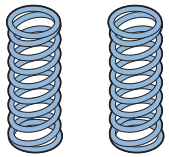
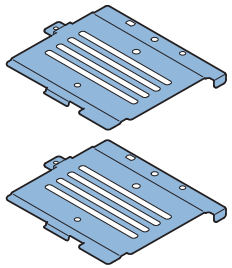
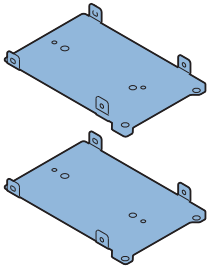
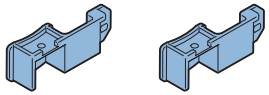
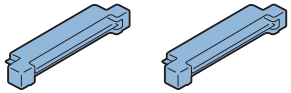
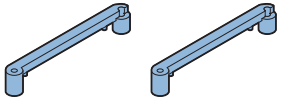
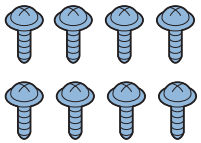
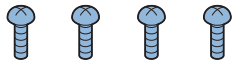
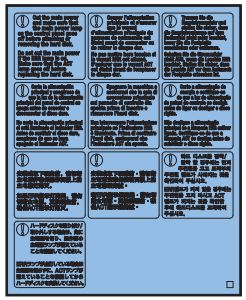
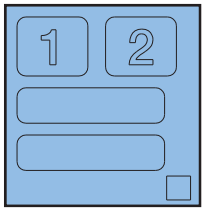



F-9-476

< CD/Guides >

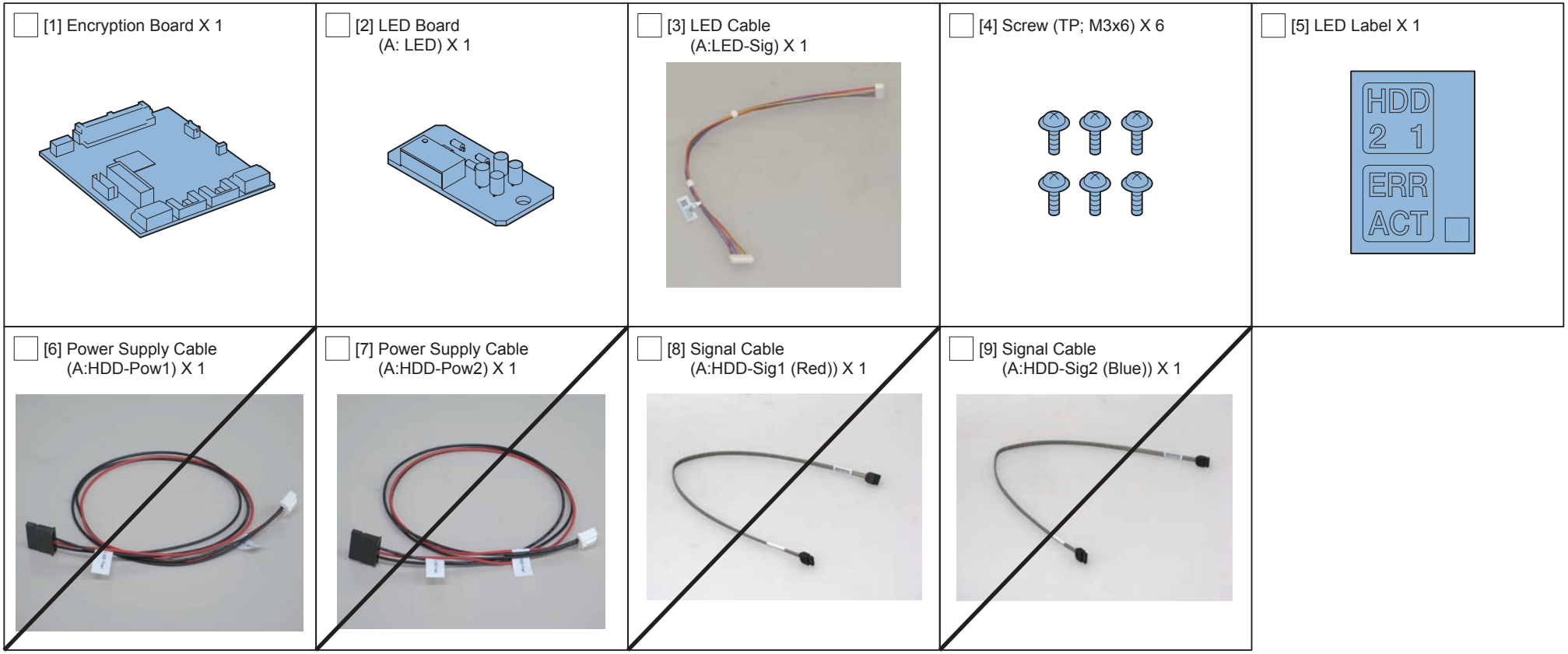
- FCC/IC Sheet

## Removable HDD Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] HDD Drawer Unit X 1  | ☐ [2] HDD Lock Pin X 2  | ☐ [3] HDD Lock Pin X 2  | ☐ [4] HDD Cover X 2  | ☐ [5] HDD Connector Plate X 2  |
| ☐ [6] HDD Connector Plate X 2  | ☐ [7] Conversion Connector X 2  | ☐ [8] Connector Fixation Block X 2  | ☐ [9] Screw (TP Round End; M3x6) X 8  | ☐ [10] Screw (P Tightening; M3x8) X 4  |
| ☐ [11] HDD Caution Label X 1  | ☐ [12] R-HDD Label X 1   | | | |

F-9-477

## HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit




F-9-478

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Guide
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

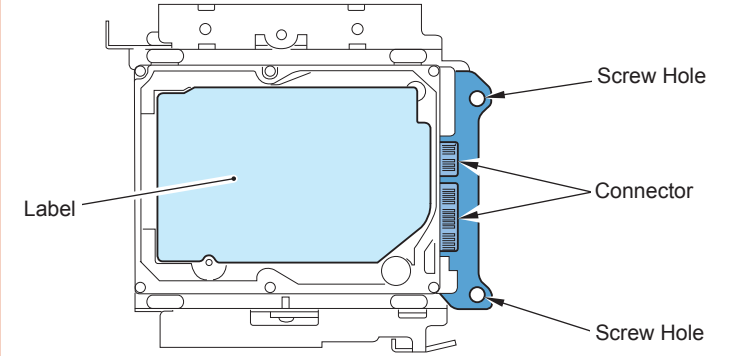
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Assembling the Option HDD

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.




F-9-479

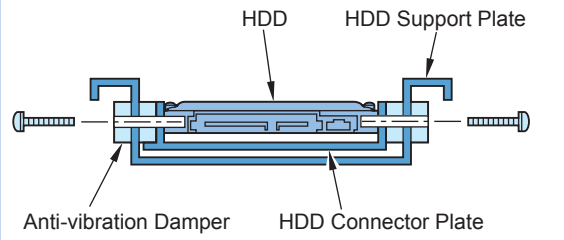
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

□

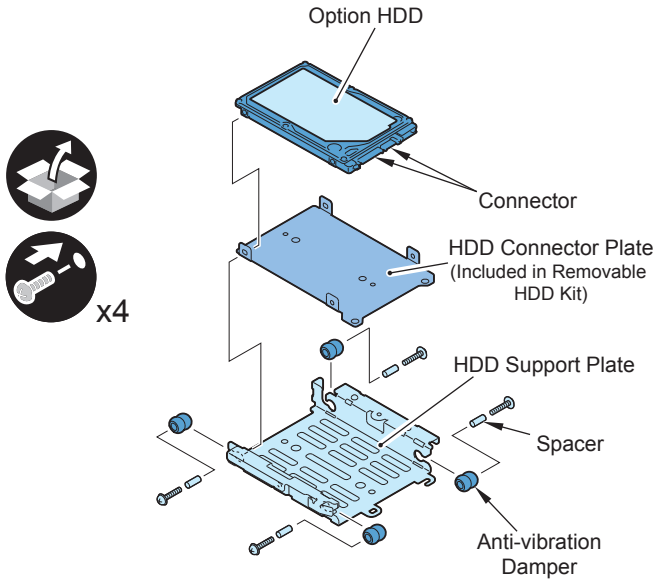
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



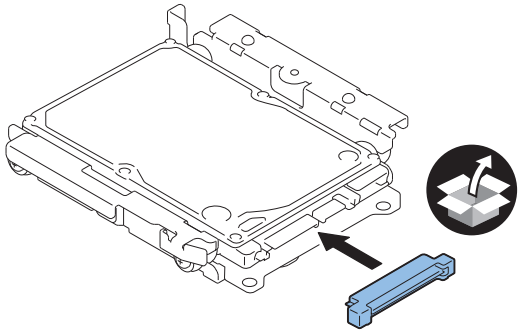

F-9-480




F-9-481

☐
2) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-482

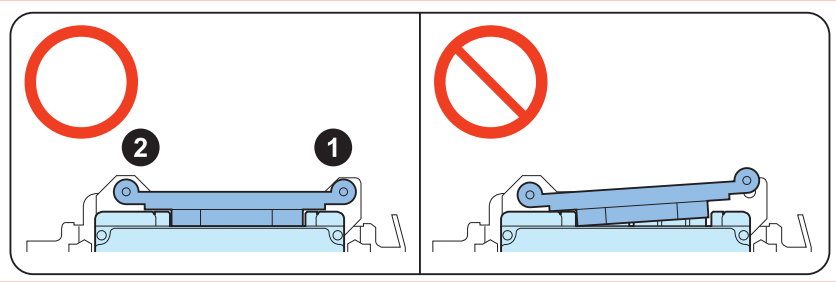
☐

3) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

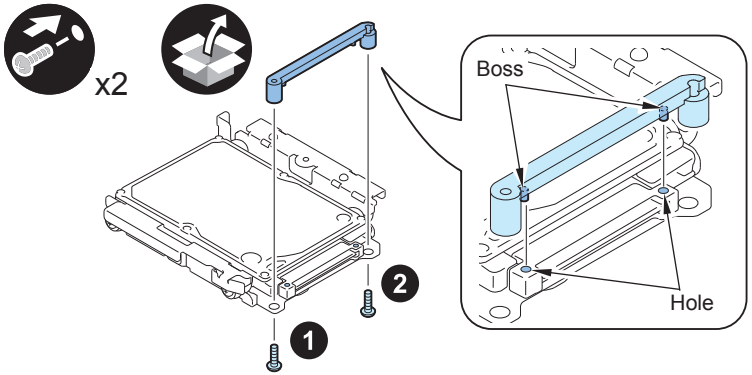
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-483




F-9-484

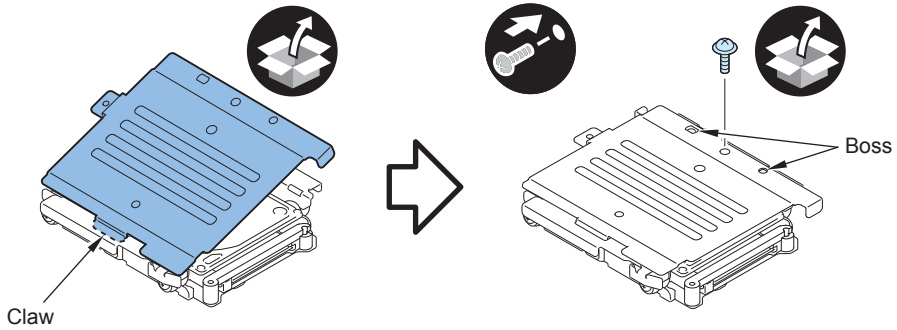
☐

4) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-485

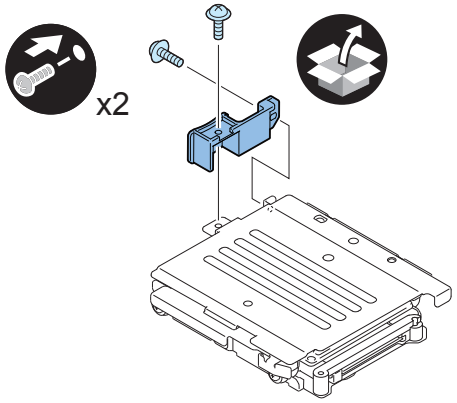
□

5) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

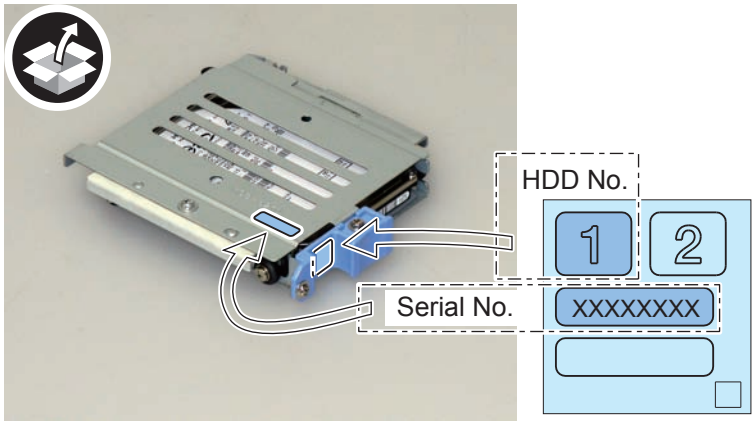



F-9-486

□

6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.




F-9-487

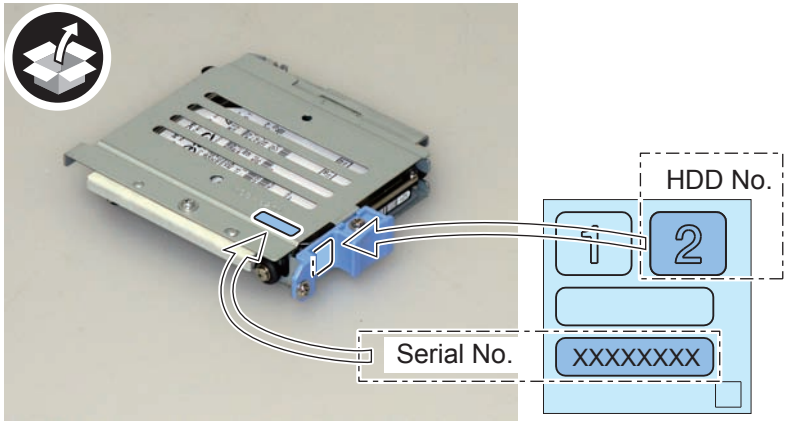
□

8) Assemble the other Option HDD (1TB) in the same way according to steps 1) to 5).

□

9) Affix the HDD No.2 of the R-HDD Label to the handle of the Removable HDD.

10) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

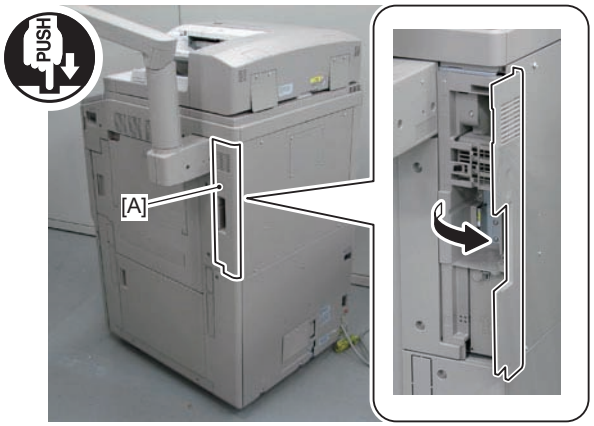



F-9-488

## Removing the HDD and HDD Case Unit

□

1) Push [A] part, and open the Right Rear Cover 1.

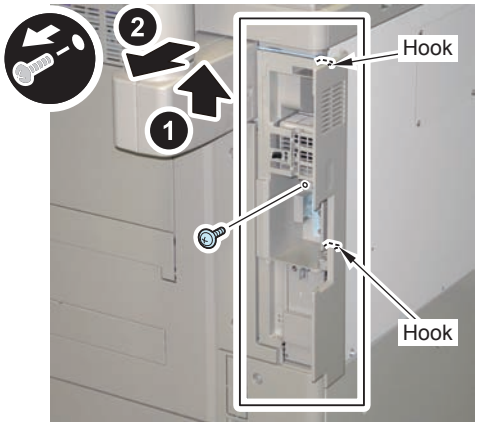



F-9-489

□

2) Remove the Side Cover.

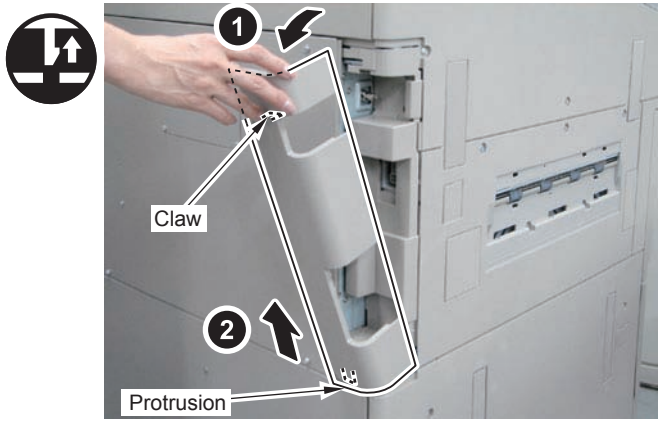
- 1 Screw
- 2 Hooks




F-9-490

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

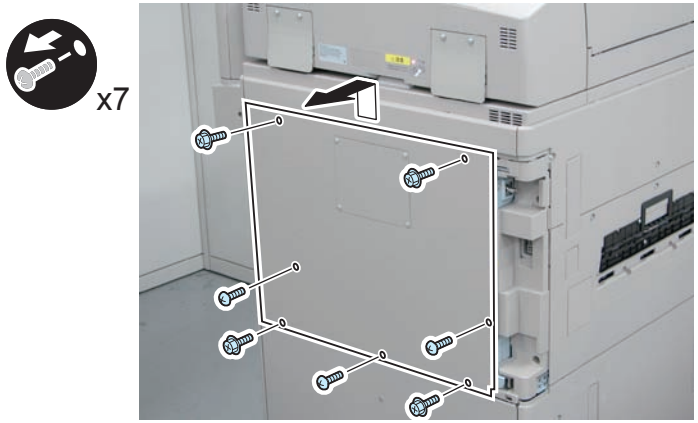



F-9-491

□

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

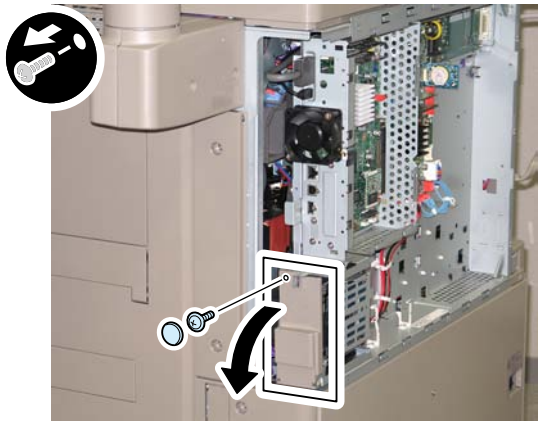



F-9-492

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-493

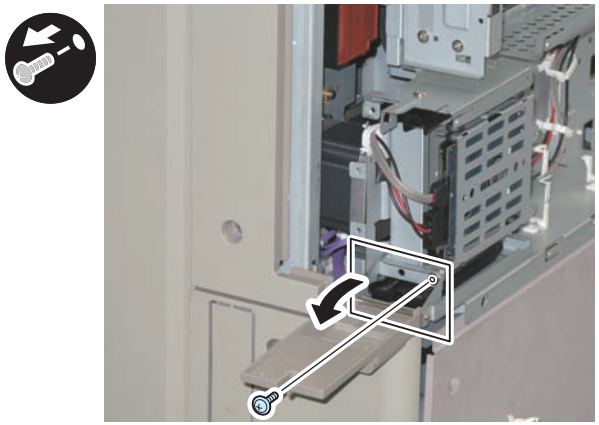
☐

6) Return the rubber cap to the HDD Cap.

☐

7) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will not be used.)

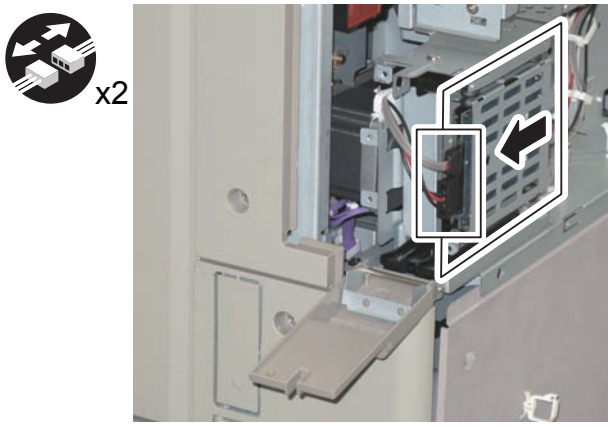


F-9-494

☐

8) Remove the HDD. (The removed HDD will not be used.)

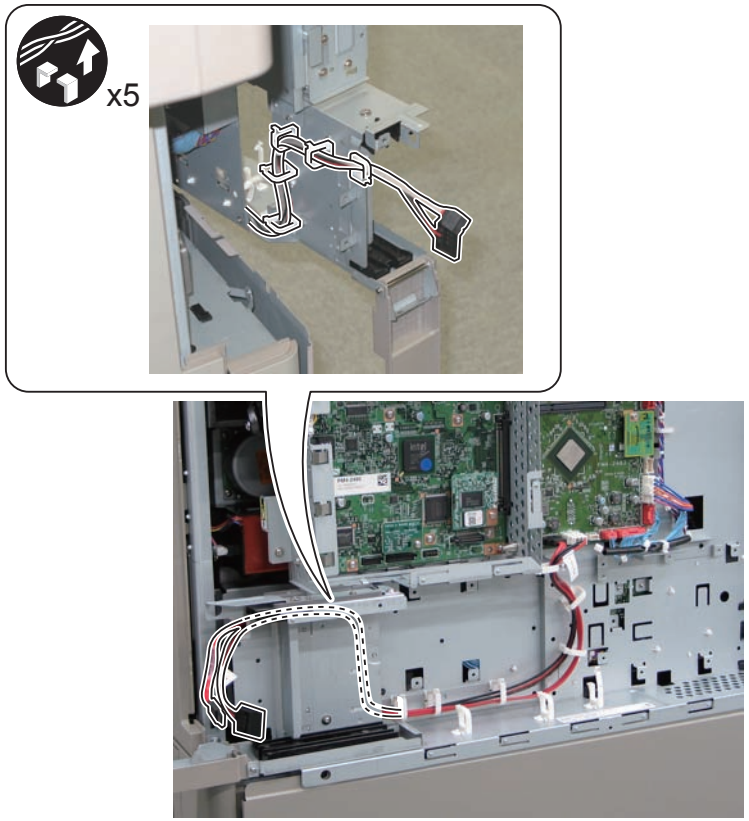
- 2 Connectors




F-9-495

☐

9) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.

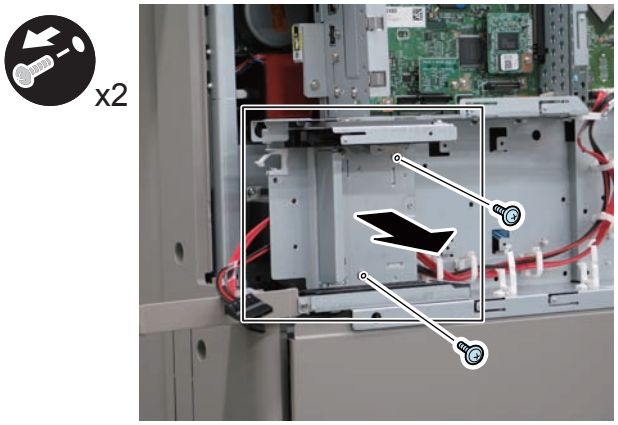



F-9-496

☐

10) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the Encryption Board and HDD Case Unit” step 3).)

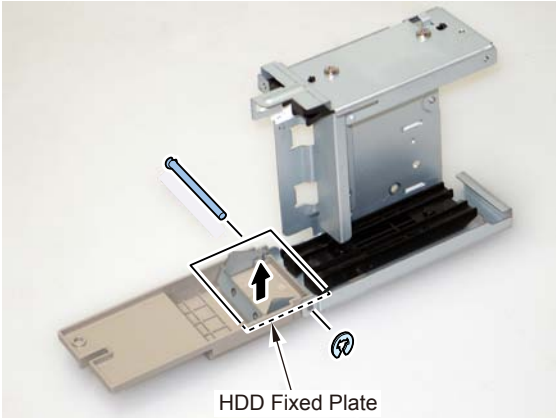



F-9-497

## Changing Configuration inside of HDD Case Unit

☐

1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)




F-9-498

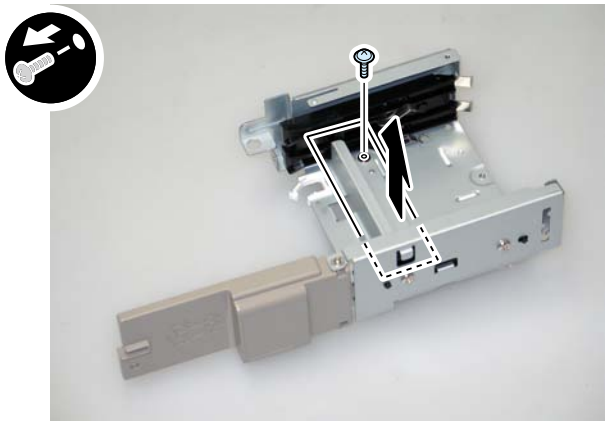
☐

2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

☐

3) Remove the Face Plate. (The removed Face Plate and screw will not be used.)

- 1 Screw

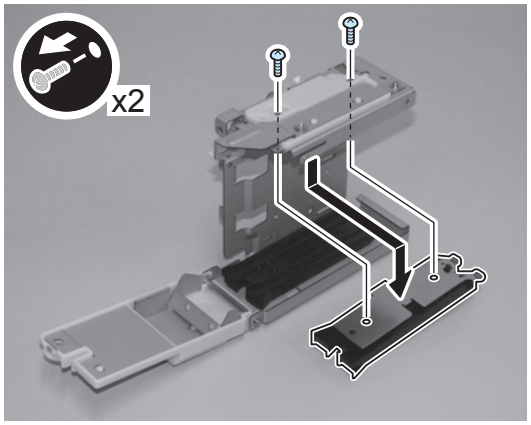


F-9-499

☐

4) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 7).)

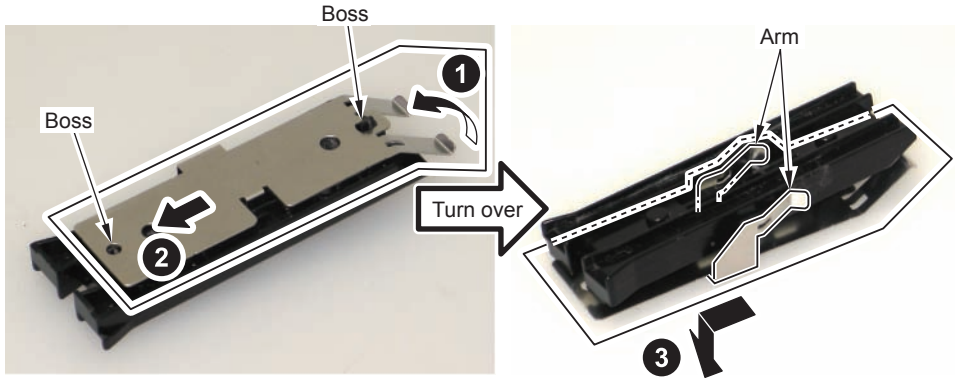



F-9-500

☐

5) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



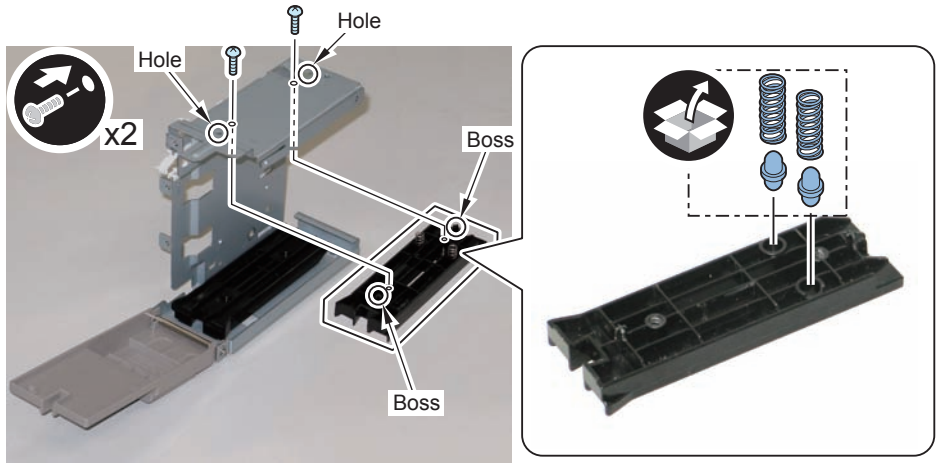

F-9-501

☐

6) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

7) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 4).)




F-9-502

☐

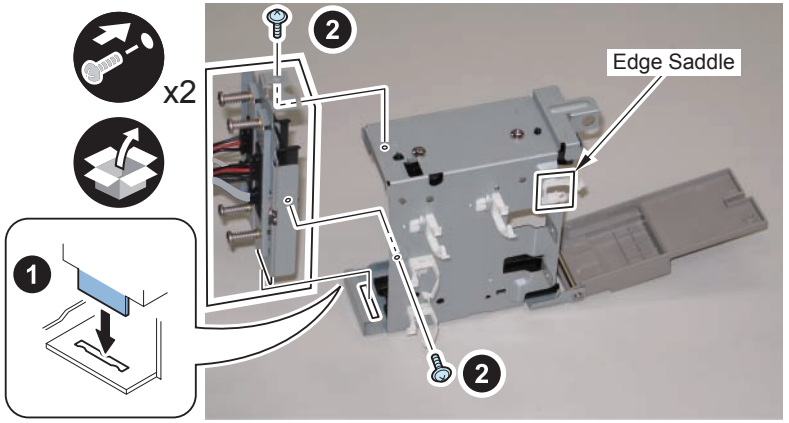
8) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

9) Close the Edge Saddle.

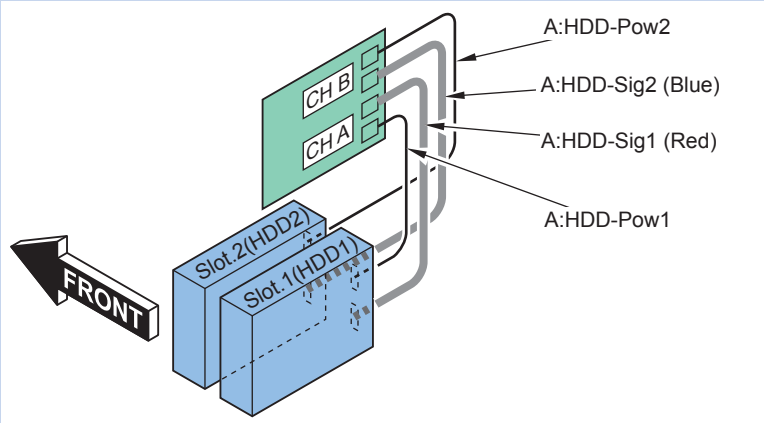



F-9-503

## Installing the Mirroring Board or Encryption Board and HDD Case Unit

NOTE:
The following shows combination of the HDD and the Mirroring Board or Encryption Board.

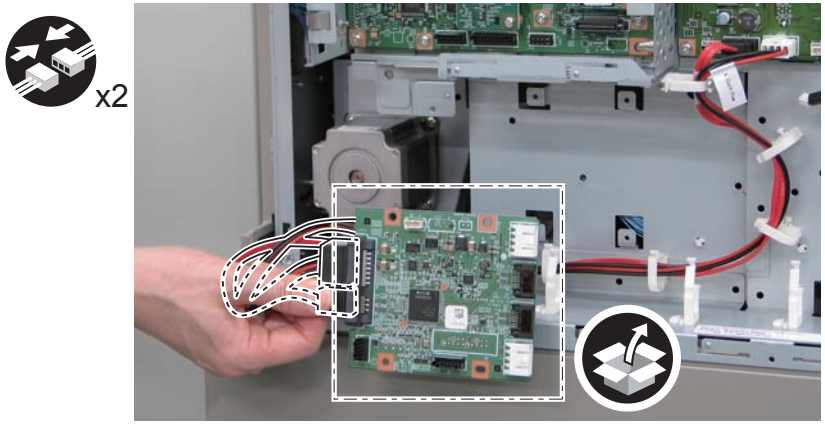
- Connect “CH A” to Slot.1 (The new HDD)
- Connect “CH B” to Slot.2 (The new HDD)




F-9-504

☐

1) Connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine to the Encryption Board.

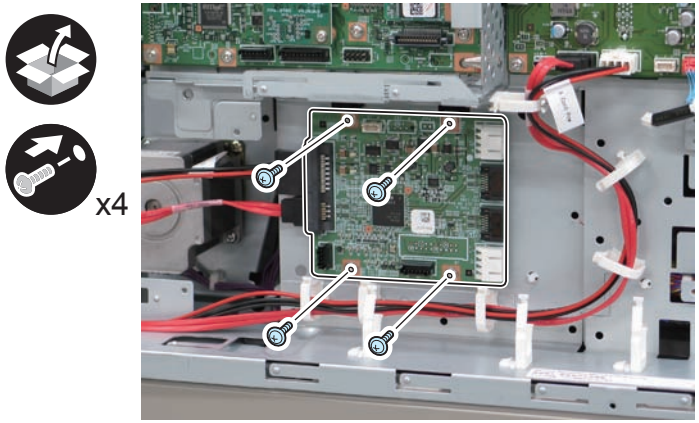



F-9-505

☐

2) Install the Encryption Board.

- 4 Screws (TP; M3x6)




F-9-506

☐

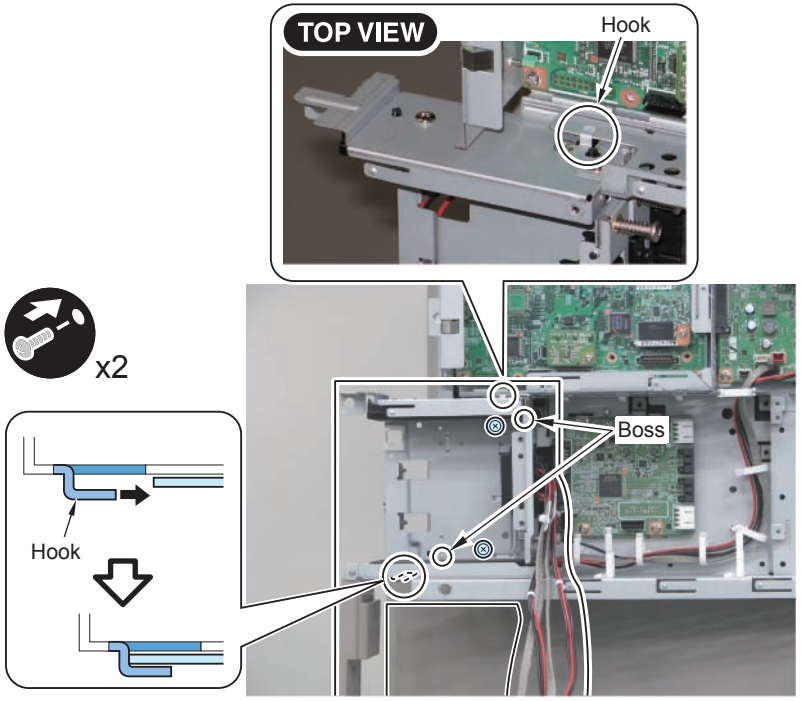
3) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.

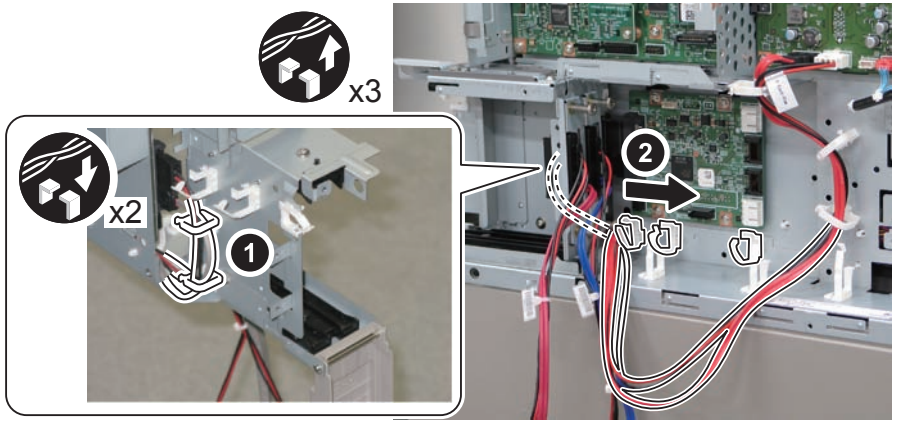



F-9-507

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

5) Free the cables from the 3 Wire Saddles at the front, and pull out the extra lengths of the cables to the front.

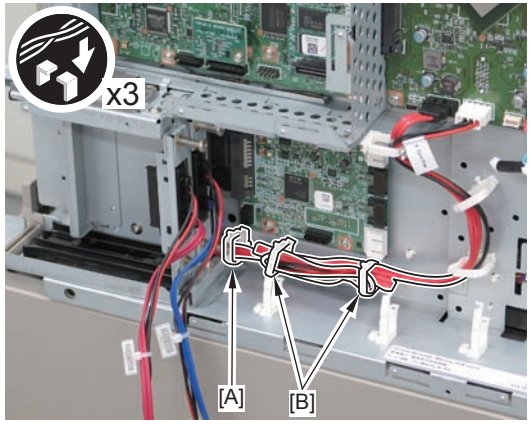



F-9-508

☐

6) Put cables through the Wire Saddle [A] and secure it.

7) Fold extra length of the Cable and secure it in place using the 2 Wire Saddles [B].

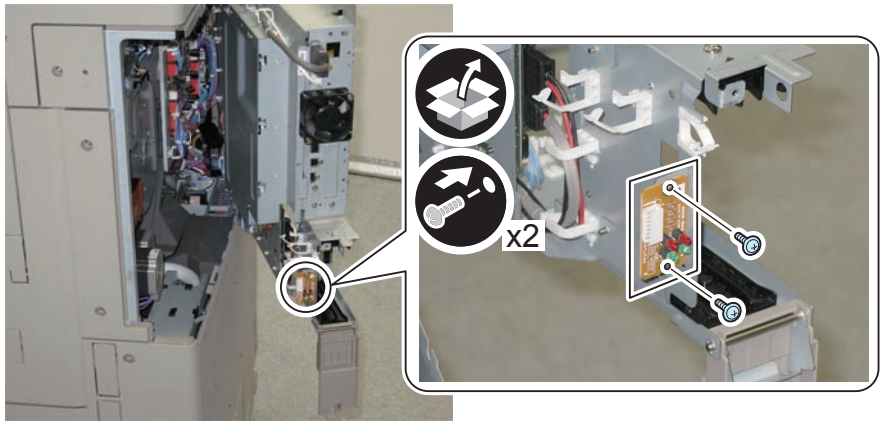



F-9-509

☐

8) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-510

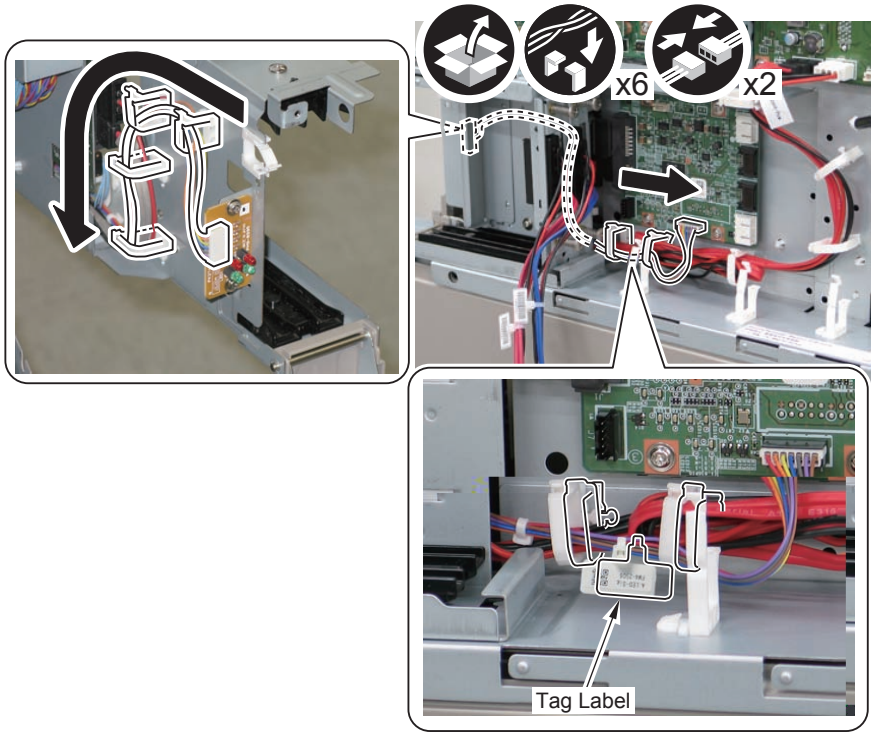
☐

9) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.



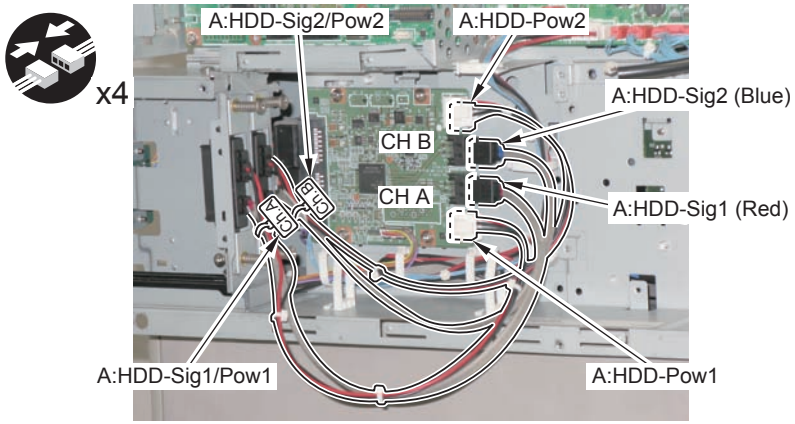

F-9-511

☐

10) Connect the 4 Connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Encryption Board.

CAUTION:

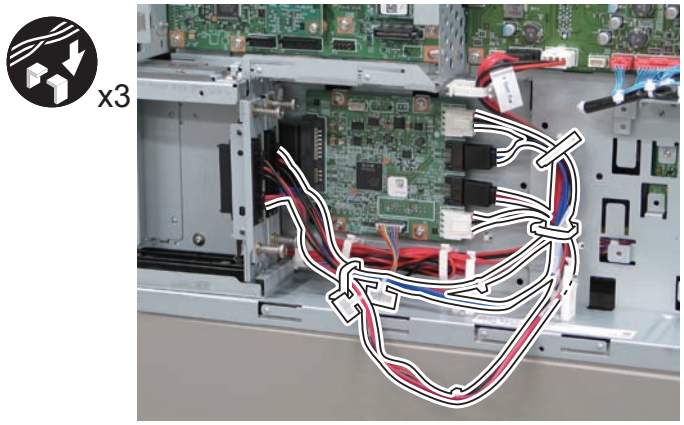
- Connect "A:HDD-Sig1/Pow1" to the location of CH-A.
- Connect "A:HDD-Sig2/Pow2" to the location of CH-B.




F-9-512

☐

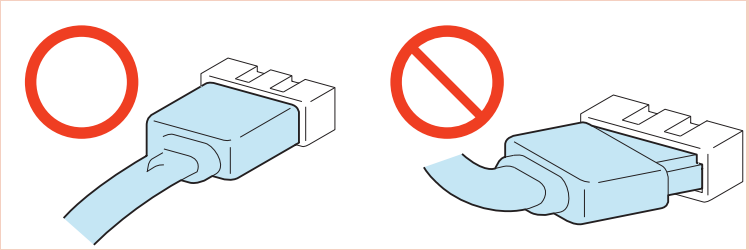
11) Secure the "A:HDD-Sig2/Pow2" cable and "A:HDD-Sig1/Pow1" cable using the total of 3 Wire Saddles as shown in the figure.




F-9-513

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-514

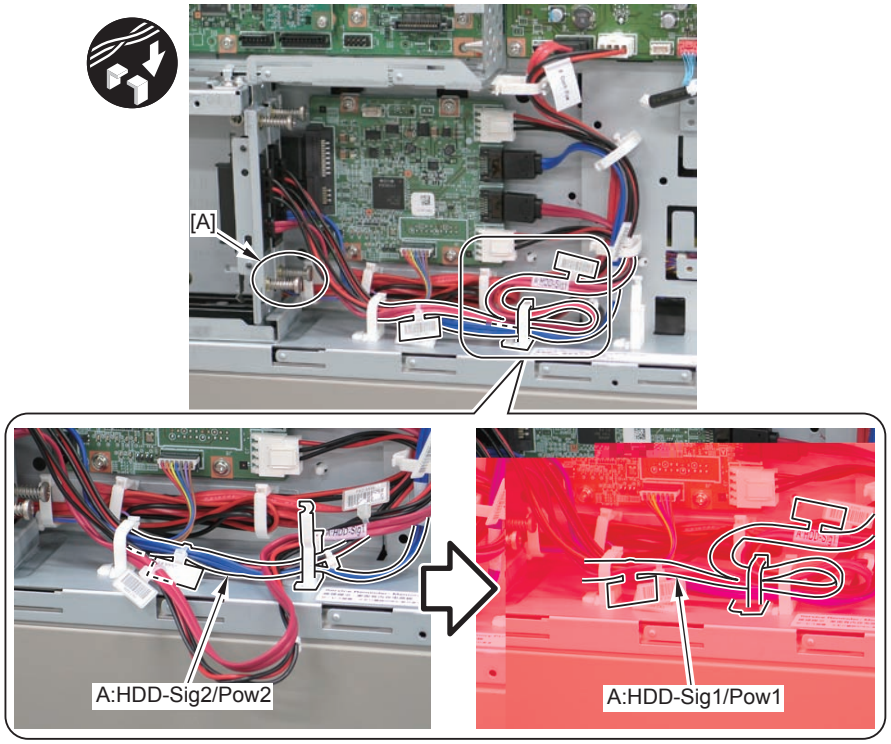
☐

12) Put the "A:HDD-Sig2/Pow2" cables through the Wire Saddle.

13) Fold the extra length of the "A:HDD-Sig1/Pow1" cables, and secure it with the Wire Saddle.

CAUTION:

- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.



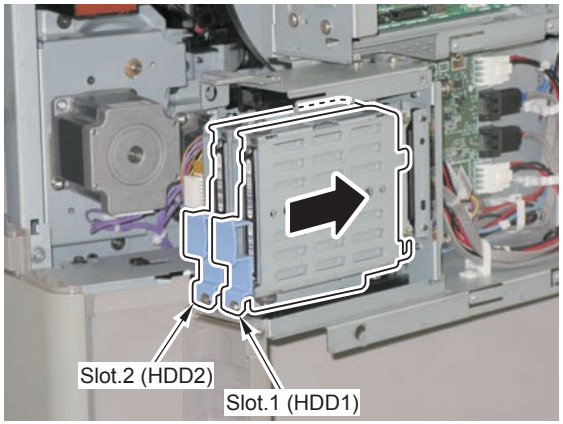

F-9-515

☐

14) Insert the assembled Removable HDD.

CAUTION:

Be sure to insert the HDD No.1 to the Slot.1, and the HDD No.2 to the Slot.2.



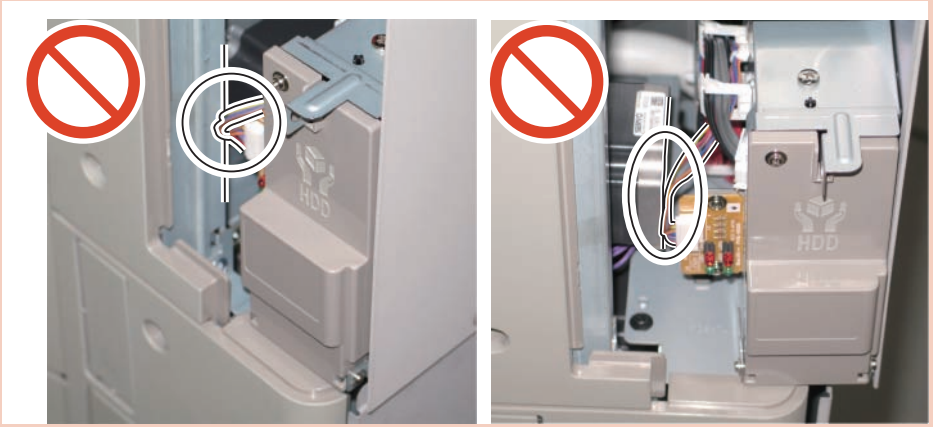

F-9-516

☐

15) Close the Controller Box.

CAUTION:

When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



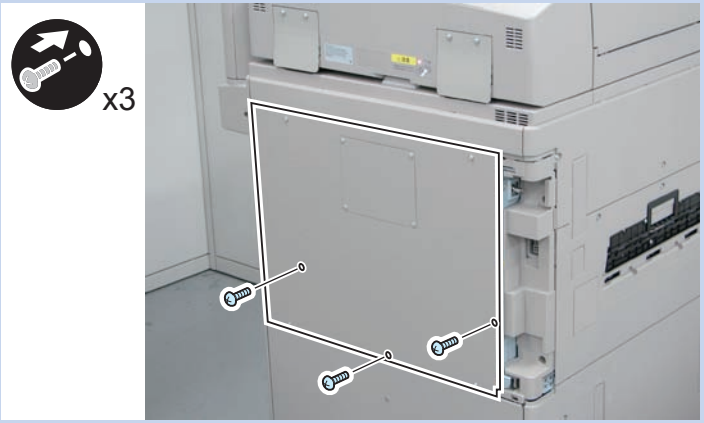
F-9-517

☐

16) Install the Rear Upper Cover.

- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.

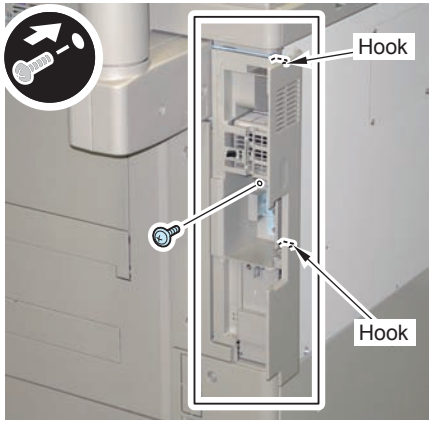



F-9-518

☐

17) Install the Side Cover.

- 2 Hooks
- 1 Screw

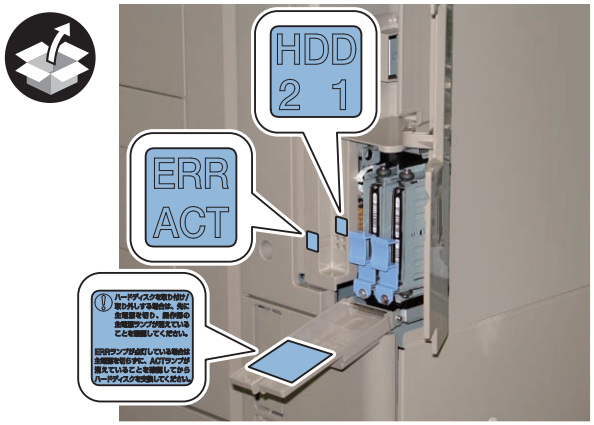



F-9-519

☐

18) Affix the LED Label.

19) Affix the HDD Caution Label in the appropriate language on the HDD Cap.




F-9-520

☐

20) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.

- Size (width x depth x height) : 67mm x 14mm x 64mm

F-9-521

☐

21) Close the Right Rear Cover 1.

22) Return the Left Rear Cover to its original position.

23) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## After Installing HDD Data Encryption & Mirroring Kit

### Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for ‘Canon MFP Security Chip’.

### Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>
When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Setting for Mirroring

1) Make a setting of mirroring.
- Specify “1” under “Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID”.

2) Turn OFF/ON the main power of the host machine to enable the setting value.
3) Make sure that the UI screen is activated correctly.
4) Make sure that the LED blinks.
- HDD1 (Slot 1): The green LED blinks.
- HDD2 (Slot 2): The green and red LEDs blink.

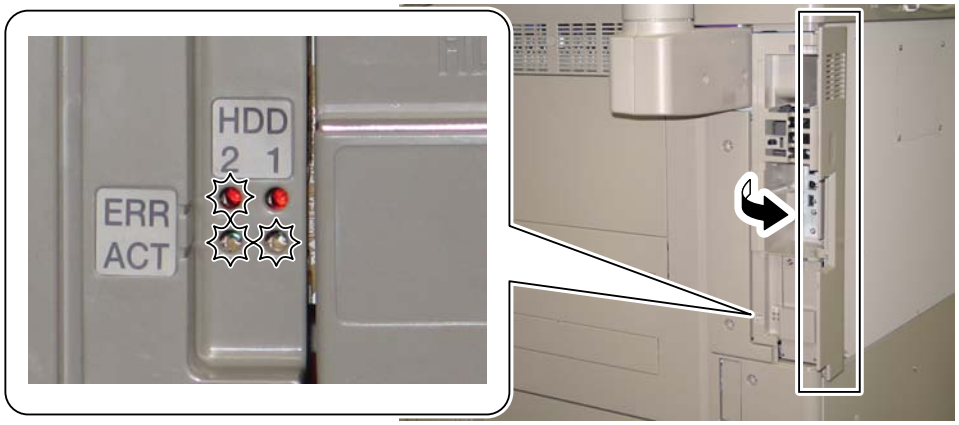
CAUTION:

Rebuild process starts after setting “1” for W/RAID. If an error occurs during the rebuild process at the initial installation The hard disk needs to be replaced. (Call service rep.), reexecute the process with the following procedure.

1) Check that the lighting red LED is HDD2.
2) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set “0”.
3) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.
4) Select Service Mode (Level 1) > COPIER > OPTION > FNCSW > W/RAID, and set "1".
5) To enable the setting value, turn OFF/ON the Main Power Supply Switch of the host machine.

The foregoing procedure is limited to the rebuild process at the initial installation.

An error during the rebuild process that is executed during operation is not included in the consideration.




F-9-522

## Reporting to the System Administrator at the End of the Work (Only When HDD Data Encryption & Mirroring Kit has been Installed)

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

# [TYPE-10] Removable HDD Kit + HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

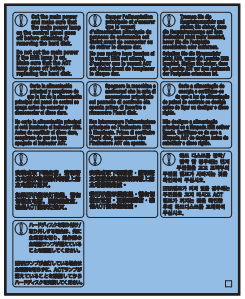
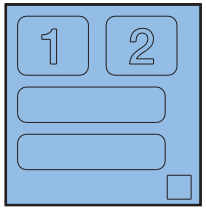
A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

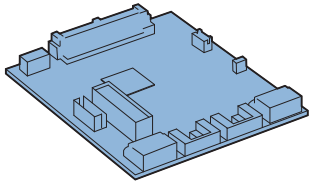
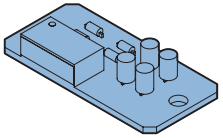
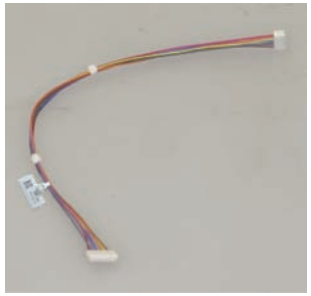
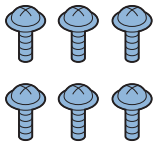
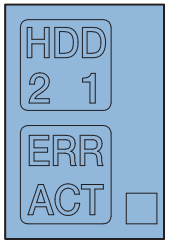
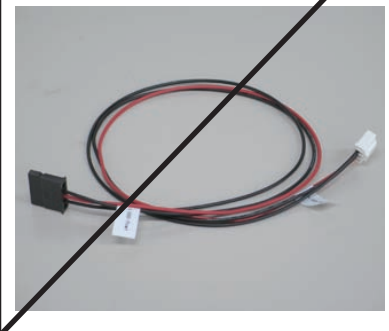
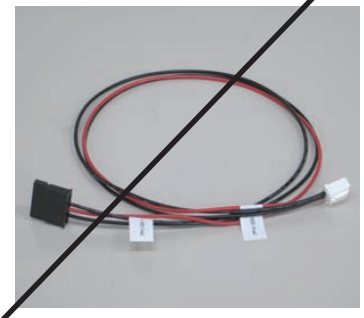
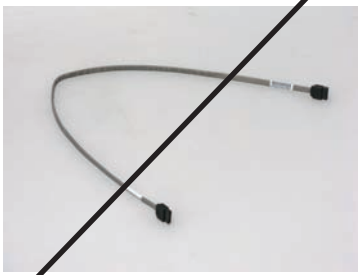
### Removable HDD Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] HDD Drawer Unit X 1 | ☐ [2] HDD Lock Pin X 2 | ☐ [3] HDD Lock Pin X 2 | ☐ [4] HDD Cover X 2<br>Use 1 of them. | ☐ [5] HDD Connector Plate X 2<br>Use 1 of them. |
| ☐ [6] HDD Connector Plate X 2<br>Use 1 of them. | ☐ [7] Conversion Connector X 2<br>Use 1 of them. | ☐ [8] Connector Fixation Block X 2<br>Use 1 of them. | ☐ [9] Screw (TP Round End; M3x6) X 8<br>Use 6 of them. | ☐ [10] Screw (P Tightening; M3x8) X 4<br>Use 2 of them. |

F-9-523

| | |
|---|---|
| ☐ [11] HDD Caution Label X 1  | ☐ [12] R-HDD Label X 1   |

## ■ HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] Encryption Board X 1  | ☐ [2] LED Board (A: LED) X 1  | ☐ [3] LED Cable (A:LED-Sig) X 1  | ☐ [4] Screw (TP; M3x6) X 6  | ☐ [5] LED Label X 1   |
| ☐ [6] Power Supply Cable (A:HDD-Pow1) X 1  | ☐ [7] Power Supply Cable (A:HDD-Pow2) X 1  | ☐ [8] Signal Cable (A:HDD-Sig1 (Red)) X 1 | ☐ [9] Signal Cable (A:HDD-Sig2 (Blue)) X 1  | |

F-9-524

< CD/Guides >
- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).
- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

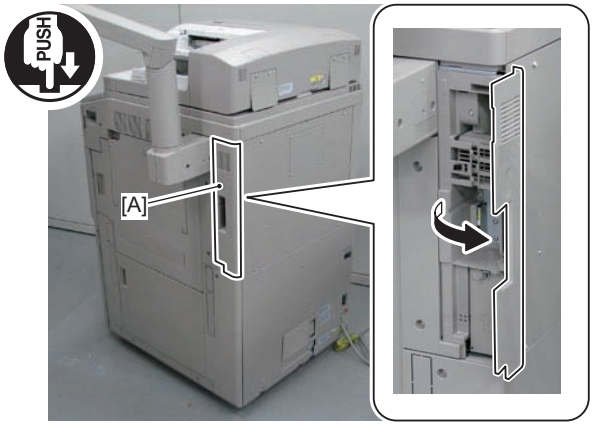
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Removing the HDD and HDD Case Unit

□

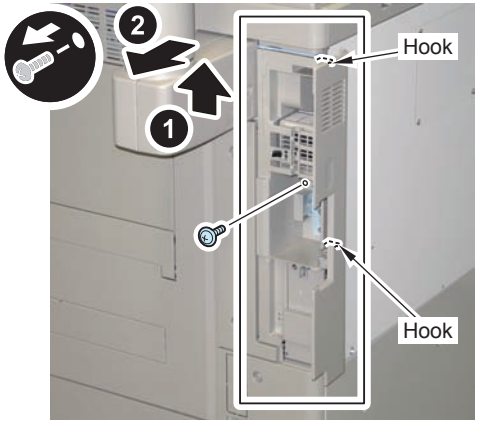
1) Push [A] part, and open the Right Rear Cover 1.




F-9-525

□

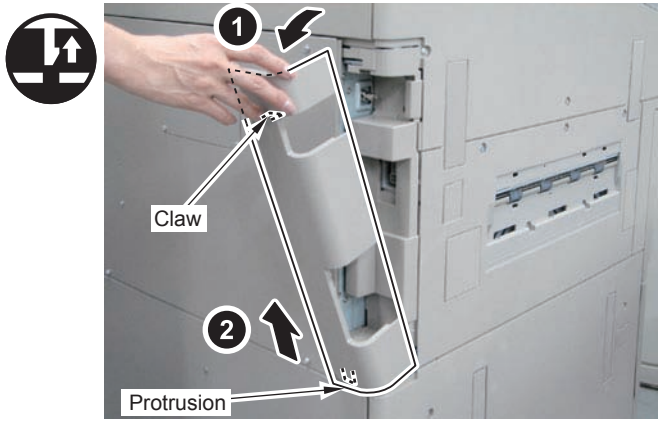
2) Remove the Side Cover.
- 1 Screw
- 2 Hooks




F-9-526

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

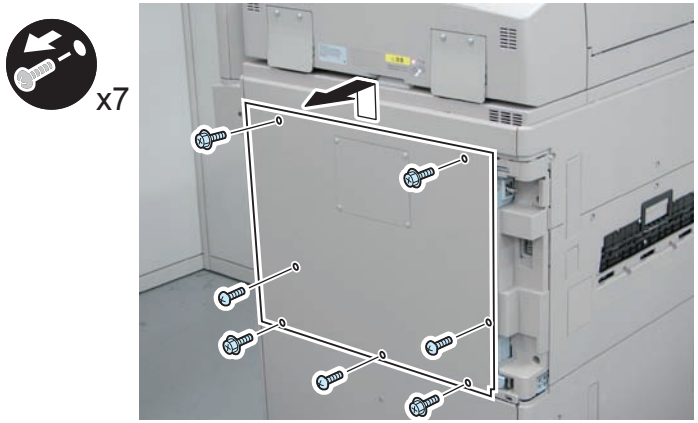



F-9-527

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

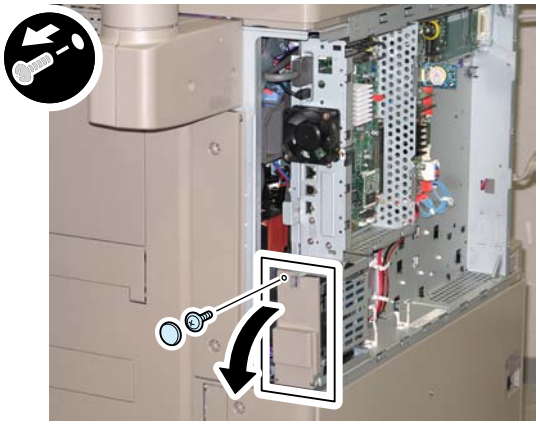



F-9-528

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-529

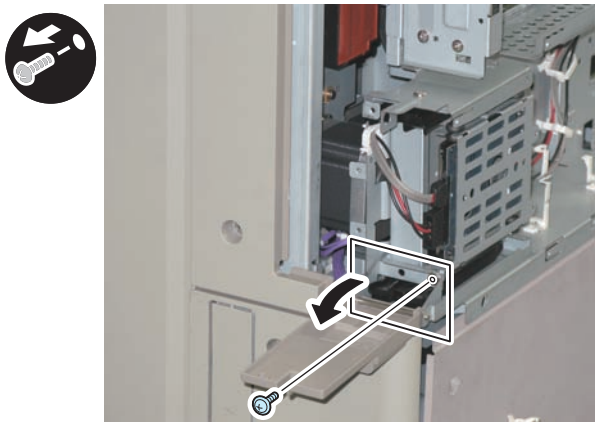
☐

6) Return the rubber cap to the HDD Cap.

☐

7) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will not be used.)

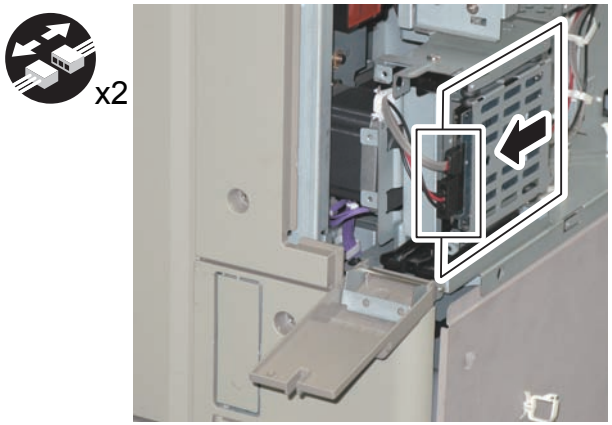


F-9-530

☐

8) Remove the HDD.

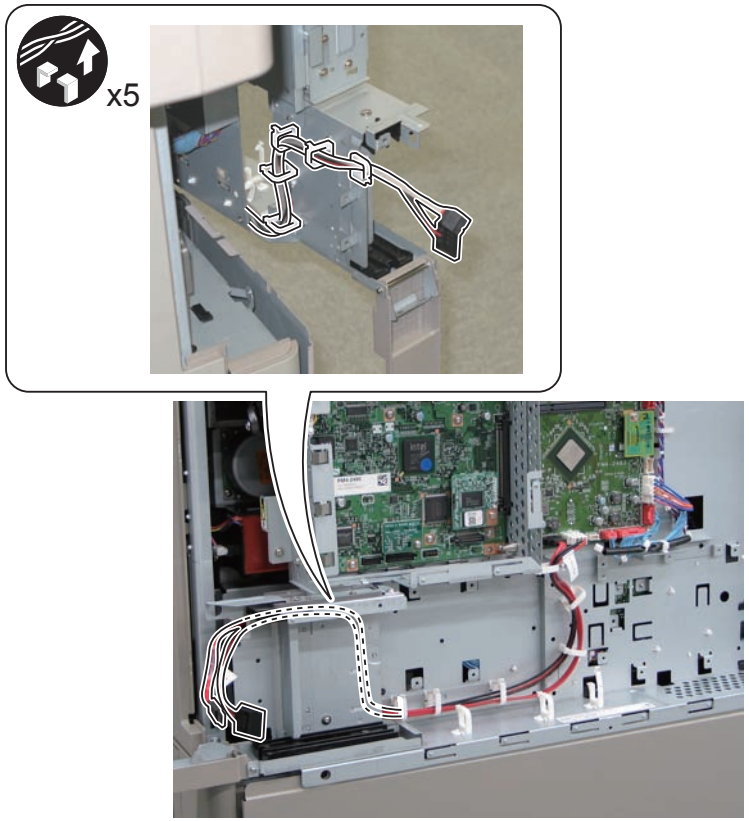
- 2 Connectors




F-9-531

☐

9) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.

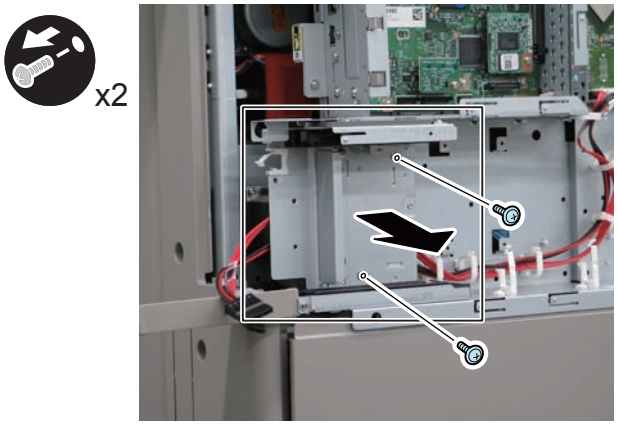



F-9-532

□

10) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the Encryption Board and HDD Case Unit” step 3).)



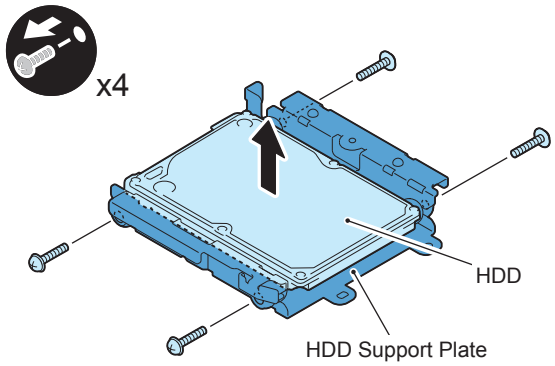

F-9-533

## Disassembling and Assembling of the HDD Removed from the Host Machine

□

1) Disassemble the removed HDD.

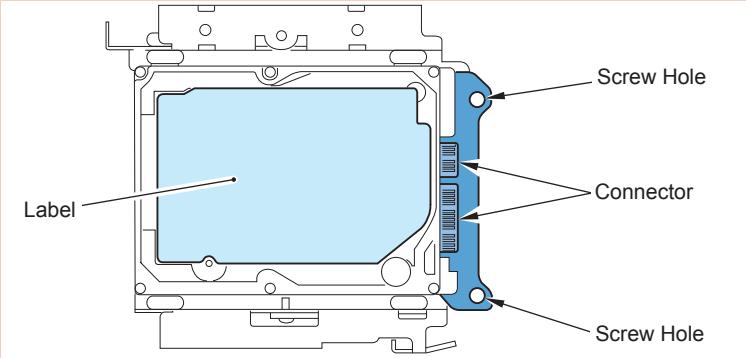
- 4 Screws (W Sems)
- 1 HDD Support Plate




F-9-534

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.



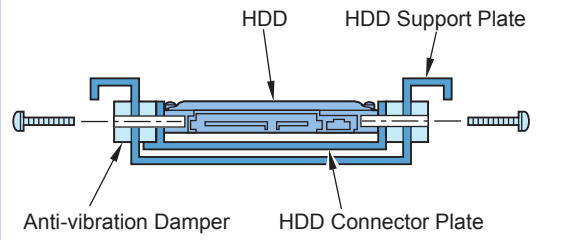

F-9-535

NOTE:
Use the parts disassembled in step 1) and parts included in the Removable HDD Kit.

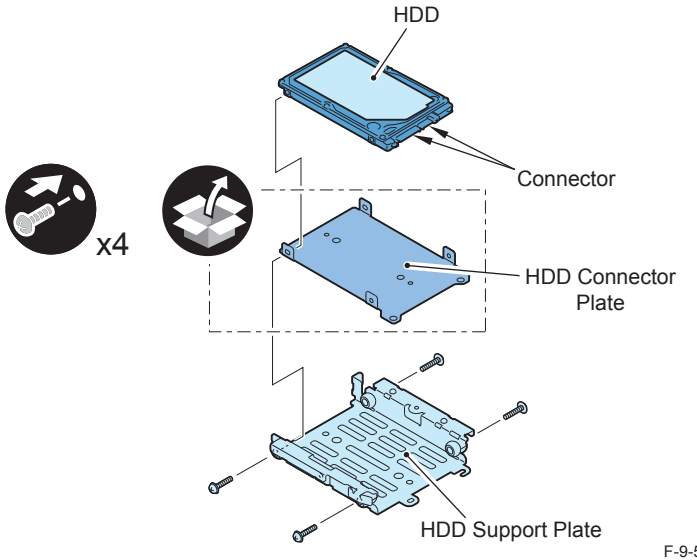
□
2) Assemble the HDD disassembled in step 1).

- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



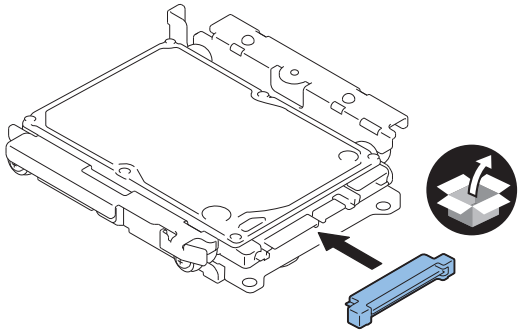

F-9-536




F-9-537

□
3) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-538

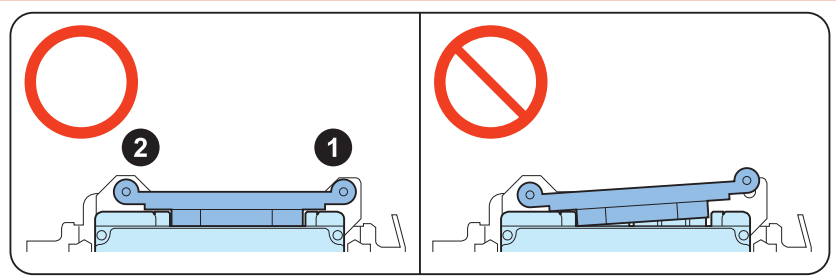
☐

4) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

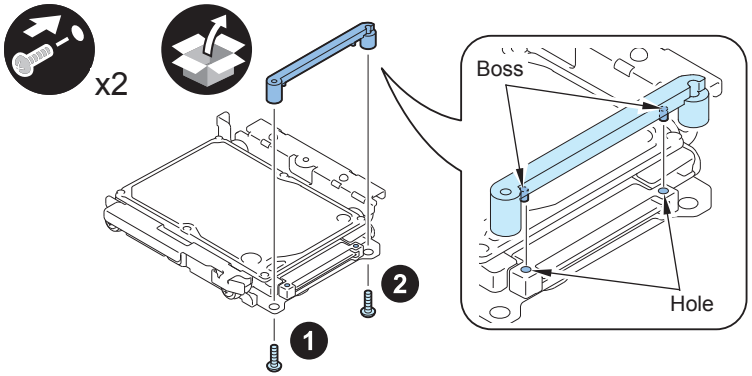
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-539




F-9-540

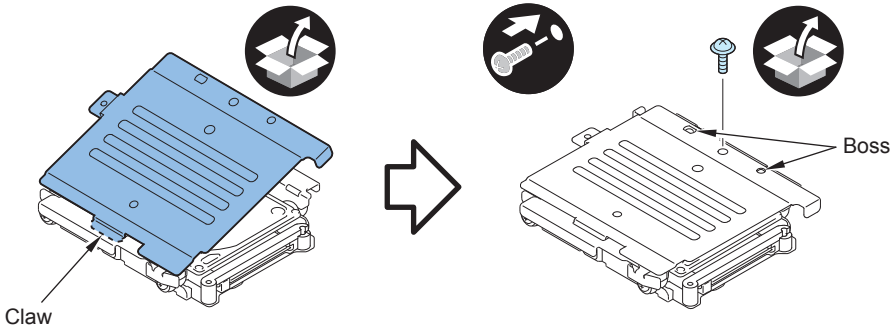
☐

5) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



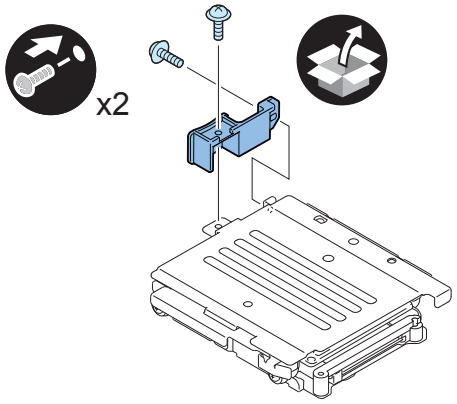

F-9-541

6) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

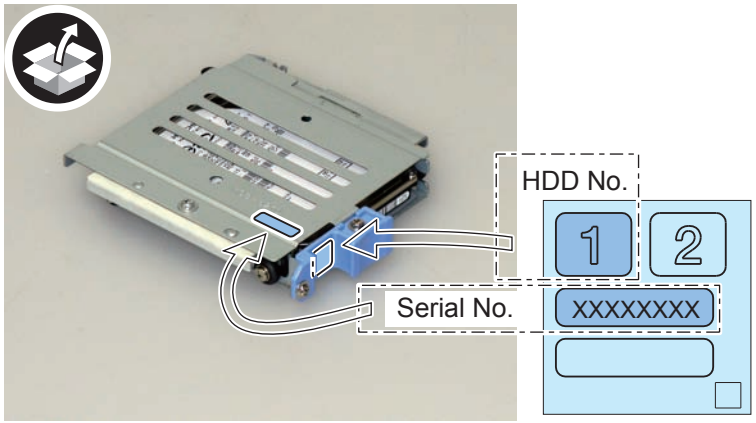
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-542

7) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

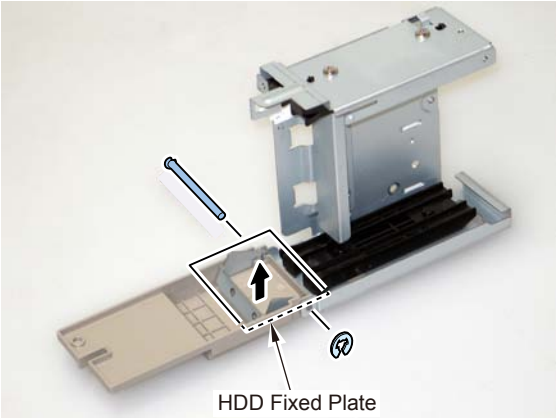
8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.




F-9-543

## Changing Configuration inside of HDD Case Unit

1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)

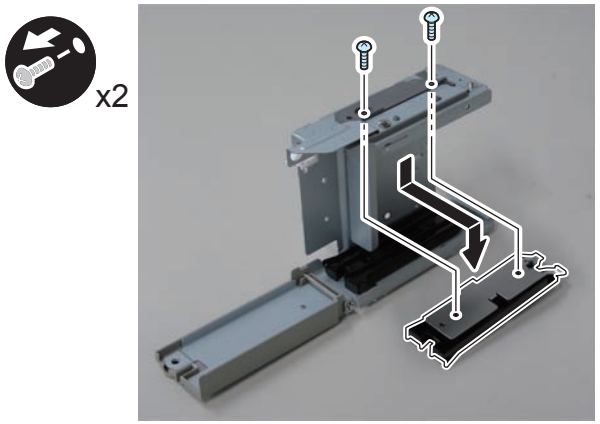



F-9-544

2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

3) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 6).)

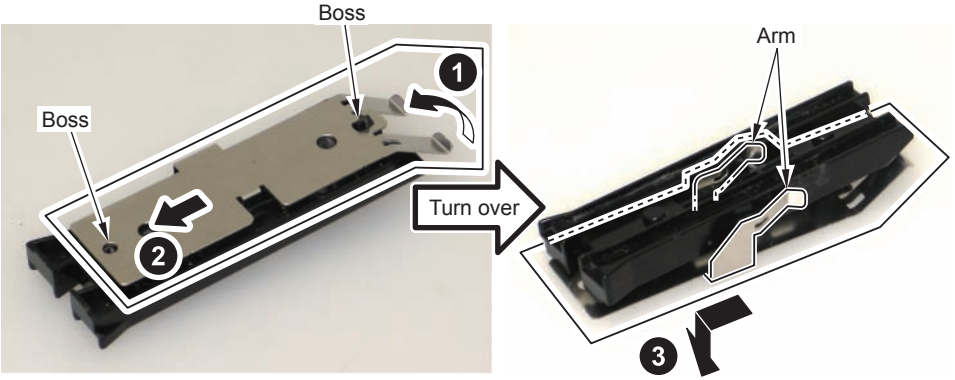



F-9-545

☐

4) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



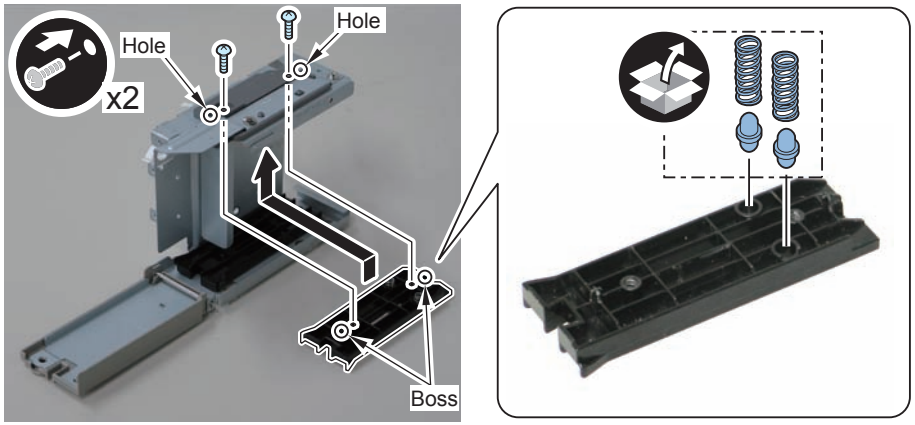

F-9-546

☐

5) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

6) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 3).)




F-9-547

☐

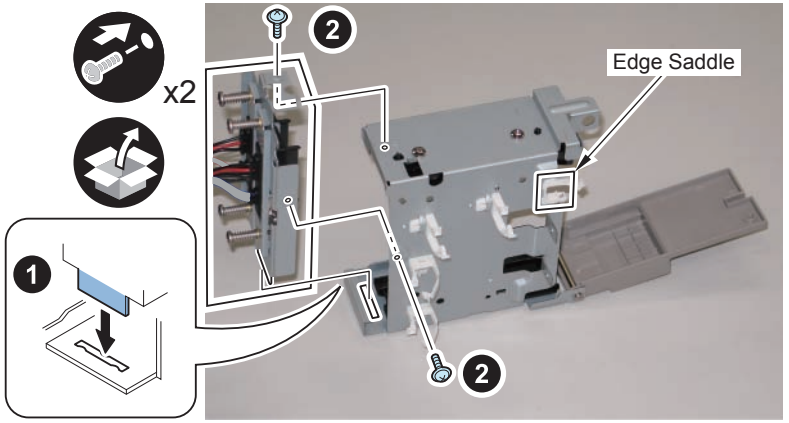
7) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

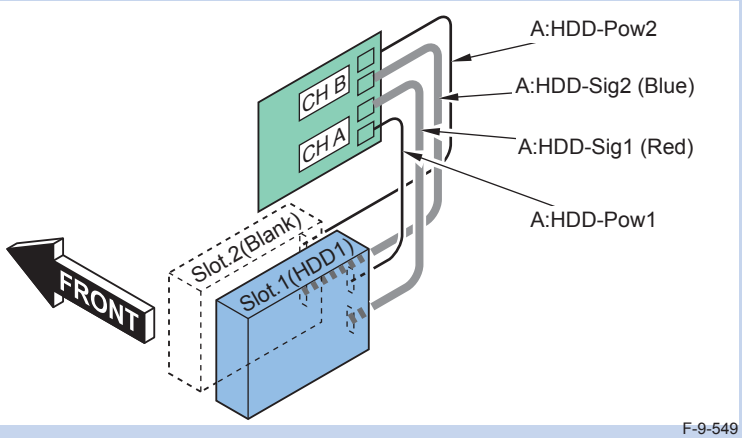
8) Close the Edge Saddle.




F-9-548

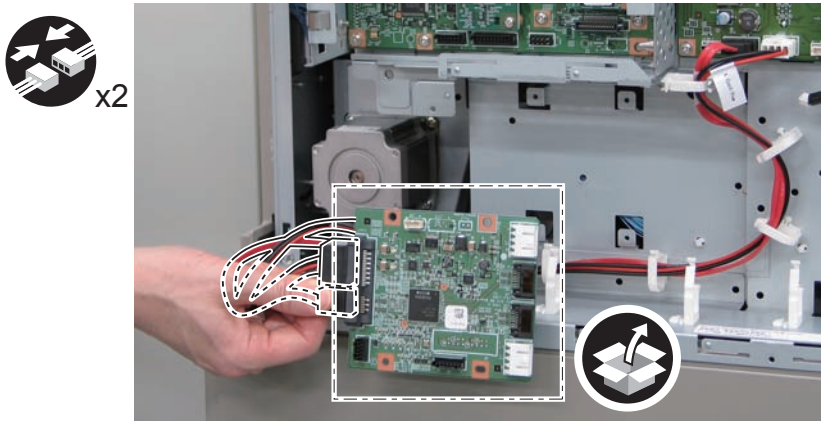
## Installing the Encryption Board and HDD Case Unit

NOTE:
The following shows combination of the HDD and the Encryption Board.
- Connect “CH A” to Slot.1 (The original HDD)
- No HDD to Slot.2



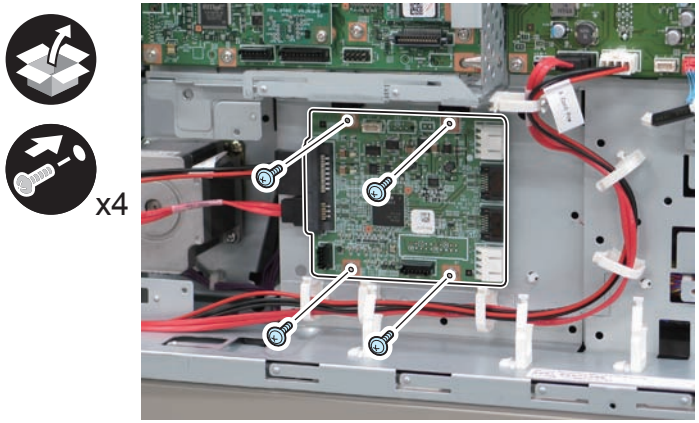

F-9-549

□
1) Connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine to the Encryption Board.




F-9-550

□
2) Install the Encryption Board.
- 4 Screws (TP; M3x6)




F-9-551

☐

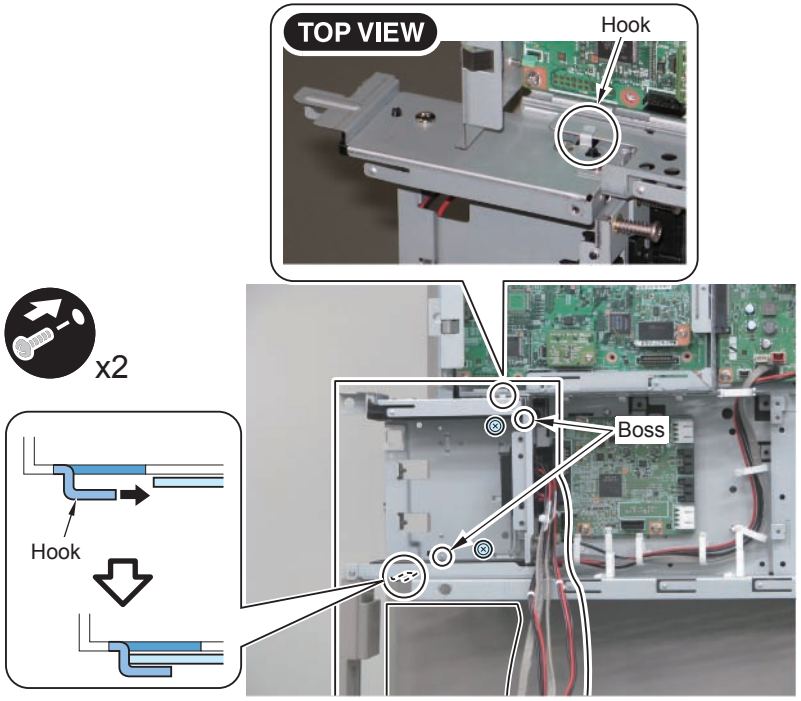
3) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.

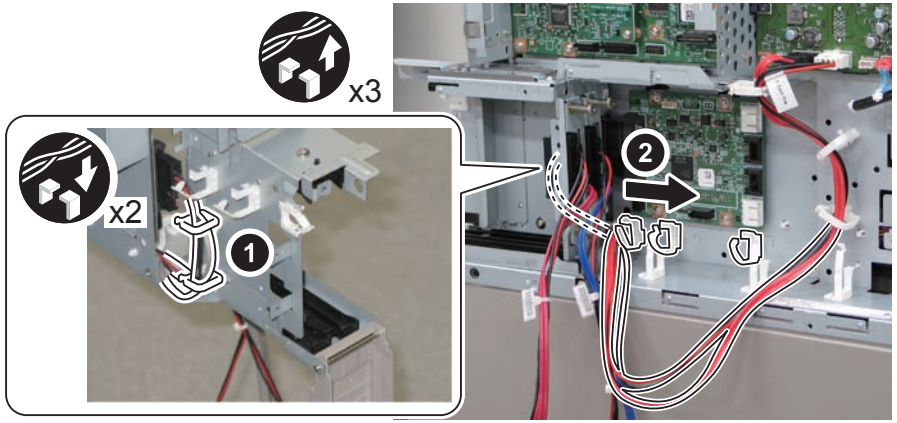



F-9-552

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

5) Free the cables from the 3 Wire Saddles at the front, and pull out the extra lengths of the cables to the front.

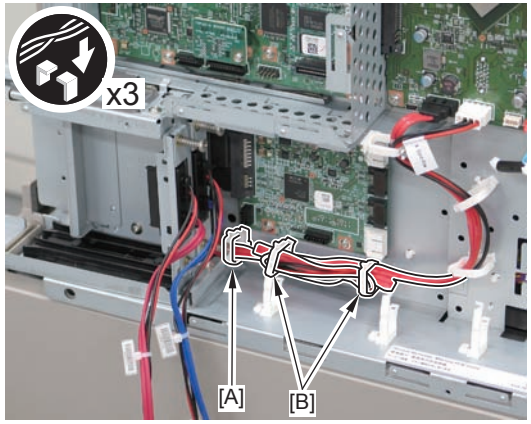



F-9-553

☐

6) Put cables through the Wire Saddle [A] and secure it.

7) Fold extra length of the Cable and secure it in place using the 2 Wire Saddles [B].

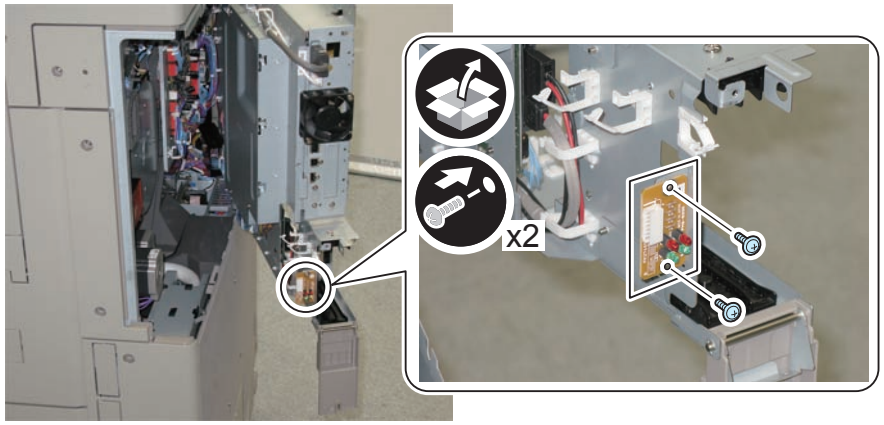



F-9-554

☐

8) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-555

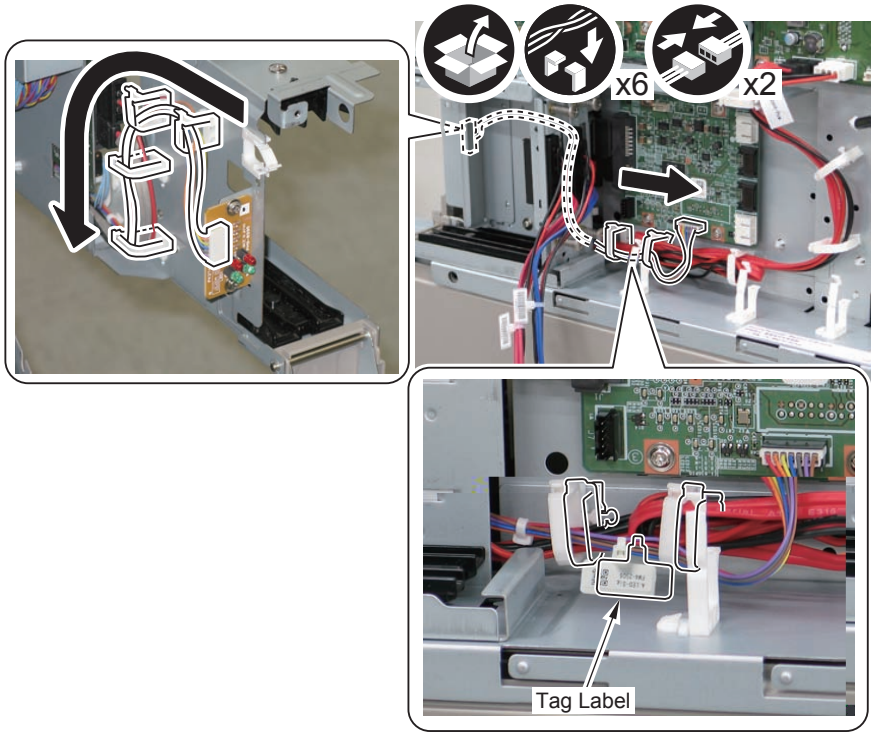
☐

9) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.



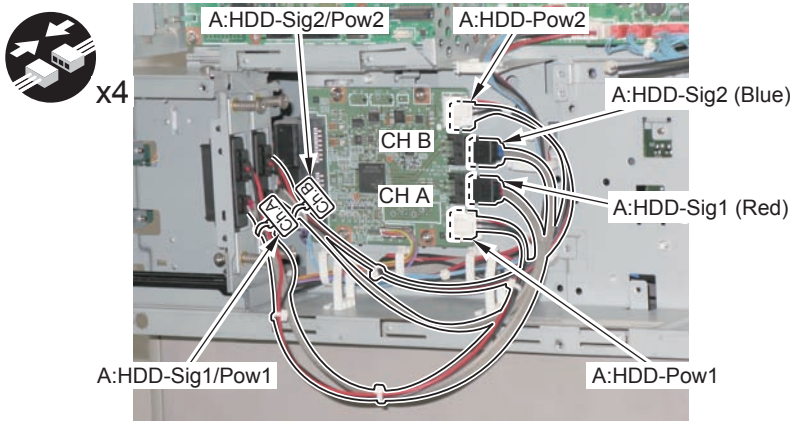

F-9-556

☐

10) Connect the 4 Connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Encryption Board.

CAUTION:

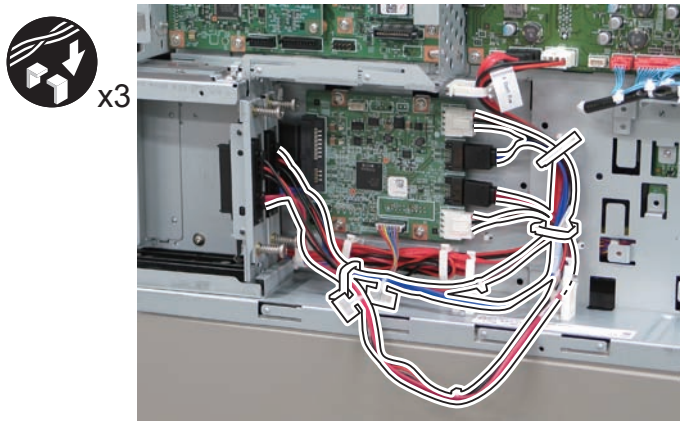
- Connect "A:HDD-Sig1/Pow1" to the location of CH-A.
- Connect "A:HDD-Sig2/Pow2" to the location of CH-B.




F-9-557

☐

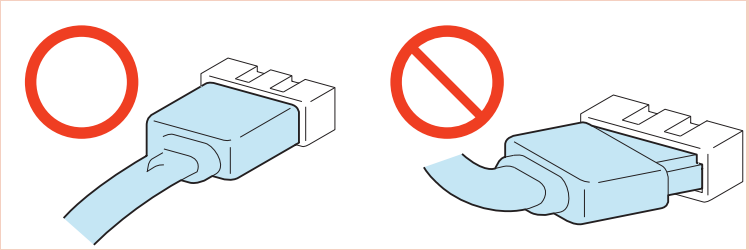
11) Secure the "A:HDD-Sig2/Pow2" cable and "A:HDD-Sig1/Pow1" cable using the total of 3 Wire Saddles as shown in the figure.




F-9-558

CAUTION:

Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-559

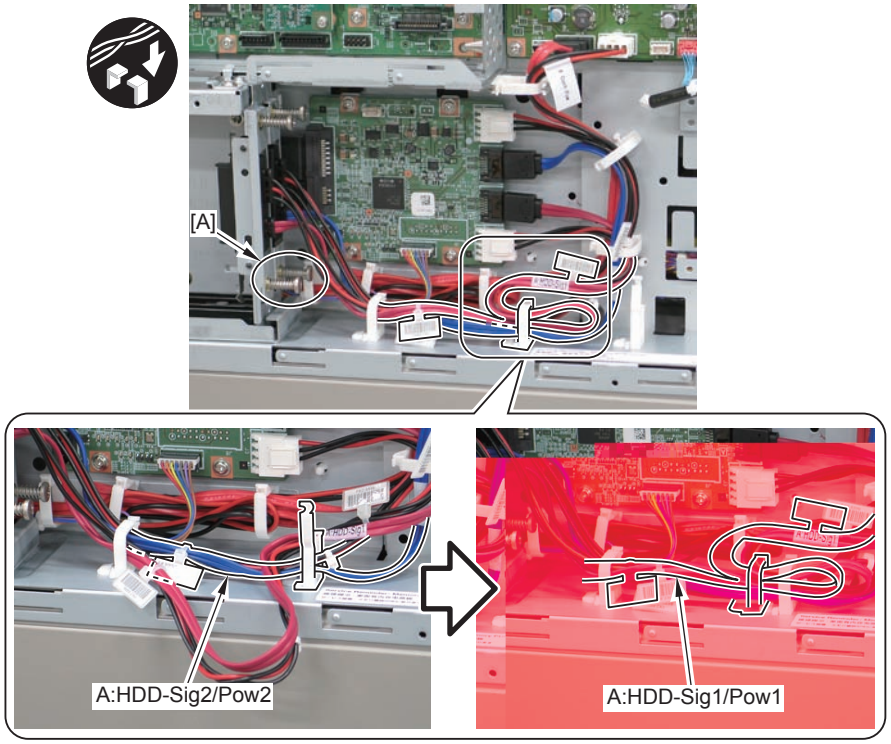
☐

12) Put the "A:HDD-Sig2/Pow2" cables through the Wire Saddle.

13) Fold the extra length of the "A:HDD-Sig1/Pow1" cables, and secure it with the Wire Saddle.

CAUTION:

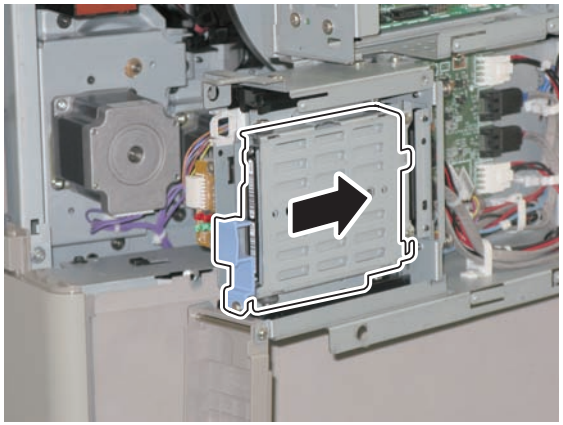
- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-560

☐

14) Insert the assembled Removable HDD.



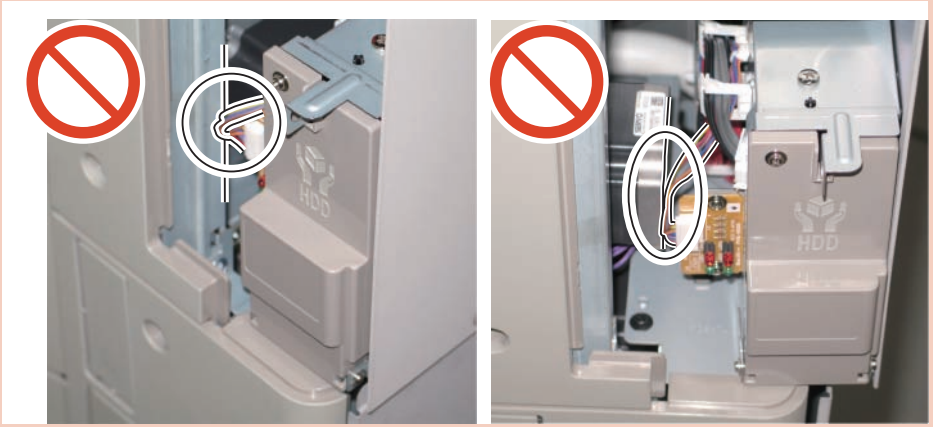
F-9-561

☐

15) Close the Controller Box.

CAUTION:

When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



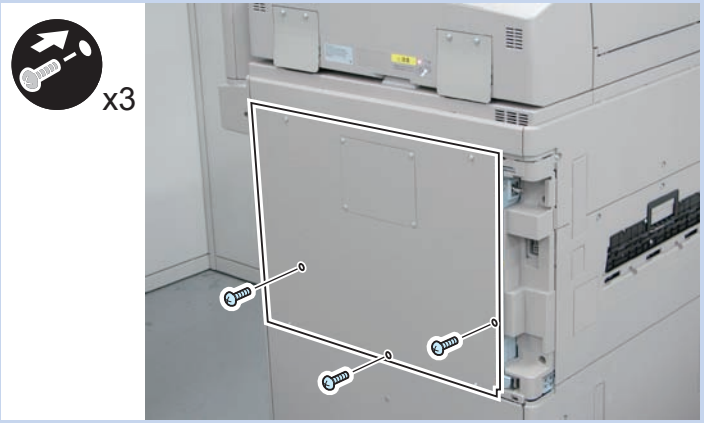
F-9-562

☐

16) Install the Rear Upper Cover.

- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.

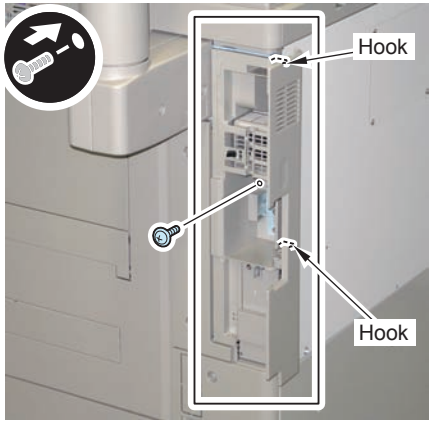



F-9-563

☐

17) Install the Side Cover.

- 2 Hooks
- 1 Screw

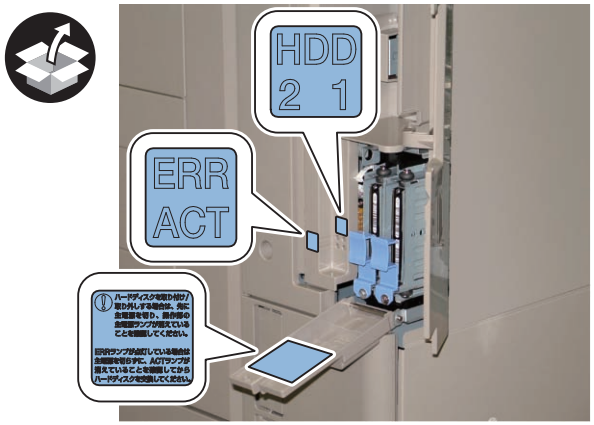



F-9-564

☐

18) Affix the LED Label.

19) Affix the HDD Caution Label in the appropriate language on the HDD Cap.




F-9-565

☐

20) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.

- Size (width x depth x height) : 67mm x 14mm x 64mm

F-9-566

☐

21) Close the Right Rear Cover 1.

22) Return the Left Rear Cover to its original position.

23) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for ‘Canon MFP Security Chip’.

## Checking the Security Mark

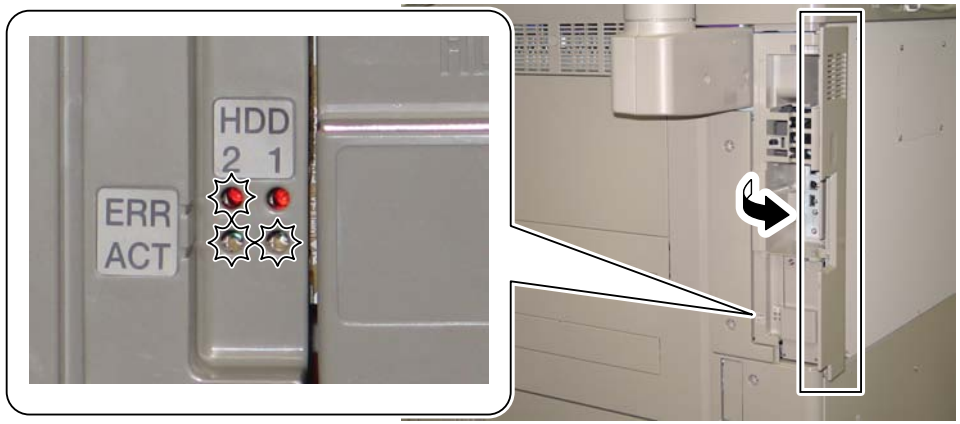
The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>
When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.

- The green LED of HDD1 (Slot1) is flashing.




F-9-567

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

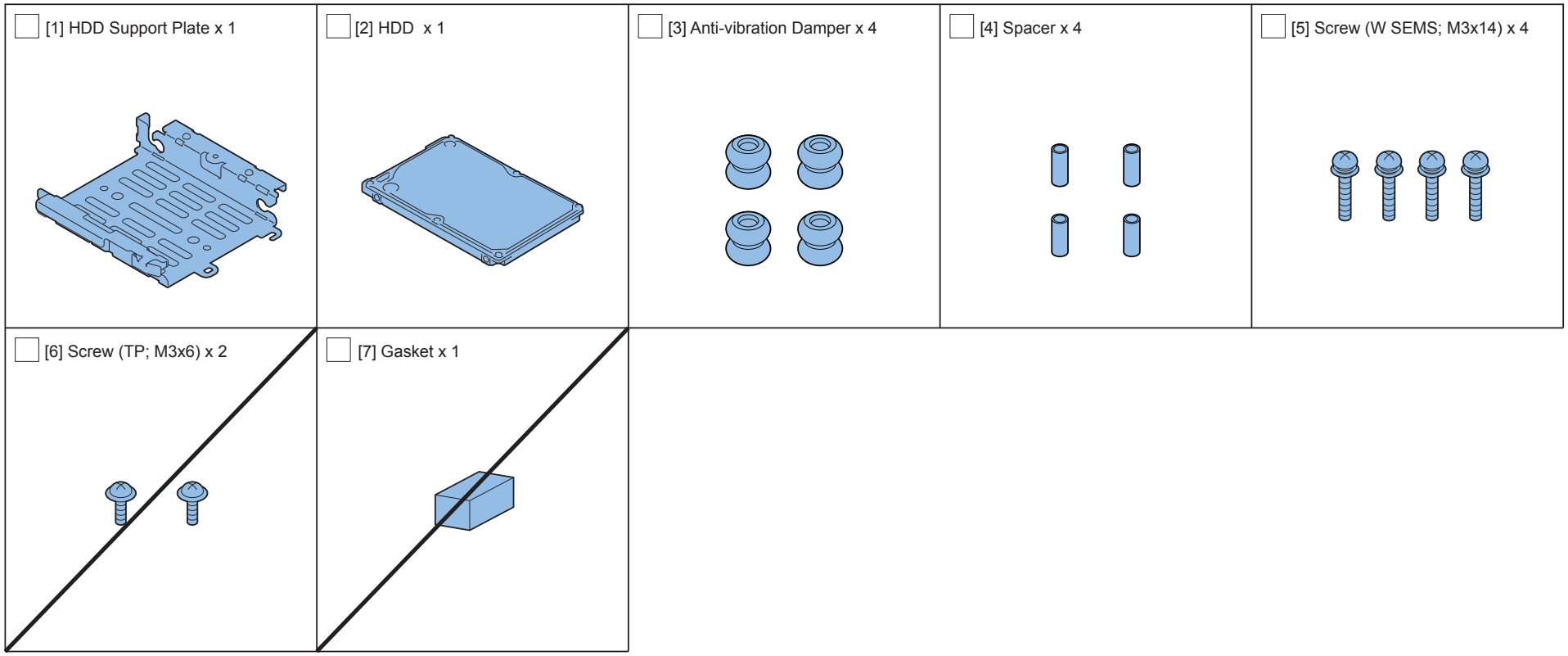
# TYPE-11] Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit

## Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

## Checking the Contents

### Option HDD (1TB)




F-9-568

< CD/Guides >

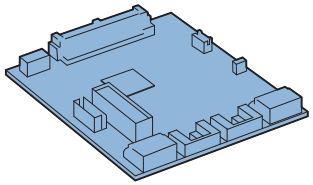
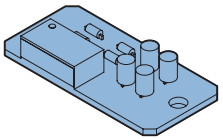
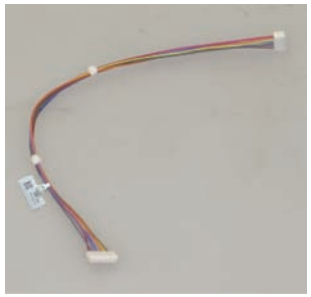
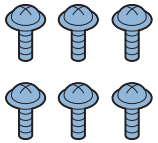
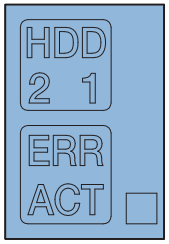
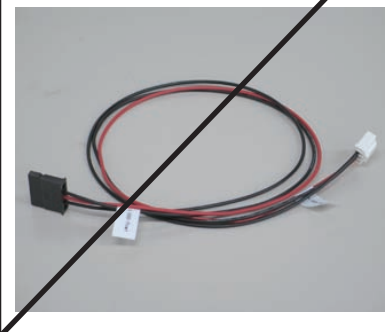
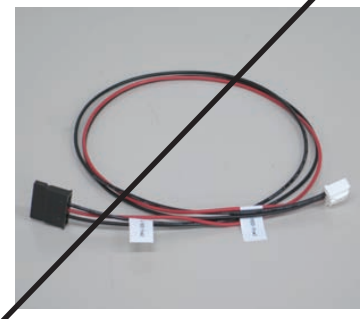
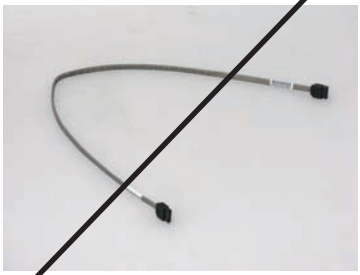
- FCC/IC Sheet

## Removable HDD Kit

| | | | | |
|---|---|---|---|---|
| ☐ [1] HDD Drawer Unit X 1 | ☐ [2] HDD Lock Pin X 2 | ☐ [3] HDD Lock Pin X 2 | ☐ [4] HDD Cover X 2<br>Use 1 of them. | ☐ [5] HDD Connector Plate X 2<br>Use 1 of them. |
| ☐ [6] HDD Connector Plate X 2<br>Use 1 of them. | ☐ [7] Conversion Connector X 2<br>Use 1 of them. | ☐ [8] Connector Fixation Block X 2<br>Use 1 of them. | ☐ [9] Screw<br>(TP Round End; M3x6) X 8<br>Use 6 of them. | ☐ [10] Screw (P Tightening; M3x8) X 4<br>Use 2 of them. |
| ☐ [11] HDD Caution Label X 1 | ☐ [12] R-HDD Label X 1 | | | |

F-9-569

## HDD Data Encryption & Mirroring Kit

| | | | | |
|---|---|---|---|---|
| [1] Encryption Board X 1  | [2] LED Board (A: LED) X 1  | [3] LED Cable (A:LED-Sig) X 1  | [4] Screw (TP; M3x6) X 6  | [5] LED Label X 1   |
| [6] Power Supply Cable (A:HDD-Pow1) X 1  | [7] Power Supply Cable (A:HDD-Pow2) X 1  | [8] Signal Cable (A:HDD-Sig1 (Red)) X 1 | [9] Signal Cable (A:HDD-Sig2 (Blue)) X 1  | |

F-9-570

< CD/Guides >

- HDD Data Encryption & Mirroring Kit User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

## Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD

Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

□

1) Execute the following service mode (level 1).

- COPIER > FUNCTION > INSTALL > HD-CRYP

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

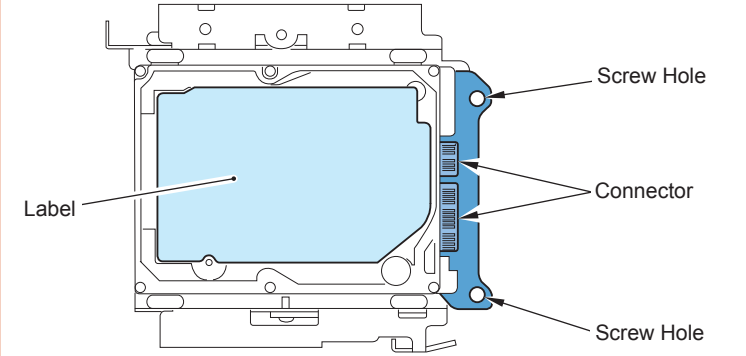
1) Turning off the Main Power Supply Switch of the Host Machine.
2) Check that the display on the Control Panel and the Main Power Supply Lamp are turned off before disconnecting the outlet.

## Installation Procedure

### Assembling the Option HDD

CAUTION: Points to Caution at Installation

Be sure to install the HDD Connector to the side with screw holes of the HDD Connector Plate.




F-9-571

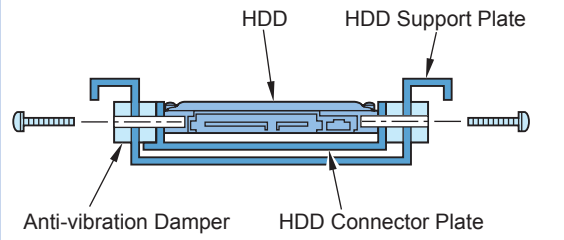
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

□

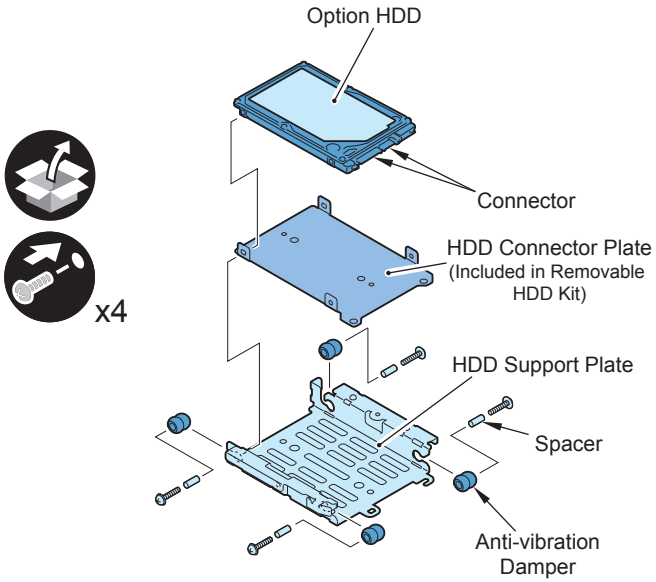
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Anti-vibration Dampers
- 4 Spacers
- 1 HDD Connector Plate (Included with the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



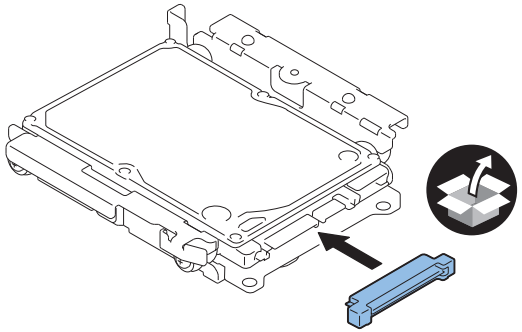

F-9-572




F-9-573

☐
2) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



F-9-574

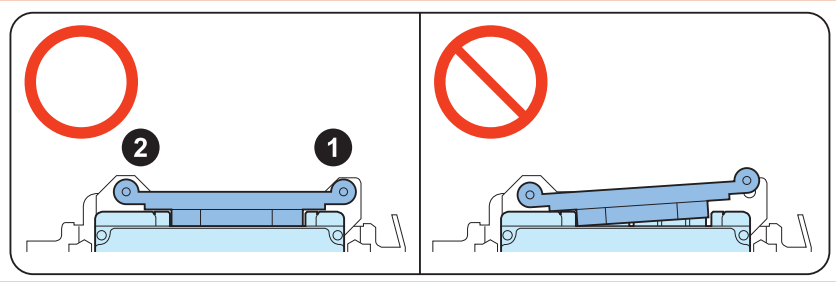
☐

3) Fit the 2 bosses of the Connector Fixation Screw into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

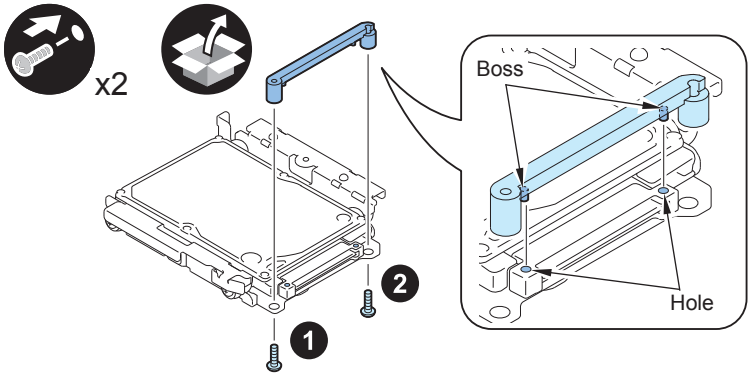
- 2 Screws (P Tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixation Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.




F-9-575




F-9-576

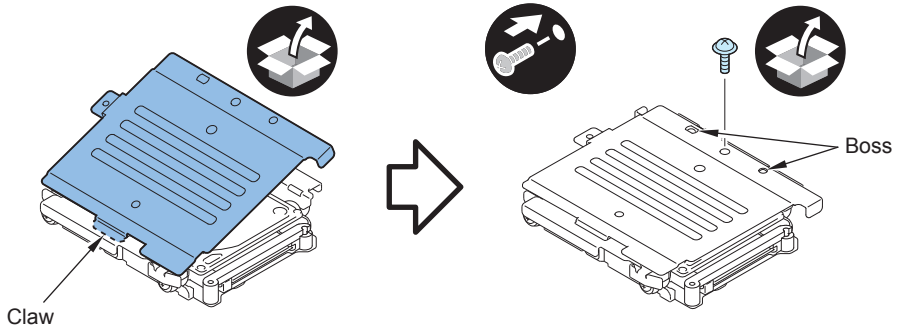
☐

4) Install the HDD Cover.

- 1 Claw
- 1 Boss
- 1 Screw (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.




F-9-577

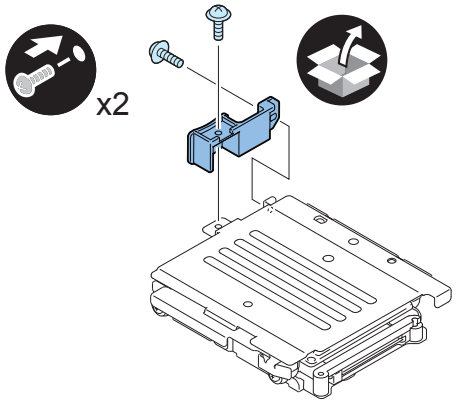
□

5) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

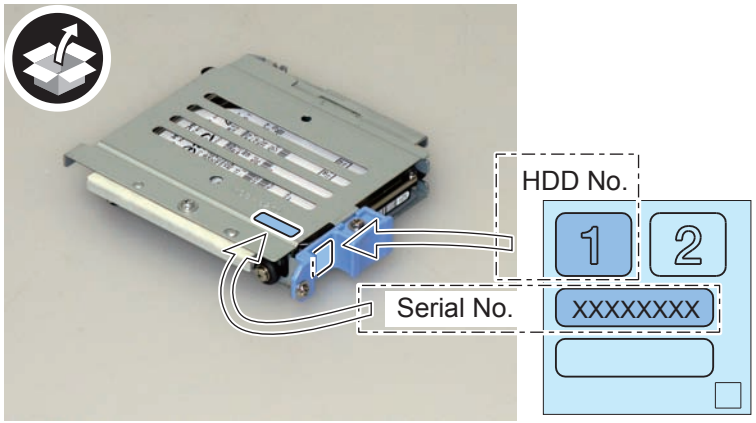



F-9-578

□

6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

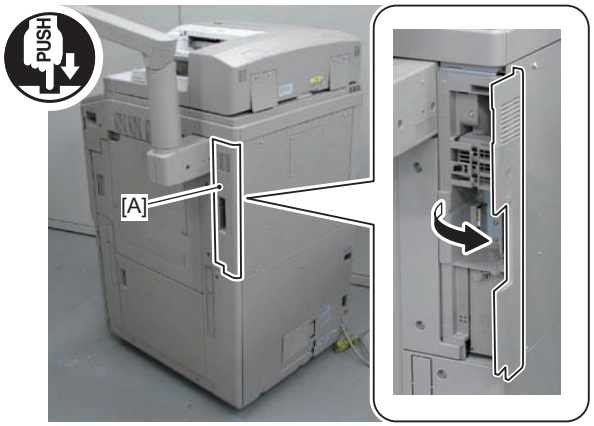



F-9-579

## Removing the HDD and HDD Case Unit

□

1) Push [A] part, and open the Right Rear Cover 1.

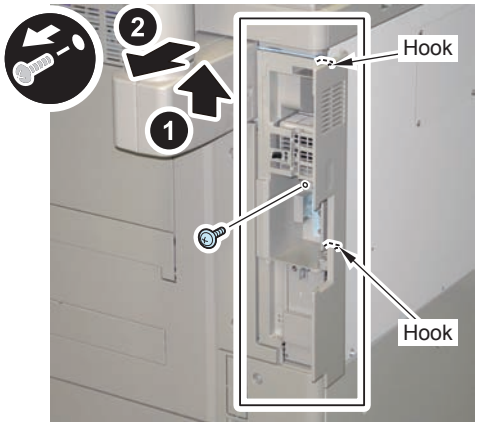



F-9-580

□

2) Remove the Side Cover.

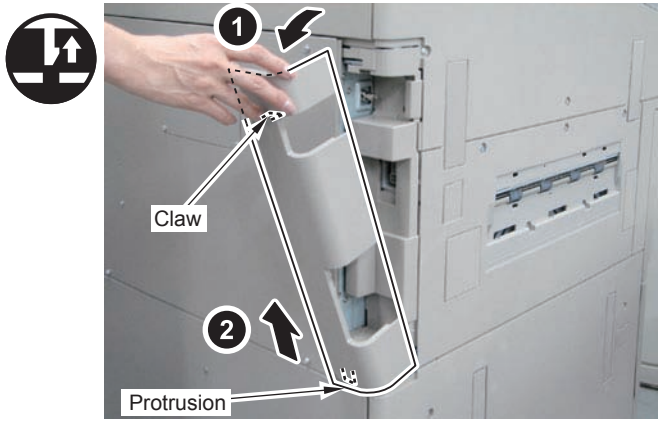
- 1 Screw
- 2 Hooks




F-9-581

3) Remove the Left Rear Cover.

- 1 Claw
- 1 Protrusions

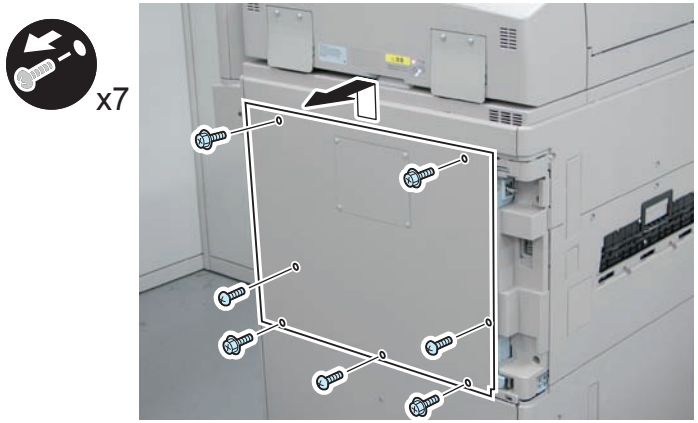



F-9-582

☐

4) Remove the Rear Upper Cover.

- 4 Screws (RS Tightening)
- 3 Screws (Bindeing)

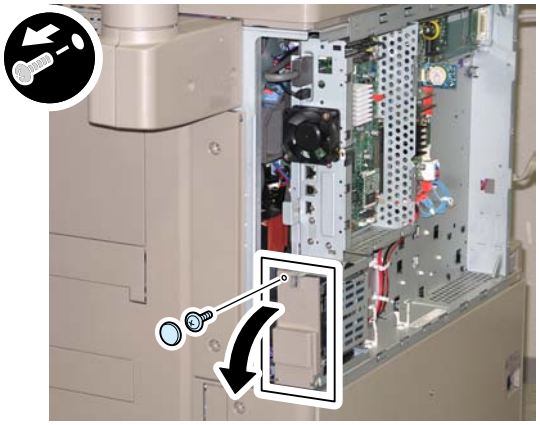



F-9-583

☐

5) Open the HDD Cap.

- 1 Rubber Cap
- 1 Screw (The removed screw will not be used.)



F-9-584

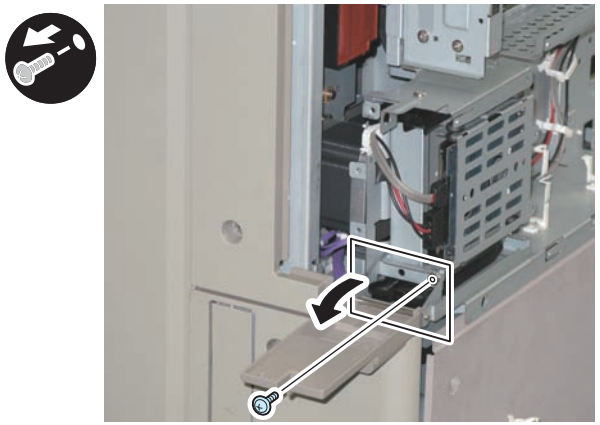
☐

6) Return the rubber cap to the HDD Cap.

☐

7) Turn the HDD Fixed Plate toward the front.

- 1 Screw (The removed screw will not be used.)

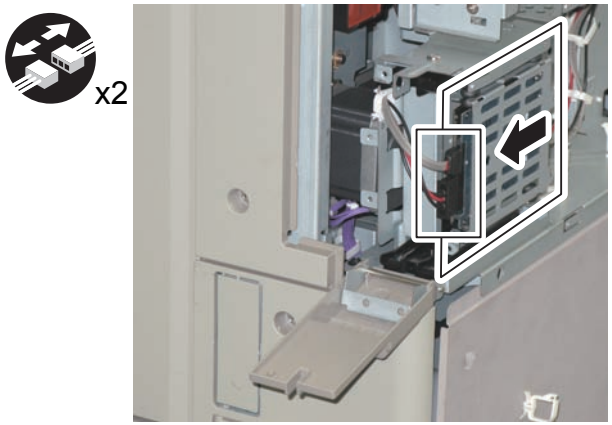


F-9-585

☐

8) Remove the HDD. (The removed HDD will not be used.)

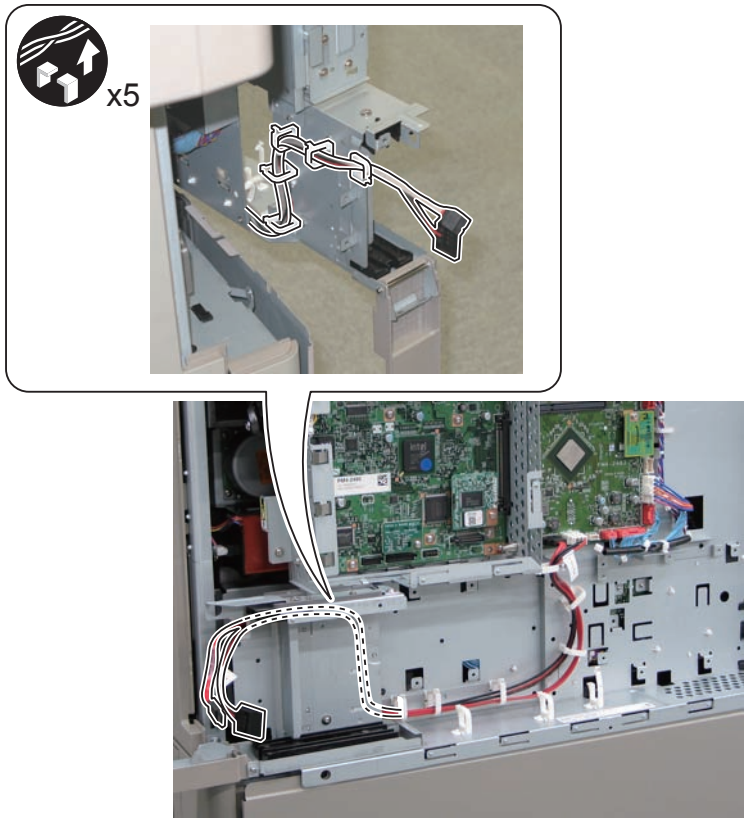
- 2 Connectors




F-9-586

☐

9) Open the Controller Box, and free the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine from the 4 Wire Saddles and the Edge Saddle at the back of the HDD Case Unit.

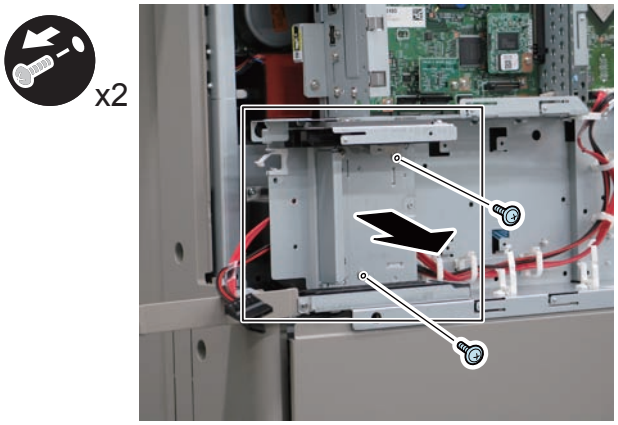



F-9-587

☐

10) Remove the HDD Case Unit.

- 2 Screws (The removed screws will be used in “Installing the Encryption Board and HDD Case Unit” step 3).)

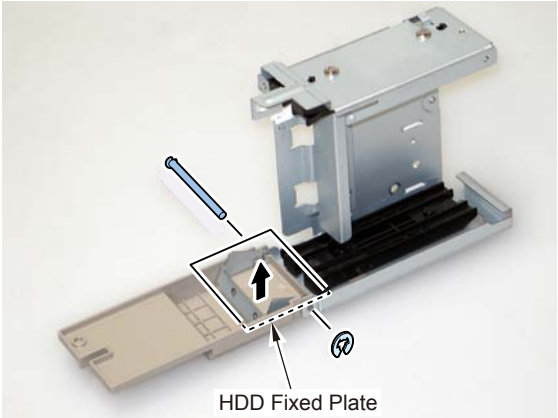



F-9-588

## Changing Configuration inside of HDD Case Unit

☐

1) Remove the E-ring from the removed HDD Case Unit, remove the shaft of the HDD Cap, and then remove the HDD Fixed Plate. (The removed HDD Fixed Plate will not be used.)




F-9-589

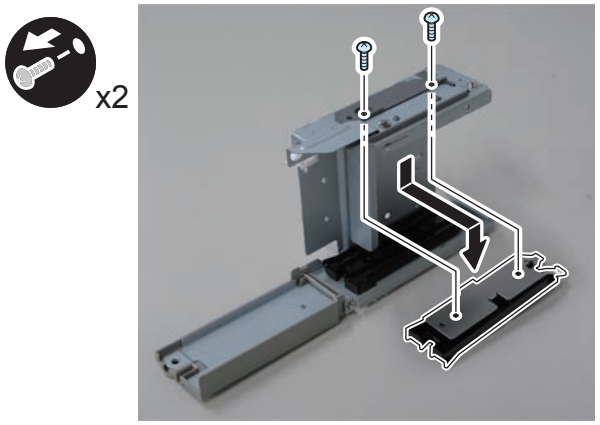
☐

2) Put the HDD Cap and the shaft back to the HDD Case Unit, and secure the HDD Case Unit with the E-ring.

☐

3) Remove the Upper Rail from the HDD Case Unit.

- 2 Screws (The removed screws will be used in step 6).)

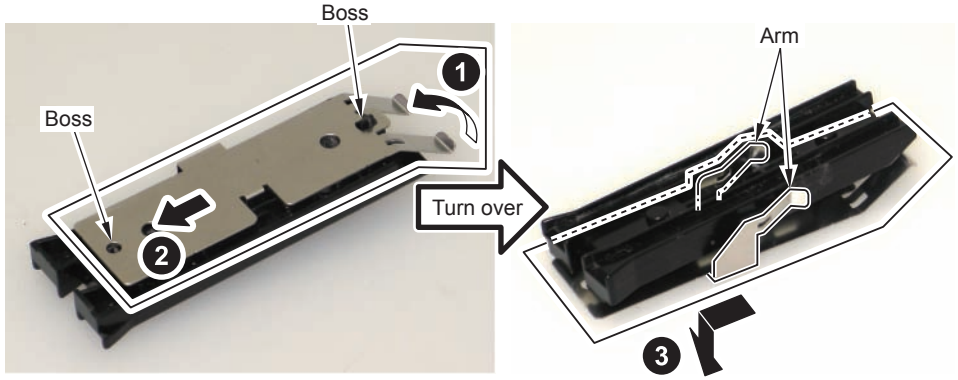



F-9-590

☐

4) Remove the Leaf Spring from the removed rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)

- 2 Bosses
- 2 Arms



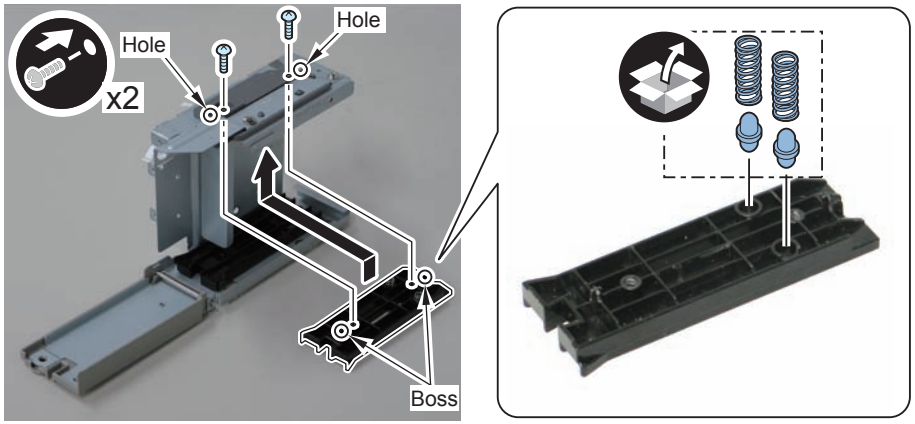

F-9-591

☐

5) Install the 2 HDD Lock Pins and the 2 HDD Lock Springs to the removed rail.

6) Return the rail to its original position.

- 2 Bosses
- 2 Screws (Use the screws removed in step 3).)




F-9-592

☐

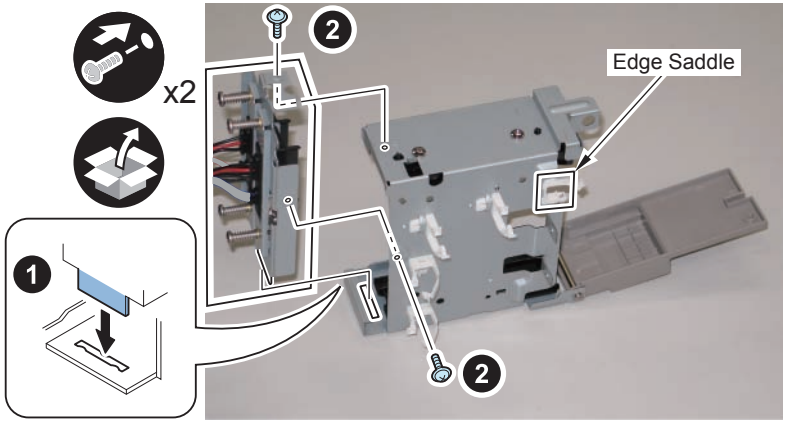
7) Insert the HDD Drawer Unit into the hole on the HDD Case Unit to install it.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

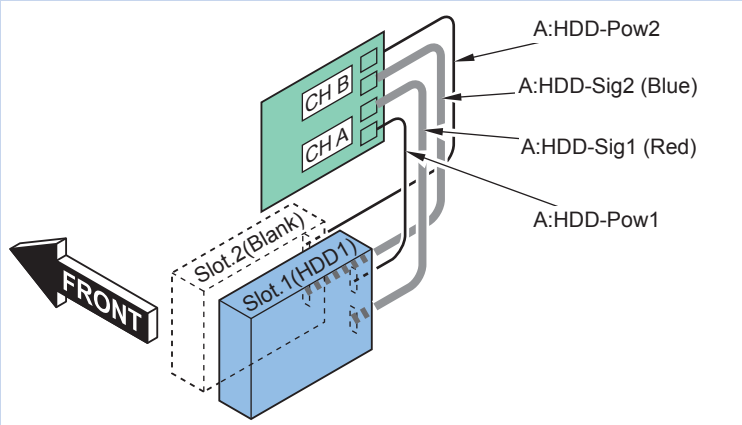
8) Close the Edge Saddle.




F-9-593

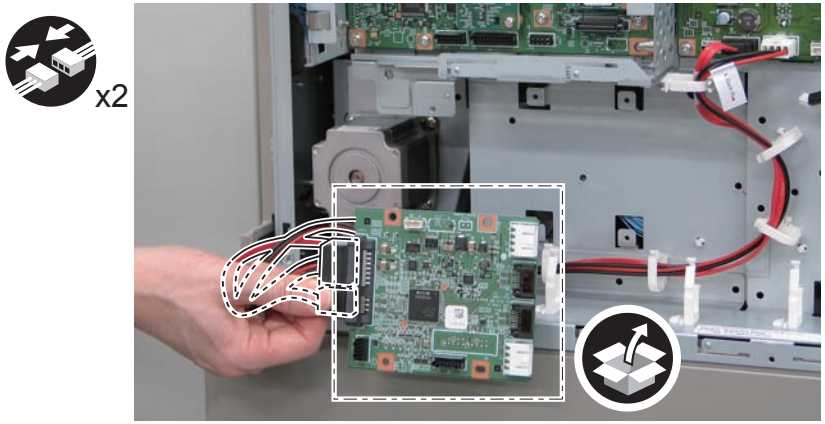
## Installing the Encryption Board and HDD Case Unit

NOTE:
The following shows combination of the HDD and the Encryption Board.
- Connect "CH A" to Slot.1 (The new HDD)
- No HDD to Slot.2



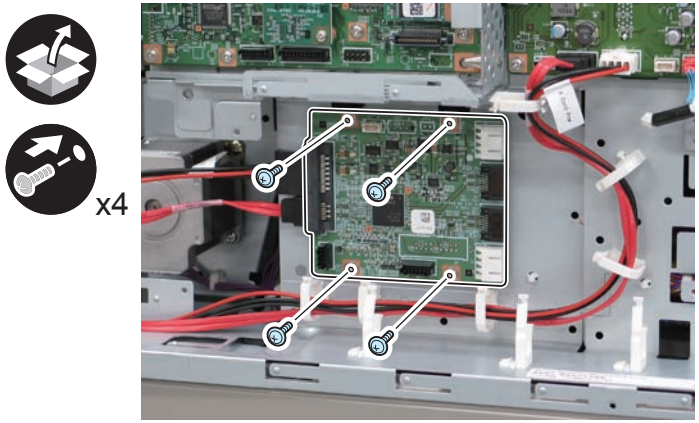

F-9-594

☐
1) Connect the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) of the host machine to the Encryption Board.




F-9-595

☐
2) Install the Encryption Board.
- 4 Screws (TP; M3x6)




F-9-596

☐

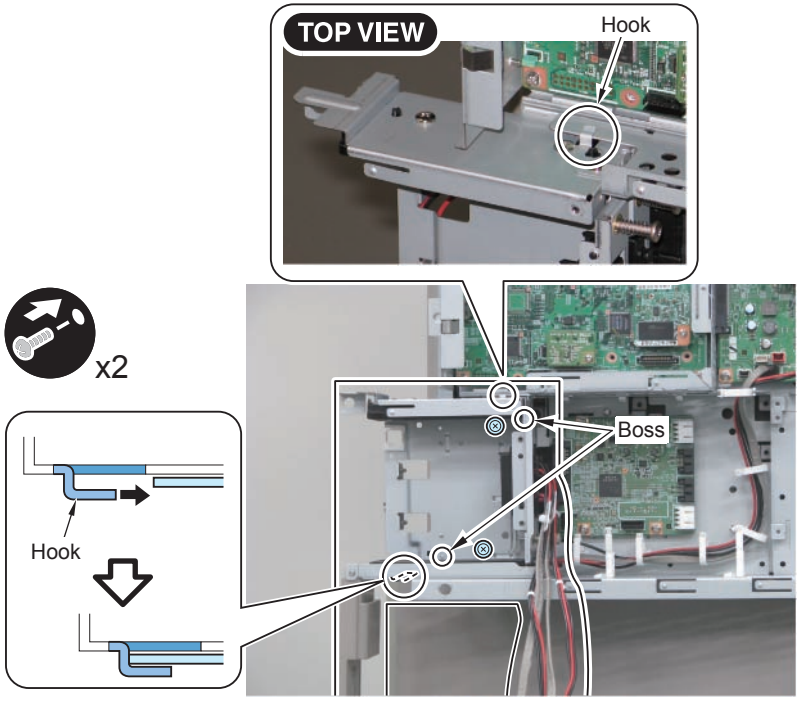
3) Install the HDD Case Unit.

- 2 Hooks
- 2 Bosses
- 2 Screws (Use the screws removed in “Removing the HDD and HDD Case Unit” step 10).)

CAUTION:

Make sure that the bosses is fitted properly.

NOTE:
Be careful not to catch the plate of the host machine with the Wire Saddles on the rear side of the HDD Case Unit, otherwise the installation work may become difficult.

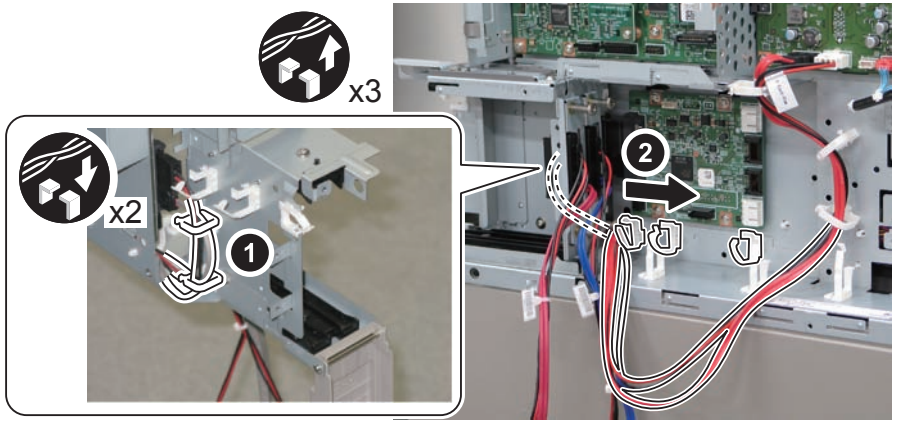



F-9-597

☐

4) Secure the Signal Cable (A:Cont-Sig) and the Power Supply Cable (A:Cont-Pow) in place using the 2 Wire Saddles at the back of the HDD Case Unit.

5) Free the cables from the 3 Wire Saddles at the front, and pull out the extra lengths of the cables to the front.

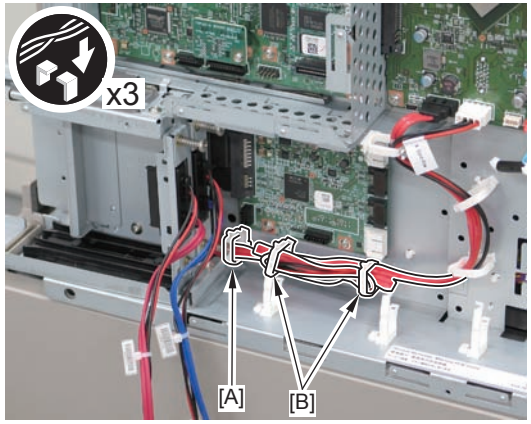



F-9-598

☐

6) Put cables through the Wire Saddle [A] and secure it.

7) Fold extra length of the Cable and secure it in place using the 2 Wire Saddles [B].

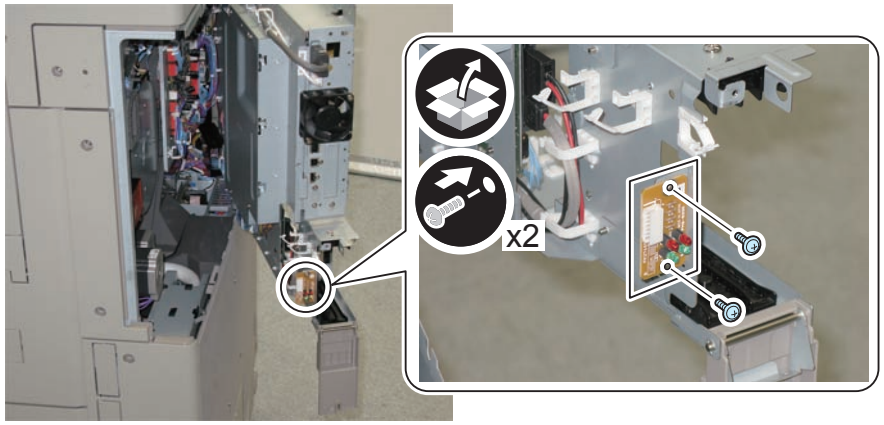



F-9-599

☐

8) Install the LED Board (A: LED) to the side surface of the HDD Case Unit.

- 2 Screws (TP; M3x6)




F-9-600

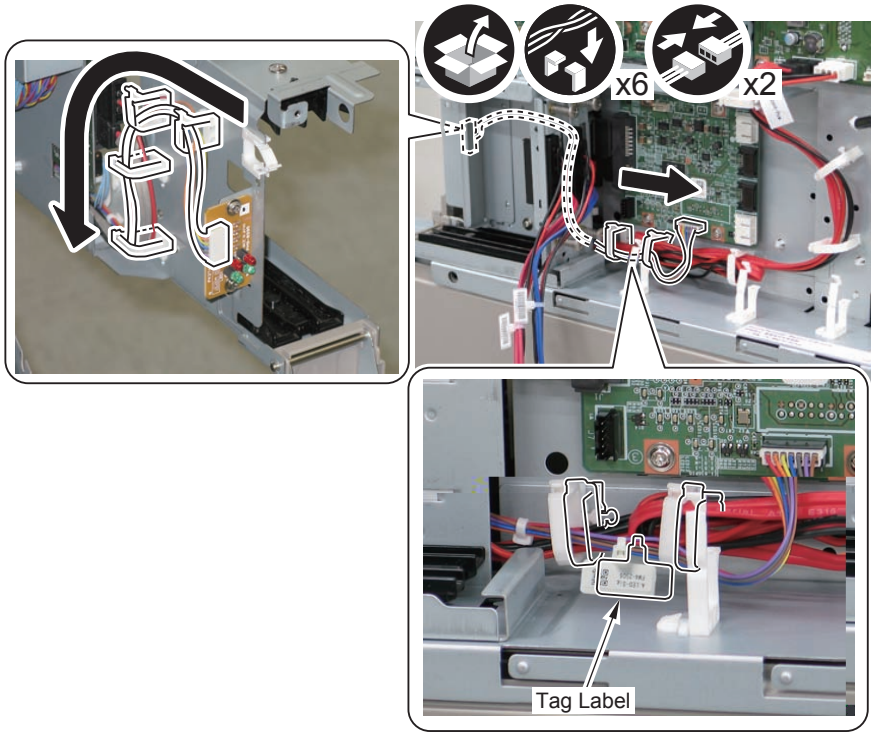
☐

9) Connect the LED Cable (A: LED-Sig) to the LED Board (A: LED) and the Encryption Board.

- 2 Connectors
- 6 Wire Saddles

CAUTION:

- The tag label of "A:LED-Sig" should be located between Wire Saddles.
- Secure the LED Cable (A: LED-Sig) in the direction of the arrow.
- Check that the LED Cable (A: LED-Sig) is connected properly at the time of installation because the machine can operate even when the cable is not connected properly.



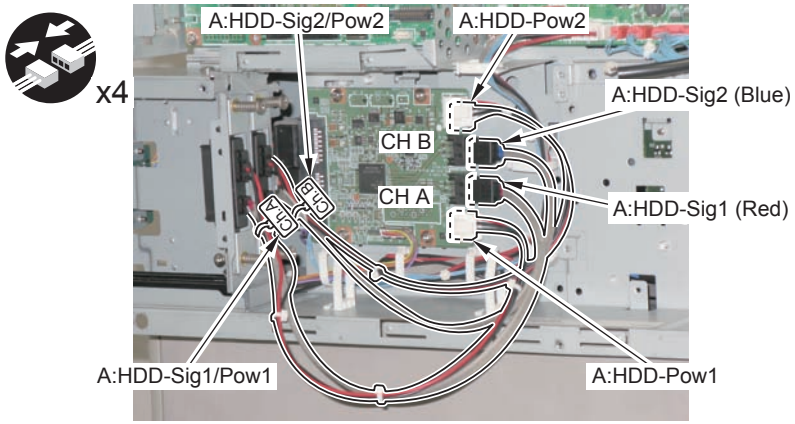

F-9-601

☐

10) Connect the 4 Connectors of the Signal Cables (A:HDD-Sig1 Red) (A:HDD-Sig2 Blue) and the Power Supply Cables (A:HDD-Pow1) (A:HDD-Pow2) to the Encryption Board.

CAUTION:

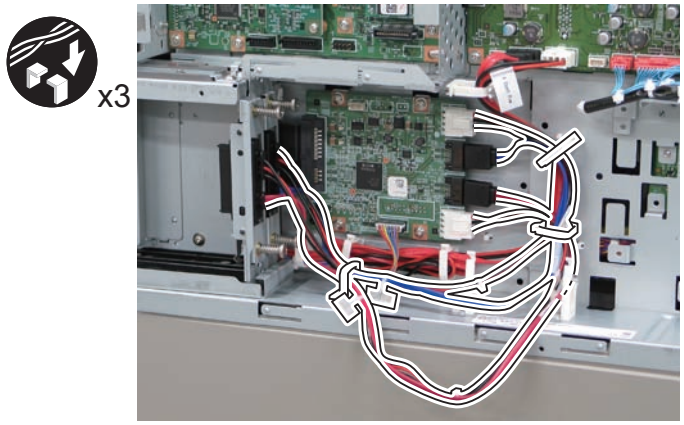
- Connect "A:HDD-Sig1/Pow1" to the location of CH-A.
- Connect "A:HDD-Sig2/Pow2" to the location of CH-B.




F-9-602

☐

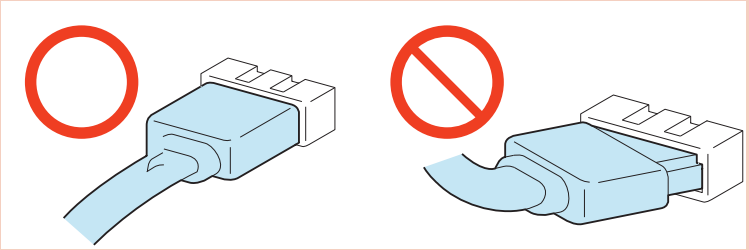
11) Secure the "A:HDD-Sig2/Pow2" cable and "A:HDD-Sig1/Pow1" cable using the total of 3 Wire Saddles as shown in the figure.




F-9-603

CAUTION:

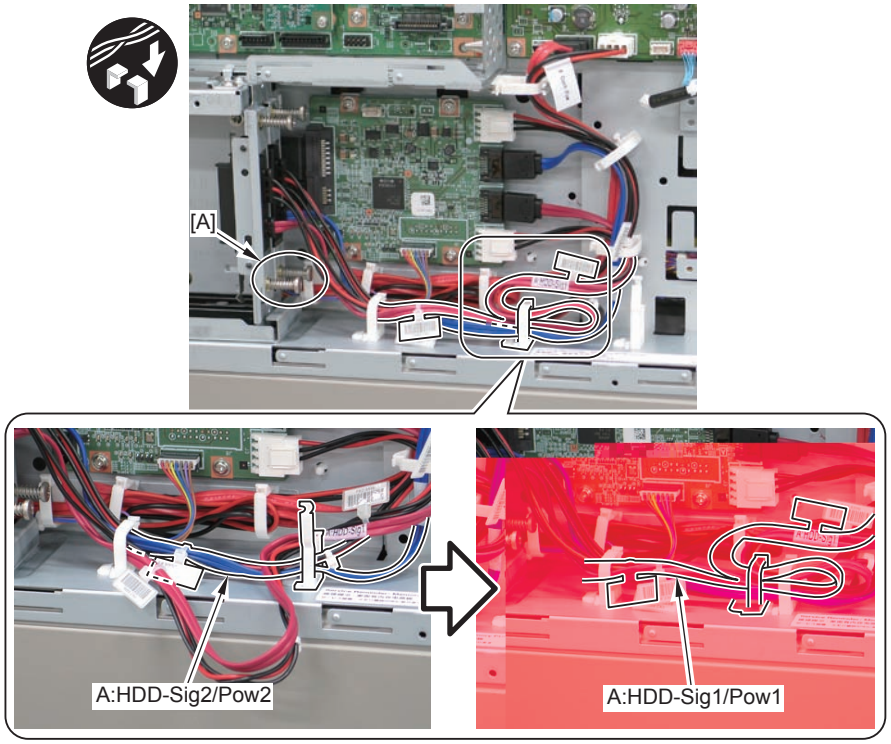
Check that the connector of the Signal Cable is connected properly and that the cable is not overloaded.



F-9-604

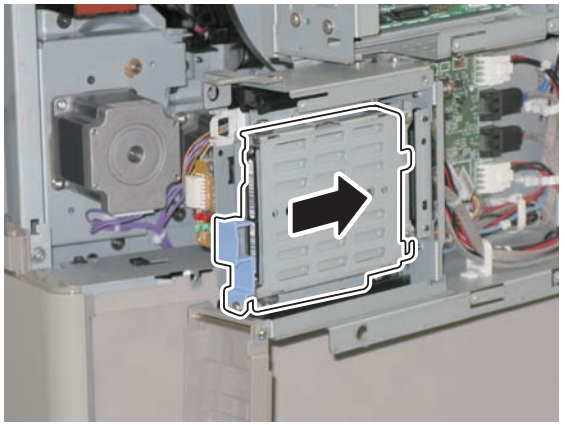
☐
12) Put the "A:HDD-Sig2/Pow2" cables through the Wire Saddle.
13) Fold the extra length of the "A:HDD-Sig1/Pow1" cables, and secure it with the Wire Saddle.

CAUTION:
- Be sure that the cable is not in contact with the stepped screw [A] of Drawer.
- When securing the cable, be sure that it does not go over to the front.
- When the FAX Board is installed, be sure to avoid contact of the cable with the PCB to secure the cable.




F-9-605

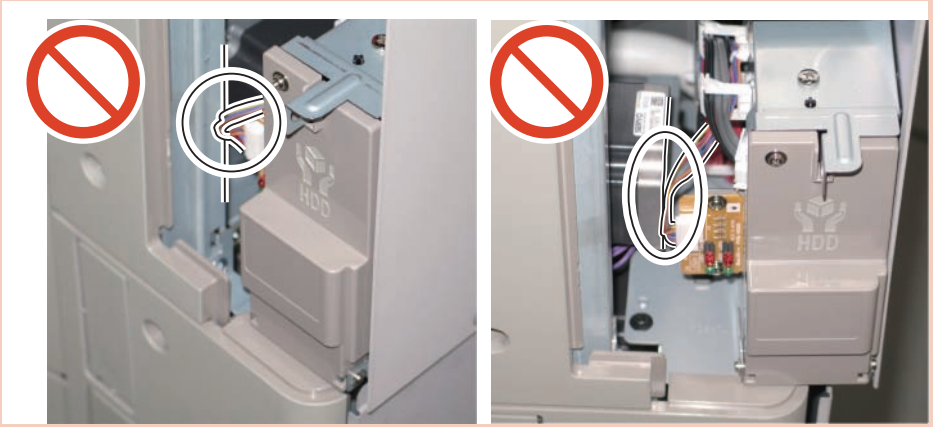
☐
14) Insert the assembled Removable HDD.



F-9-606

☐
15) Close the Controller Box.

CAUTION:
When closing the Controller Box, check that the LED Cable (A: LED-Sig) is not trapped or does not contact with it.



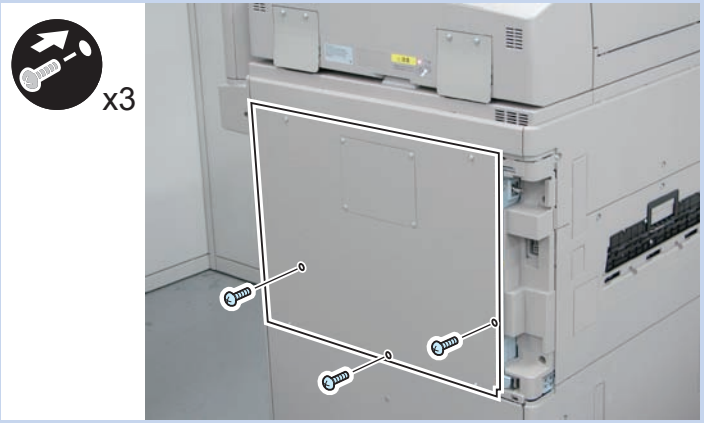
F-9-607

☐

16) Install the Rear Upper Cover.

- 3 Screws (Bindeing)
- 4 Screws (RS Tightening)

NOTE:
Be sure to install the 3 Bindeing screws show in the figure below.

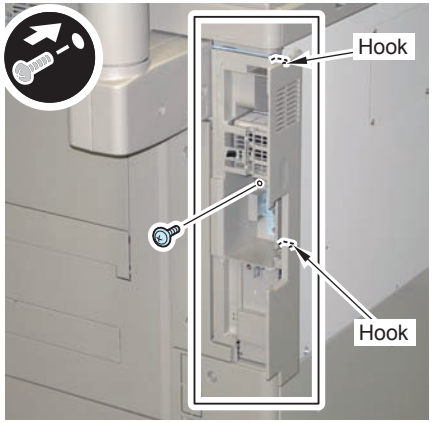



F-9-608

☐

17) Install the Side Cover.

- 2 Hooks
- 1 Screw

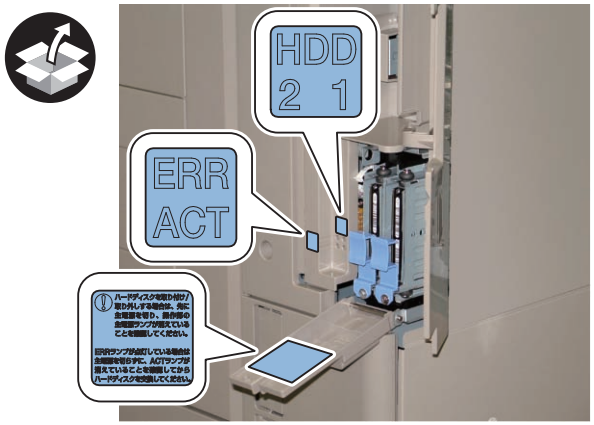



F-9-609

☐

18) Affix the LED Label.

19) Affix the HDD Caution Label in the appropriate language on the HDD Cap.




F-9-610

☐

20) Close the HDD Cap, and install the key prepared by the user for locking.

NOTE:
Be sure to use the locking key which size is the one indicated below or smaller.

- Size (width x depth x height) : 67mm x 14mm x 64mm

F-9-611

☐

21) Close the Right Rear Cover 1.

22) Return the Left Rear Cover to its original position.

23) Connect the power plug to the outlet.

## Installing the System Software Using the SST

NOTE:
Use the Service Support Tool with "Ver.4.72" or higher.

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product.
It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product.
Details follow.

### 1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

### 2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

### 3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click Register Firmware.
4) Select the drive in which the System Software CD has been set, and click search.
5) Click REGISTER.
6) Click OK.

### 4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

## Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC authentication is functioning normally by referring to the version information indicated for ‘Canon MFP Security Chip’.

## Checking the Security Mark

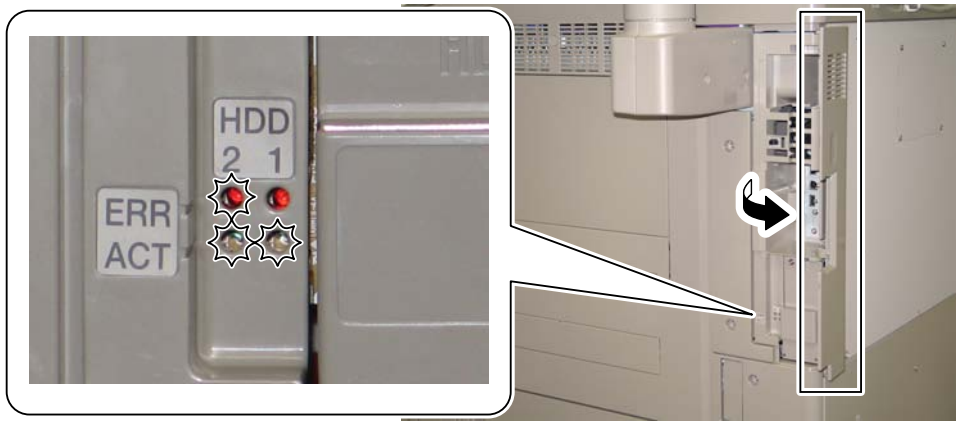
The user may check the security mark, appearing on the control panel when using the Host machine to make sure that an appropriate level of security is being maintained.
The mark appears when the machine is equipped with an encryption board and the board is operating correctly.
The Users Guide provides the following description in connection with the security mark:

<Confirming the Security Mark>
When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark( ) is displayed on the lower left corner of a panel screen.

## Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.

- The green LED of HDD1 (Slot1) is flashing.




F-9-612

## Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that '2.00' or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

## Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

# Document Scan Lock Kit-B1

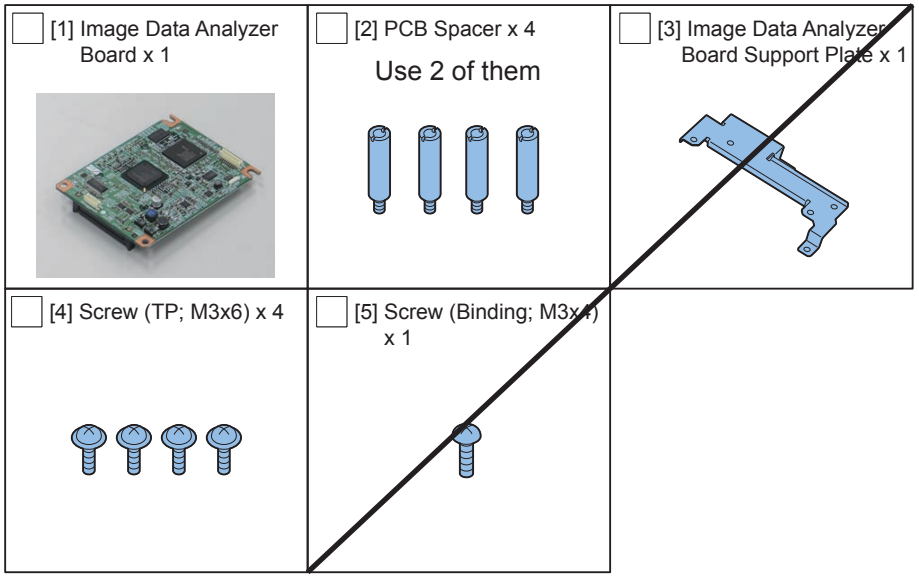
## Points to Note Before Installation

- To enable the function of "Image Data Analyzer Board", it is necessary to install the license which comes with the product.
- Be sure to ask users to install the license after the installation.

CAUTION:

An error occurs when the license is installed before installing the Image Analysis Board, so make sure to install the license after installing the Image Analysis Board.

## Checking the Contents




F-9-613

<CD/Guides>

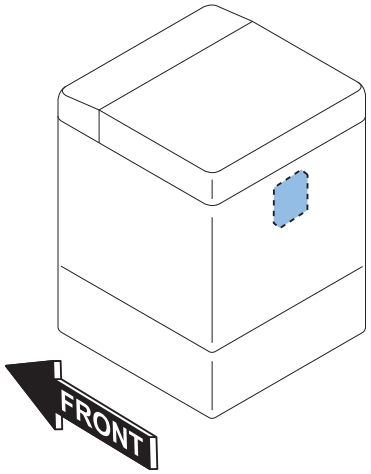
- License Access Number Certificate
- Document Scan Code Analyzer for MEAP CD
- FCC/IC sheet (only for USA/Europe)
- Notice for Delivered Installation sheet

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

## Installation Outline Drawing

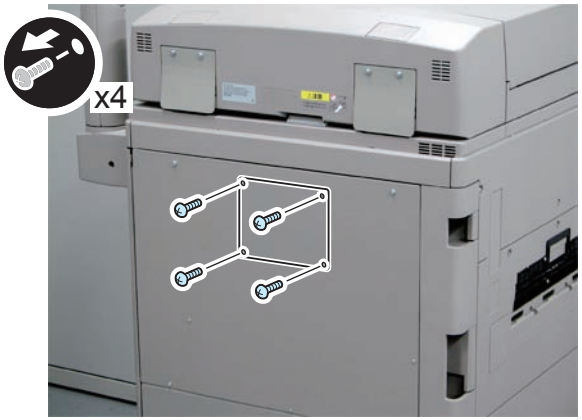



F-9-614

# Installation Procedure

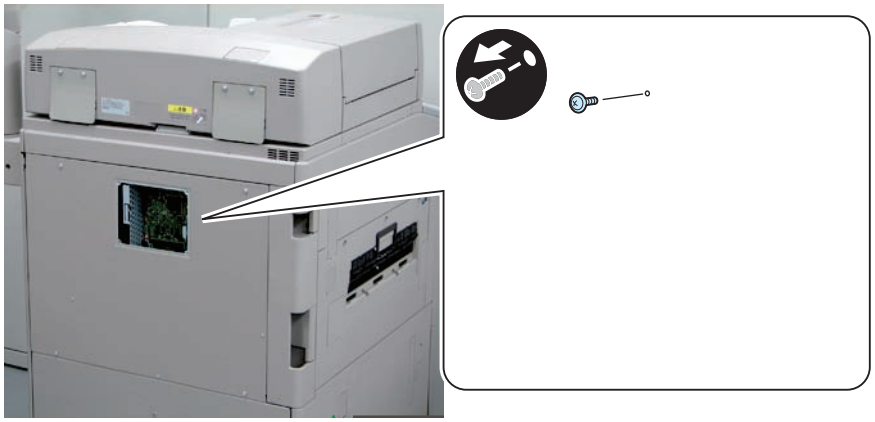
CAUTION:
Be careful not to drop the screw.

☐
1) Remove the Rear Small Cover.
- 4 Screws




F-9-615

☐
2) Remove the screw.(The removed screw will not be used.)

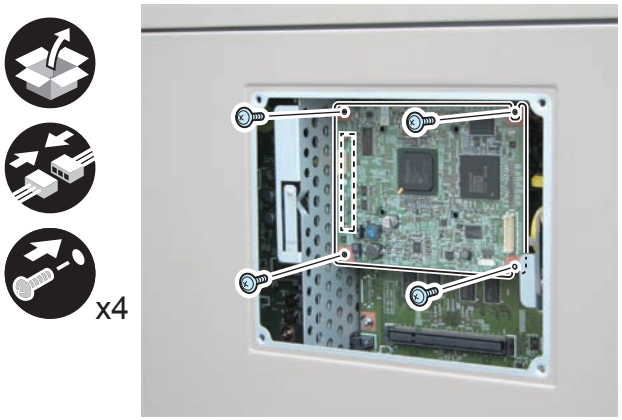


F-9-616

☐
3) Install the 4 PCB Spacers.

F-9-617

☐
4) Install the Image Data Analyzer Board.
- 4 Screws (TP; M3x6)




F-9-618

☐
5) Install the Rear Small Cover. (4 Screws)

## Checking after Installation

□

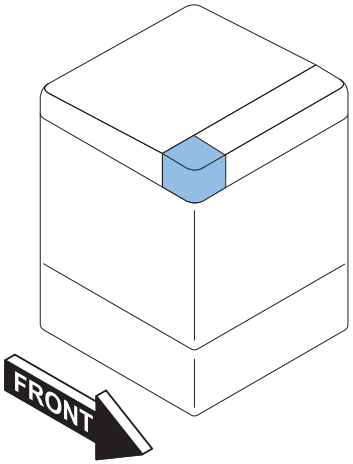
1) Connect the power plug of the host machine to the power outlet.
2) Turn ON the main power switch.
3) Ask users to install license.
4) Turn OFF/ON the main power switch.
5) Press the counter check key on the control panel.
6) Press "Check Device Configuration" key.
7) Check that "Image Data Analyzer Board" is displayed in option field.

# USB Device Port-A2/Multimedia Reader/Writer-A2

## Points to Note before Installation

- Be sure to install the USB Device Port before installing the Multimedia Reader/Writer or the Card Reader (sales company's option).
- The Multimedia Reader/Writer cannot be used in combination with the Card Reader (sales company's option).

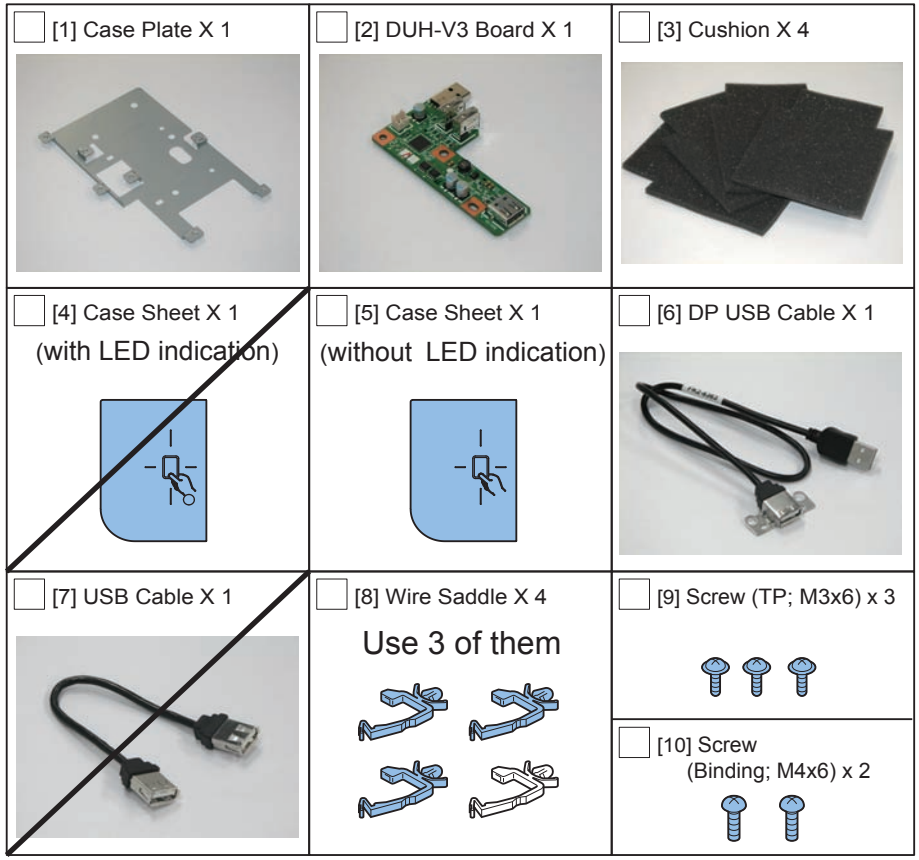
## Installation Outline Drawing




F-9-619

## Checking the Contents

### USB Device Port-A2



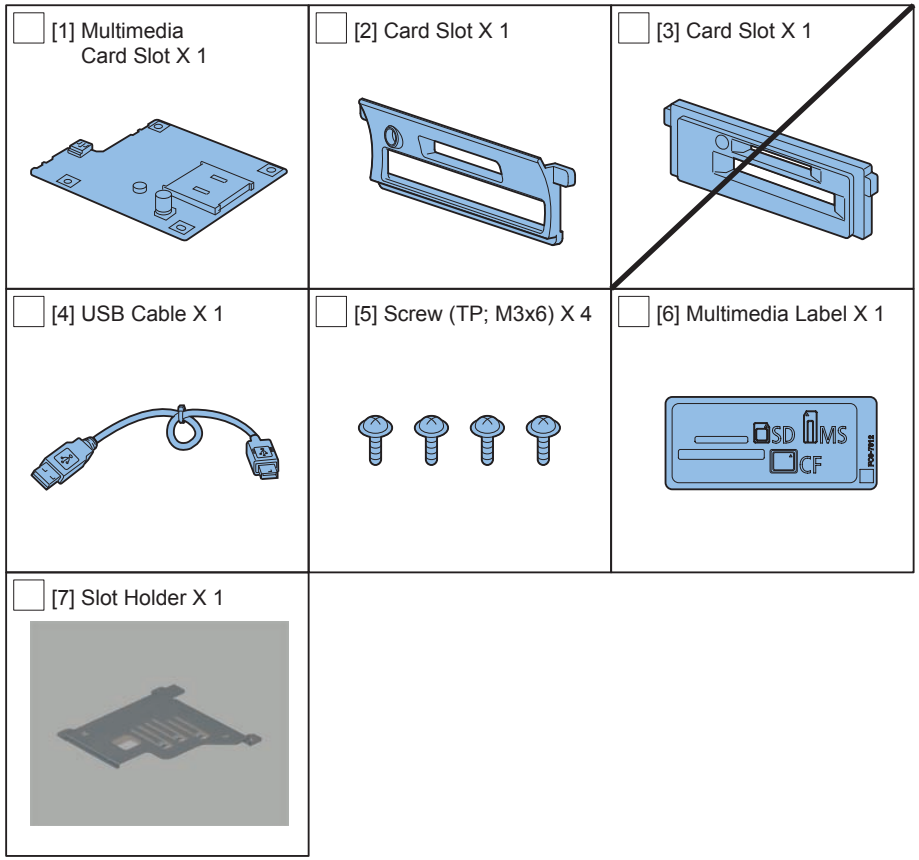

F-9-620

[3],[4]: Used when installing the Card Reader (sales company's option)

<CD/Guides>

- FCC/IC instruction sheet

## Multimedia Reader/Writer-A2




F-9-621

<CD/Guides>

- FCC/IC instruction sheet

## Check Items when Turning OFF the Main Power

Check that the main power is OFF.

1) Turn OFF the main power switch.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

## Installing the USB Device Port

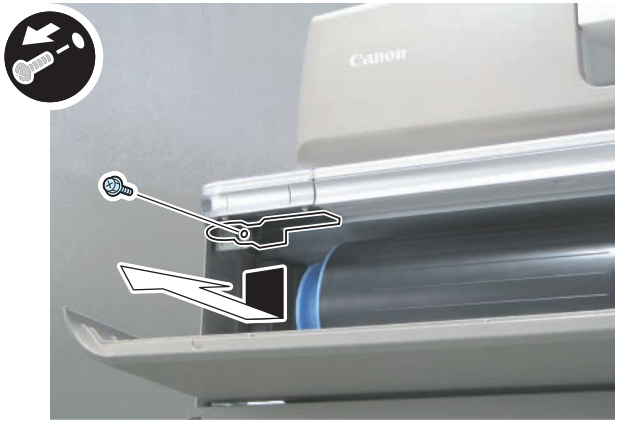
1) Open the Toner Exchange Cover.
2) Open the Upper Right Cover.
3) Remove the Upper Right Cover.

- 1 Screw

F-9-622

4) Remove the Bottle Regulation Rail.

- 1 Screw

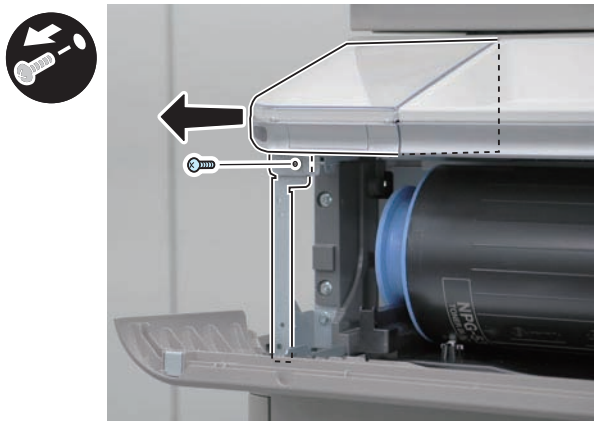



F-9-623

□

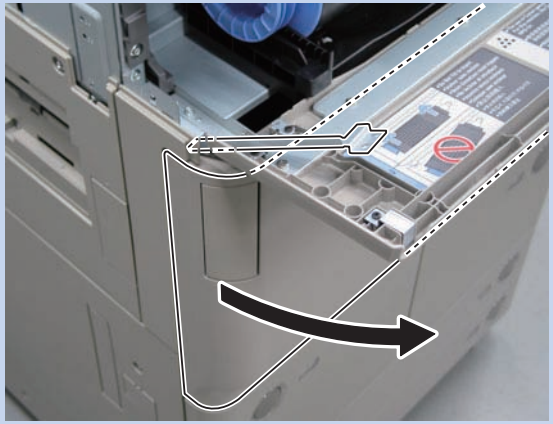
5) Remove the Upper Left Cover.

- 1 Screw



F-9-624

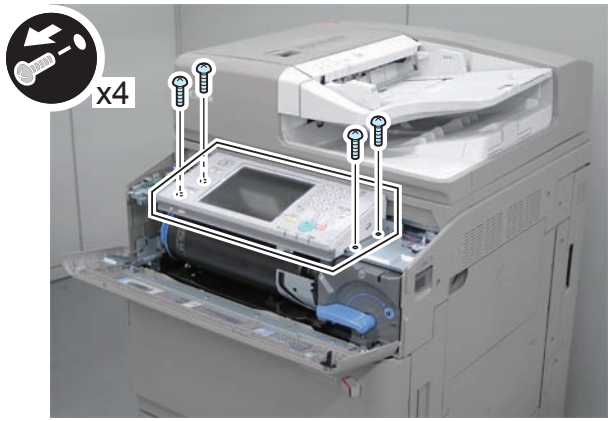
NOTE:
When removing the screw, the Control Panel Hold Plate is also removed.
When opening the Front Cover, be sure to do so while holding the Control Panel Hold Plate.



F-9-625

□

6) Remove the 4 screws of the Upper Middle Cover or the Control Panel.




F-9-626

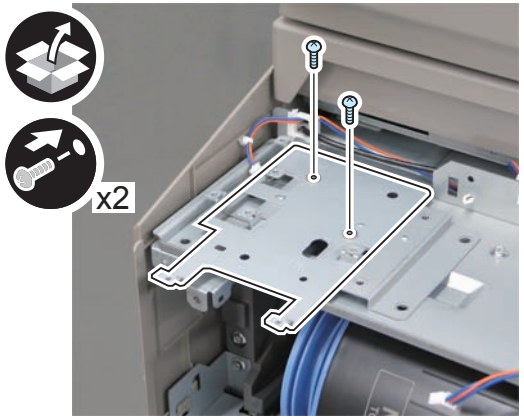
When removing the Upper Middle Cover: See <For Upper Middle Cover>
When removing the Control Panel: See <For Control Panel>

## ■ <For Upper Middle Cover>

□

1) Remove the Upper Middle Cover.
2) Install the Case Plate.

- 2 Screws (Binding; M4x6)

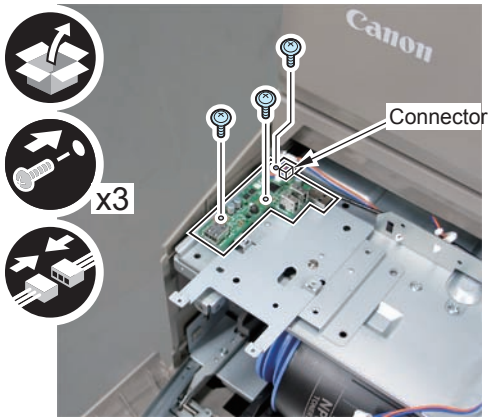



F-9-627

☐

3) Install the DUH-V3 Board.

- 3 Screws (TP; M3x6)
- 1 Connector

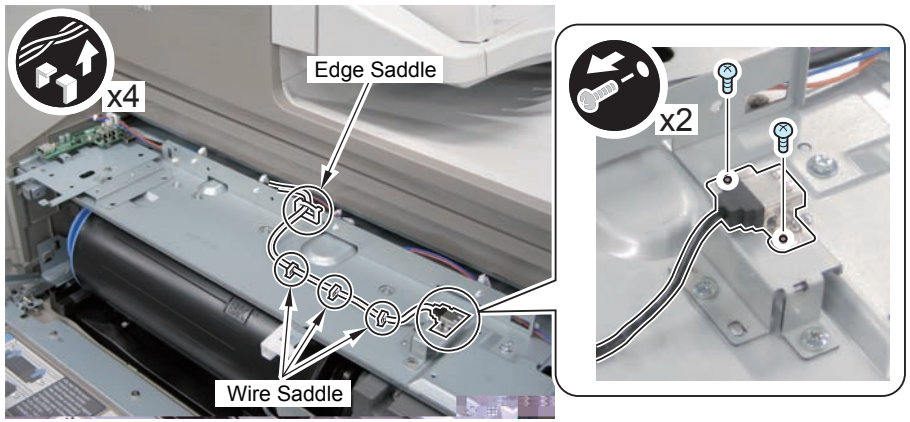



F-9-628

☐

4) Remove the USB Cable.

- 2 Screws
- 3 Wire Saddles
- 1 Edge Saddle (Close it after freeing the USB Cable)

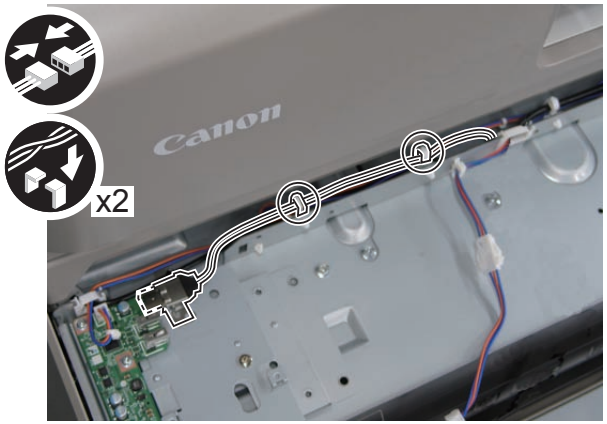



F-9-629

☐

5) Connect the removed USB Cable to the DUH-V3 Board.

- 2 Wire Saddles




F-9-630

☐

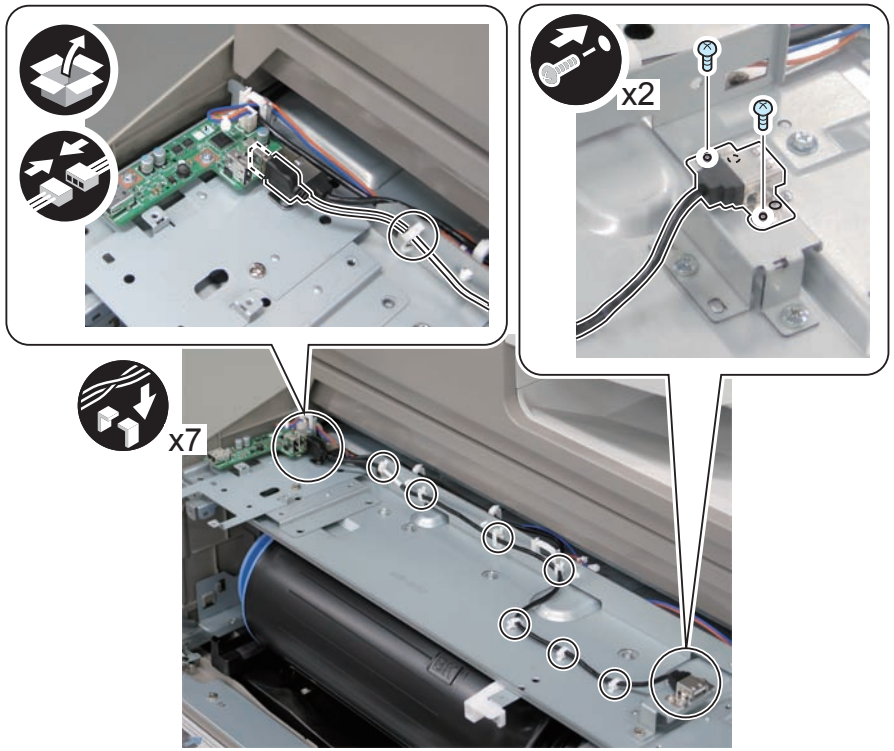
6) Install the 3 Wire Saddles to the Control Panel Plate.

F-9-631

☐

7) Connect one end of the DP USB Cable to the DUH-V3 Board, and connect its other end to the host machine.

- 2 Screws
- 7 Wire Saddles




F-9-632

☐

8) Install the Upper Middle Cover. (4 Screws)

9) Install the Upper Right Cover. (1 Screw)

NOTE:
When installing the Multimedia Reader/Writer simultaneously, it is efficient to install it before performing the following procedure.

10) Install the Upper Left Cover and Control Panel Hold Plate. (1 screw is used to tighten both parts)

11) Install the Bottle Regulation Rail. (1 Screw)

12) Close the Toner Exchange Cover.

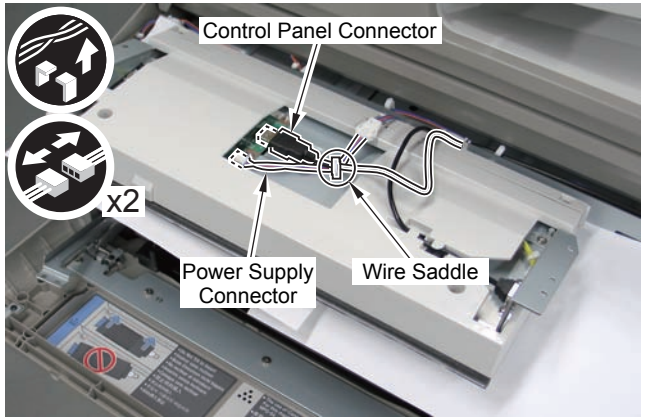
## <For Control Panel>

☐

1) Place a sheet of paper, etc., to avoid damaging the Control Panel, and turn the Control Panel over.

2) Disconnect the Control Panel Cable and the Power Supply Cable.

- 1 Wire Saddle

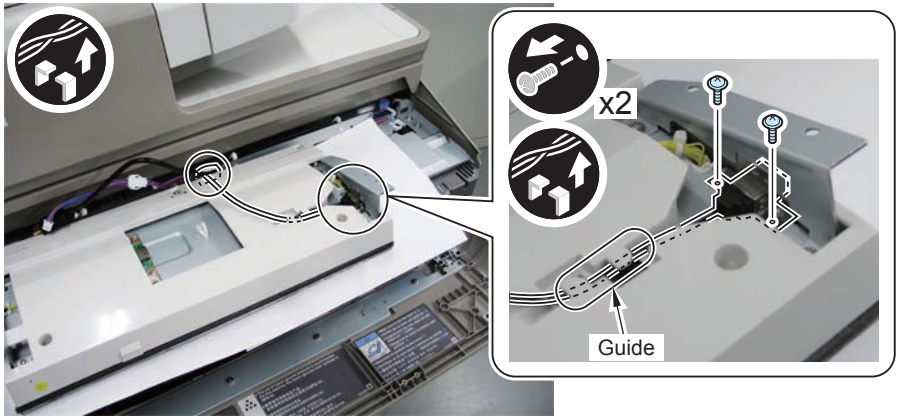



F-9-633

☐

3) Disconnect the USB Cable, and remove the Control Panel.

- 2 Screws
- Cable Guide
- 1edge saddle (Close it after freeing only the USB Cable)

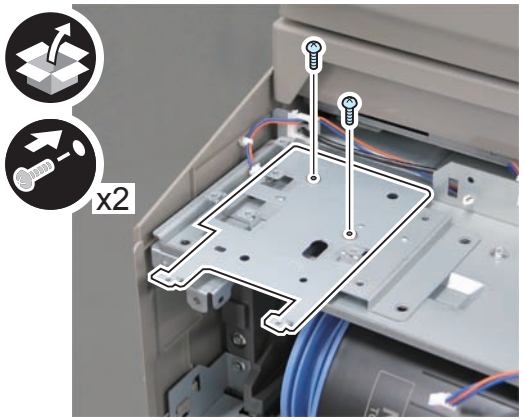



F-9-634

☐

4) Install the Case Plate.

- 2 Screws (Binding; M4x6)

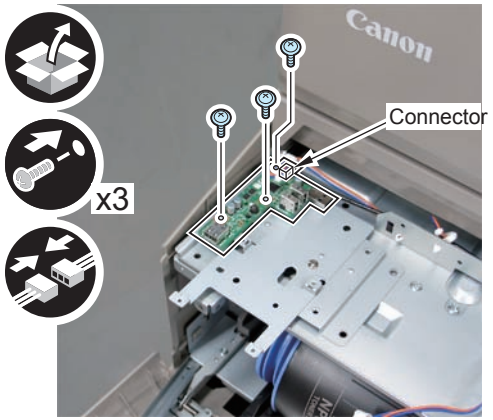



F-9-635

☐

5) Install the DUH-V3 Board.

- 3 Screws (TP; M3x6)
- 1 Connector

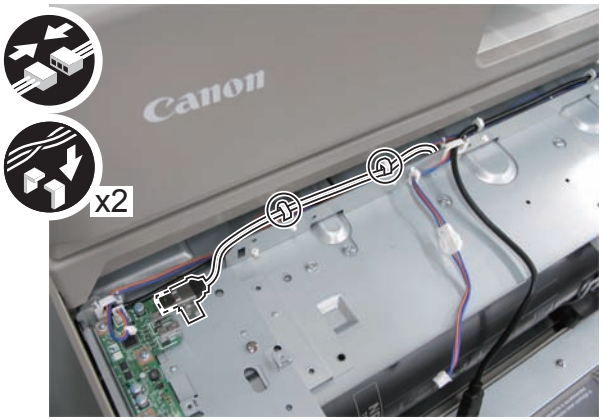



F-9-636

☐

6) Connect the removed USB Cable to the DUH-V3 Board.

- 2 Wire Saddles




F-9-637

☐

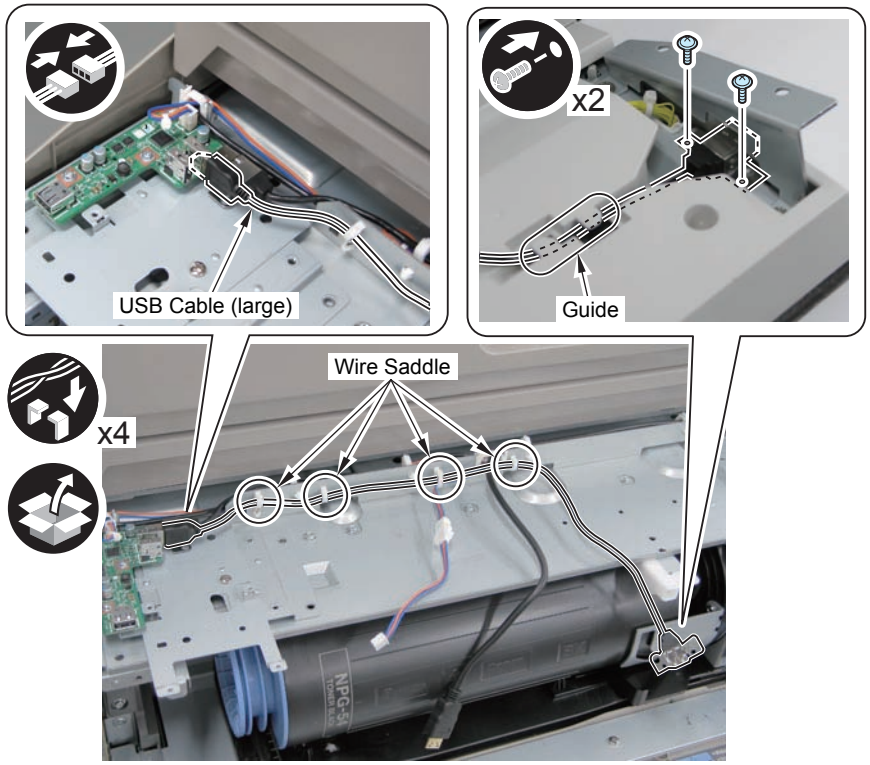
7) Install the 3 Wire Saddles to the Control Panel Plate.

F-9-638

☐

8) Connect one end of the DP USB Cable to the DUH-V3 Board, and connect its other end to the Control Panel by putting it through the guide.

- 2 Screws
- 4 Wire Saddles




F-9-639

☐

9) Connect the Control Panel Cable and the Power Supply Cable (1 Wire Saddle).

10) Install the Control Panel (4 Screws).

11) Install the Upper Right Cover. (1 Screw)

NOTE:
When installing the Multimedia Reader/Writer simultaneously, it is efficient to install it before performing the following procedure.

12) Install the Upper Left Cover and Control Panel Hold Plate. (1 screw is used to tighten both parts)

13) Install the Bottle Regulation Rail. (1 Screw)

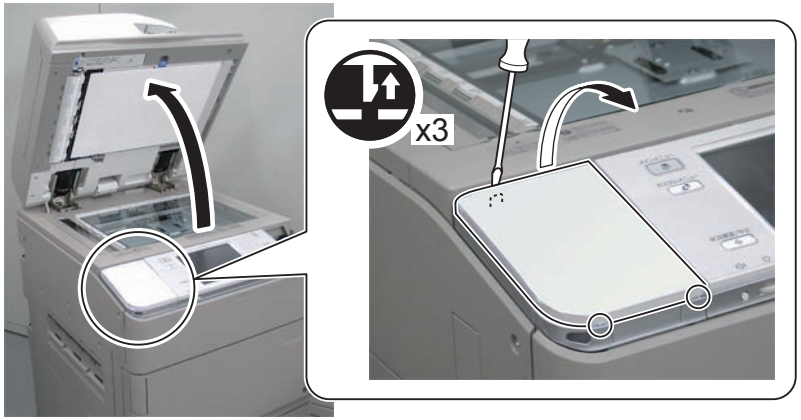
14) Close the Toner Exchange Cover.

## Installing the Card Reader

☐

1) Open the DADF, and remove the Transparent Cover and the Device Port Sheet of the Upper Left Cover.

- 3 Claws




F-9-640

☐

2) Connect the Card Reader to the PCB, and store the cable inside the Upper Cover by rolling it up.

F-9-641

☐

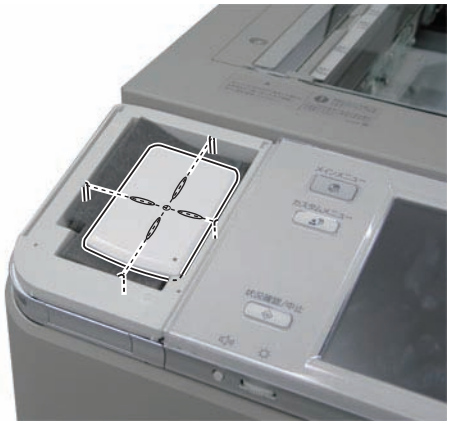
3) Put 4 cushions by piling them up.

NOTE:
Be sure to adjust the number of cushions according to how the cable of the Card Reader is stored.

F-9-642

☐

4) Place the Card Reader by aligning it with the position where the cover is installed.



F-9-643

☐

5) Replace the Device Port Sheet with the Case Sheet.

NOTE:
Be sure to replace it with the Case Sheet (with LED indication).

6) Install the Transparent Cover and the Case Sheet.

F-9-644

☐

7) Close the DADF.

☐

8) Connect the power plug of the host machine to the power outlet.

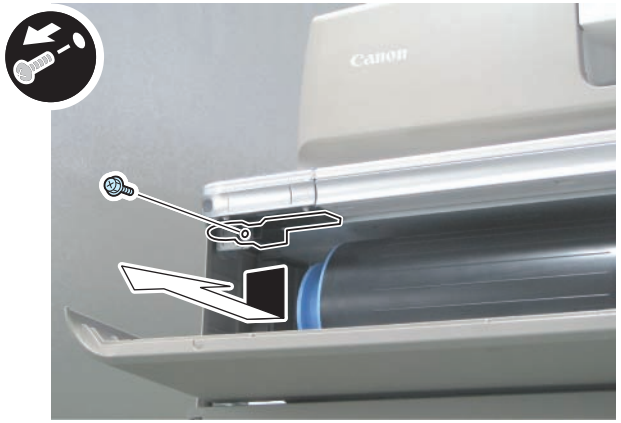
9) Turn ON the main power switch.

# Installing the Multimedia Reader/Writer

NOTE:
When installing the USB Device Port simultaneously, skip steps 1 and 3.

☐

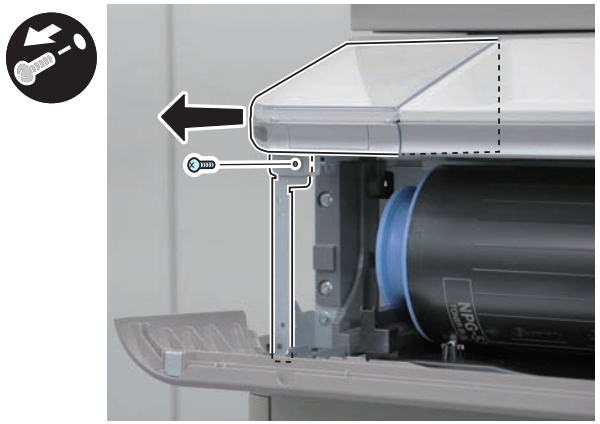
1) Open the Upper Right Cover.
2) Remove the Bottle Regulation Rail.
- 1 Screw




F-9-645

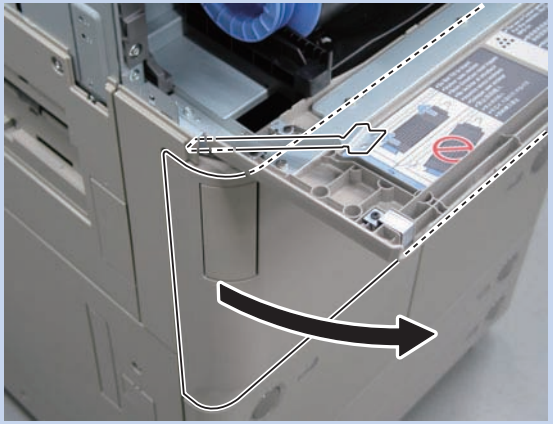
☐

3) Remove the Upper Left Cover.
- 1 Screw



F-9-646

NOTE:
When removing the screw, the Control Panel Hold Plate is also removed.
When opening the Front Cover, be sure to do so while holding the Control Panel Hold Plate.

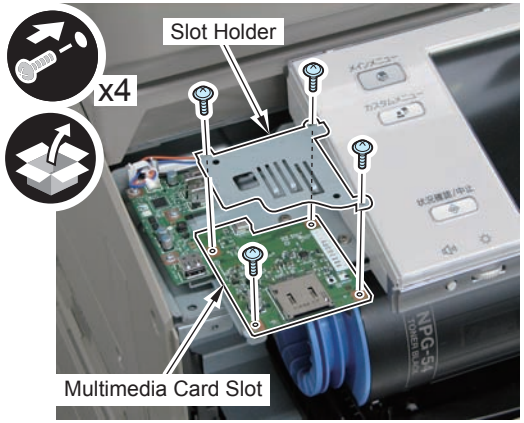


F-9-647

☐

4) Install the Multimedia Card Slot and Slot Holder together.

- 4 Screws (TP; M3x6)

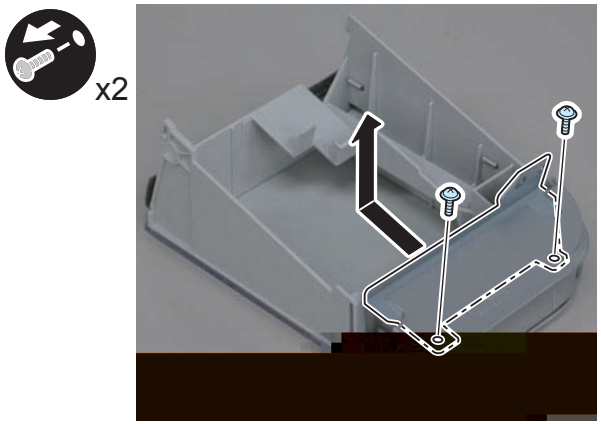



F-9-648

☐

5) Remove the Plate.

- 2 Screws

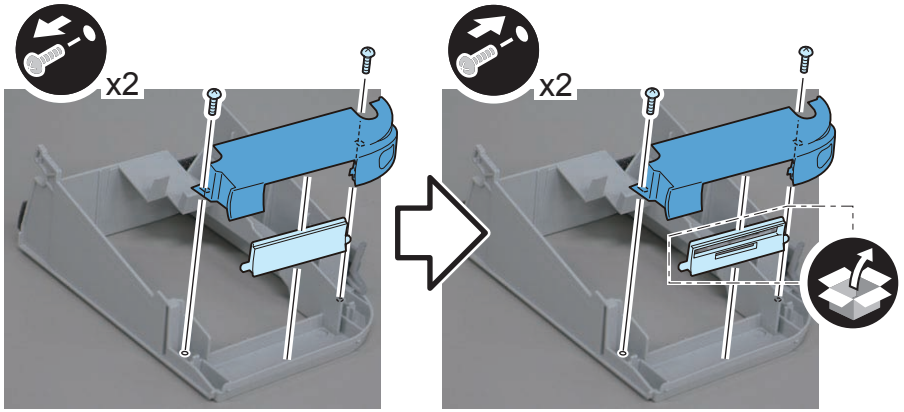



F-9-649

☐

6) Remove the Card Slot, and replace it with the Card Slot included in the package (The removed Card Slot will not be used).

- 2 Screws




F-9-650

☐

7) Install the Plat. (2 Screws)

8) Install the Upper Left Cover and Control Panel Hold Plate. (1 screw is used to tighten both parts)

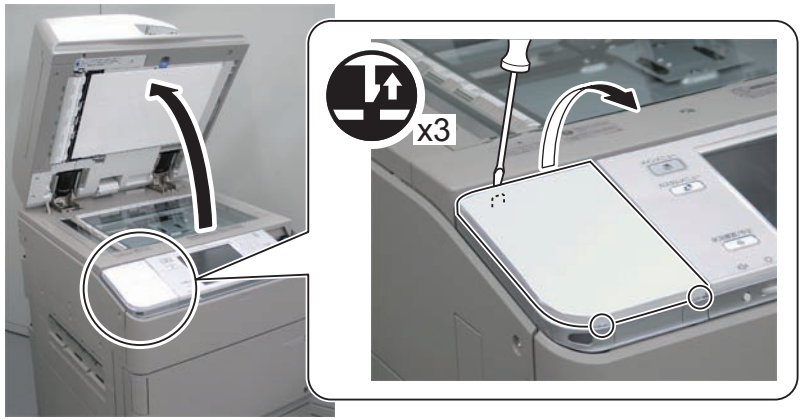
9) Install the Bottle Regulation Rail. (1 Screw)

10) Close the Toner Exchange Cover.

☐

11) Open the DADF, and remove the Transparent Cover and the Device Port Sheet of the Upper Left Cover.

- 3 Claws




F-9-651

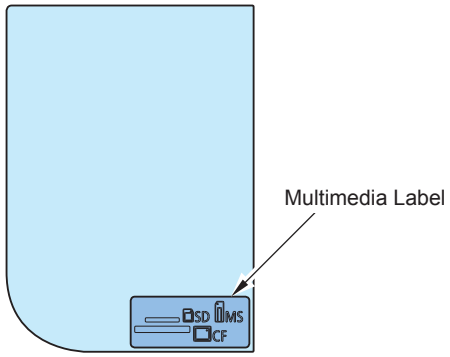
☐

12) Install the USB Cable.

F-9-652

☐

13) Affix the Multimedia Label to the Device Port Sheet as shown in the figure.




F-9-653

☐

14) Return the Transparent Cover and the Device Port Sheet to the original position.

- 3 Claws

F-9-654

☐

15) Close the DADF.

☐

16) Connect the power plug of the host machine to the power outlet.

17) Turn ON the main power switch.

# Operation Check [Multimedia Reader/Writer-A2]

NOTE:
- To the Multimedia Reader/Writer, Memory Media of the SC Card, Memory Stick, and CF Card can be connected. With one of the 3 types of Memory Media, perform the oepration check 1 through 3.
- When changing the settings upon user's request, it is required to log in as a system manager in accordance with instructions from the user administrator.

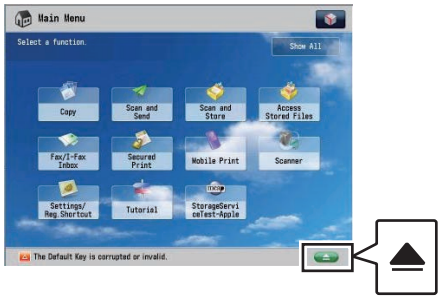
## Writing Check

□

1) Select "1" for the following service mode (Level 2).(Default value "0")
   CPIER > OPTION > DSPLY-SW > UI-MEM
2) To make the setting value effective, turn OFF/ON the main power of the Host Machine.

□

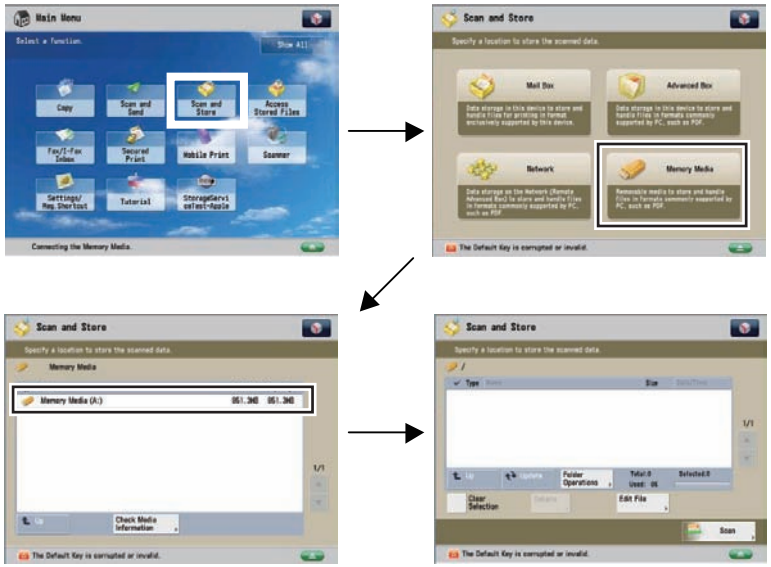
3) Mount the Memory Media to the Multimedia Card Reader/Writer. (Check that the Mount Mark is indicated in the bottom right.)




F-9-655

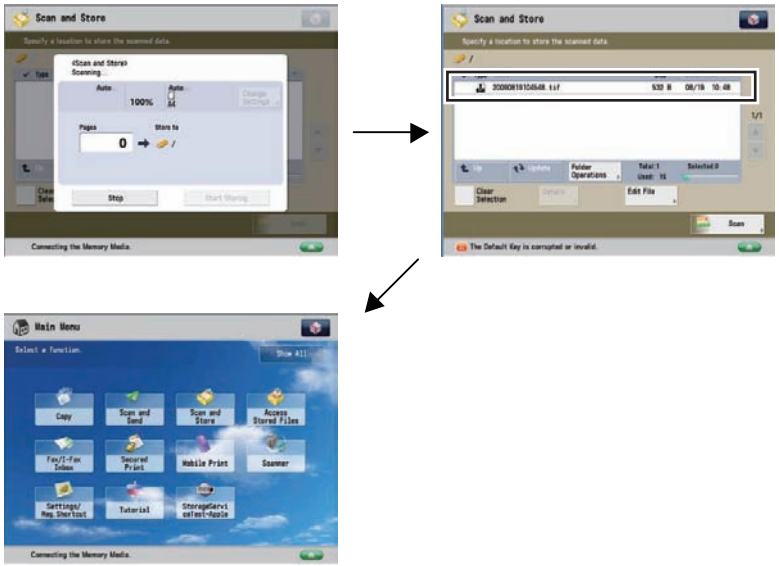
□

4) Make the following selection:[Scan and Store] > [Memory Media] > [Memory Media (A:)]



□

6) After the completion of original reading, check that the data is stored in the media. After that, press the [Main Menu] button on the Control Panel.

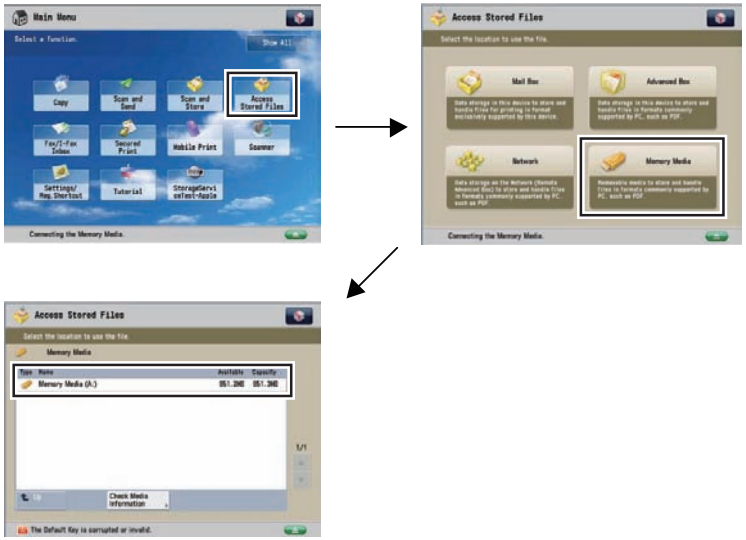



F-9-658

## Reading Check

□

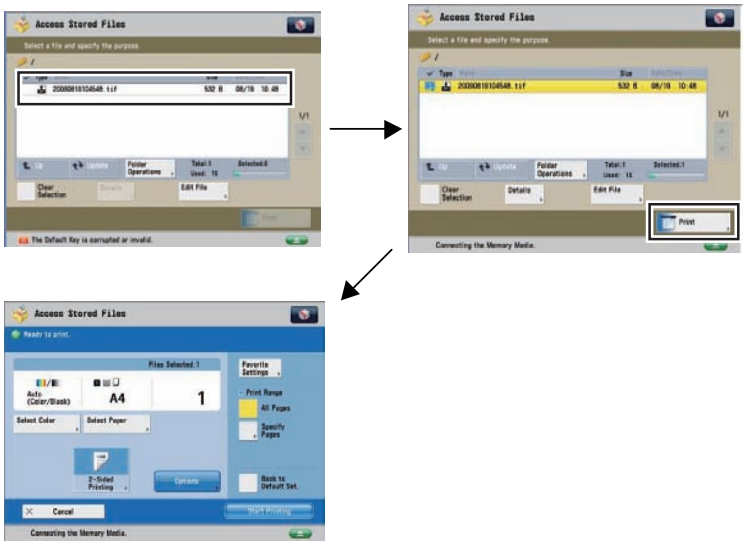
7) Make the following selection from Main Menu: [Access Stored Files] > [Memory Media] > [Memory Media(A:)]




F-9-659

□

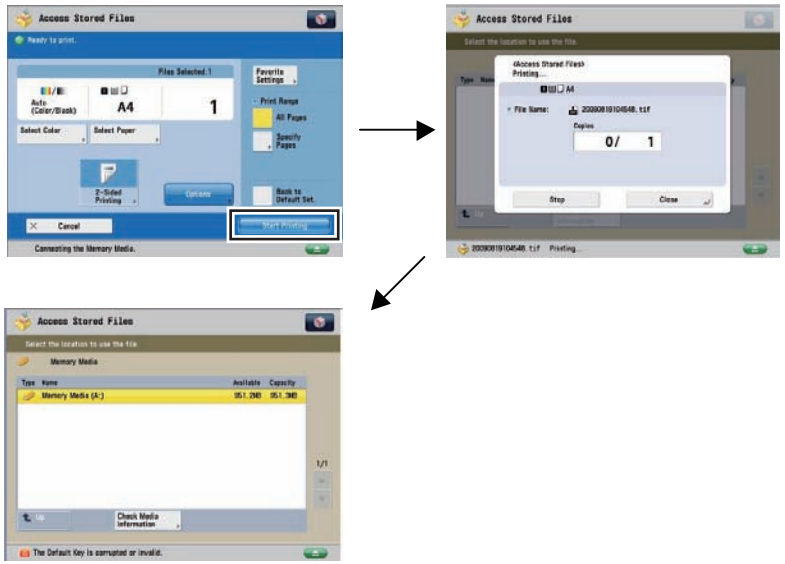
8) Select the files stored in step 4) and 5), and then press the [Print] button.




F-9-660

□

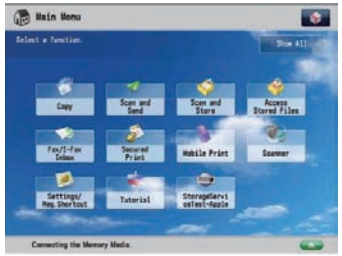
9) Press the [Start Printing] button, and print the file. Then check that the file is printed correctly.




F-9-661

□

10) Press the [Main Menu] button on the Control Panel.

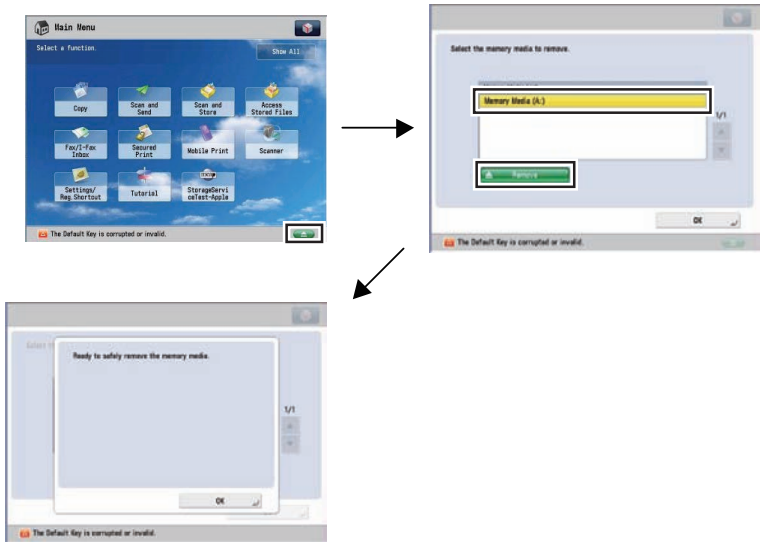



F-9-662

## Memory Media Removal

□

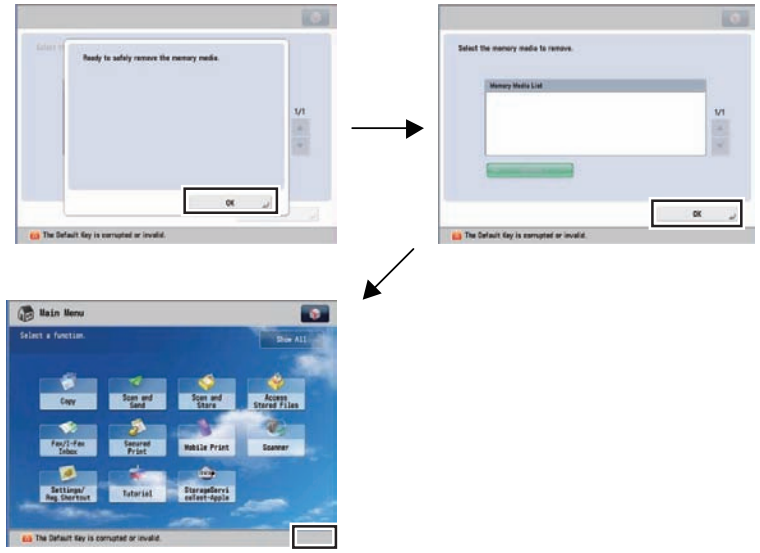
11) Press the [Mount Mark ] in the bottom right.Then, select the memory media to be removed, and press the [Remove] button.




F-9-663

□

12) Press the [OK] button. Then, check that the Mount Mark is not indicated in the bottom right on the Main Menu screen.




F-9-664

## Points to Note at Installation

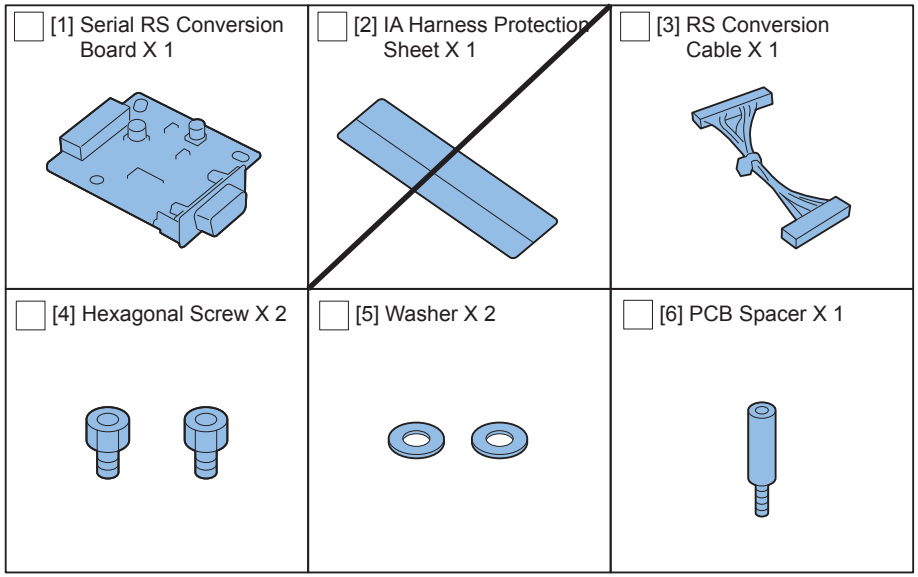
The following options cannot be used in combination with each other.

- Serial Interface Kit
- Copy Control Interface Kit
- Copy Card Reader

## Installation Outline Drawing

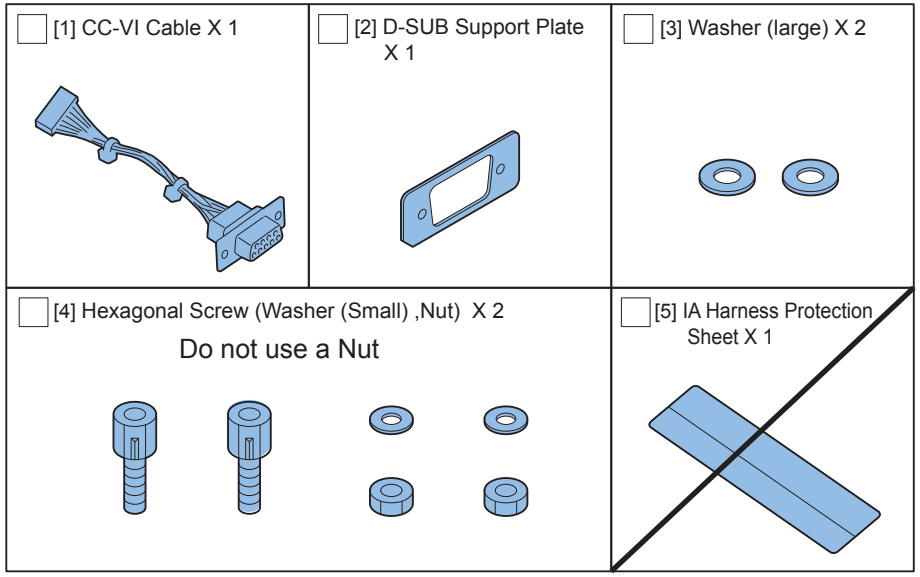
## Checking the Contents

### Serial Intreface KIT-K1




F-9-665

### Copy Control Interface KIT-A1




F-9-666

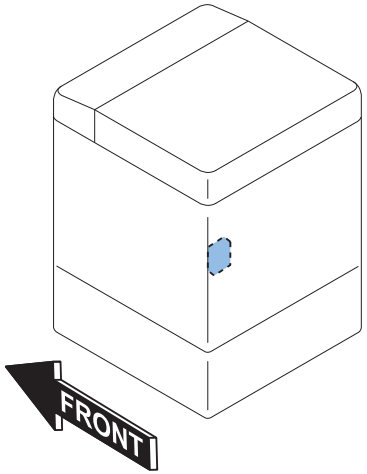
## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.

2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing



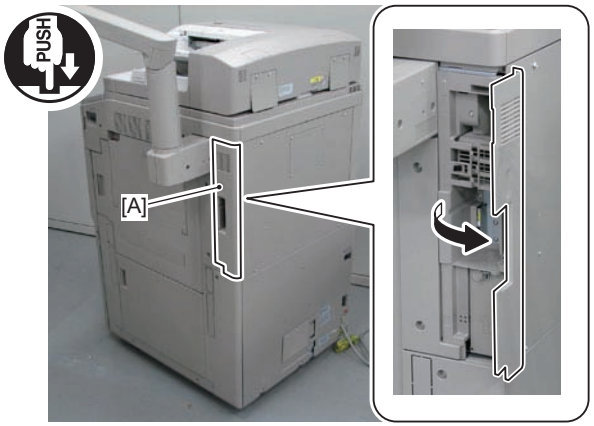

F-9-667

## Installation Procedure

### Removing the Main Controller PCB 1

□

1) Push [A] part, and open the Right Rear Cover 1.

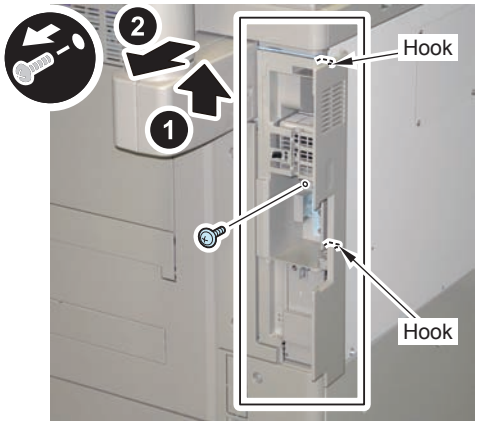



F-9-668

□

2) Remove the Side Cover.

- 1 Screw
- 2 Hocks



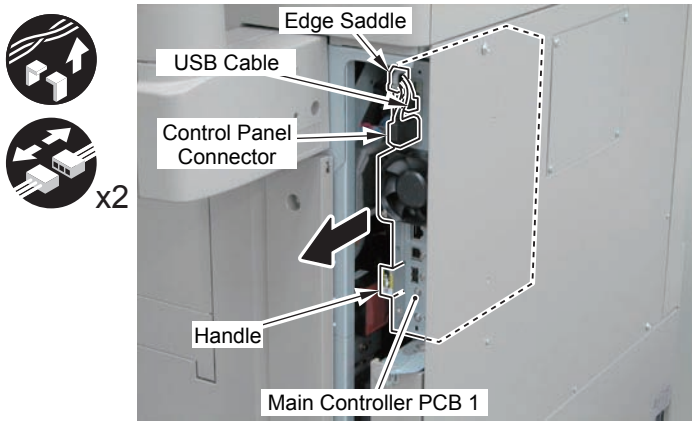

F-9-669

□

3) Disconnect the USB Cable and the Control Panel Cable.

4) Route the removed cable to the open space and remove the Main Controller PCB 1.

- 1 Edge Saddle



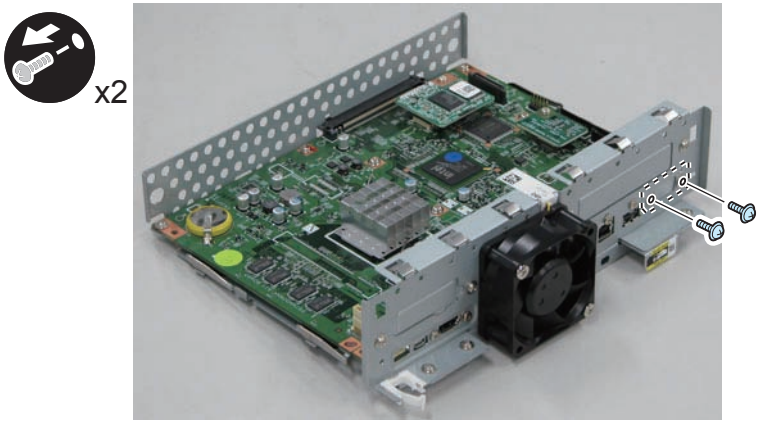

F-9-670

## Installing the Serial Interface Kit-K1

□

1) Remove the Face Cover from the Main Controller PCB 1. (The removed Face Cover will not be used.)

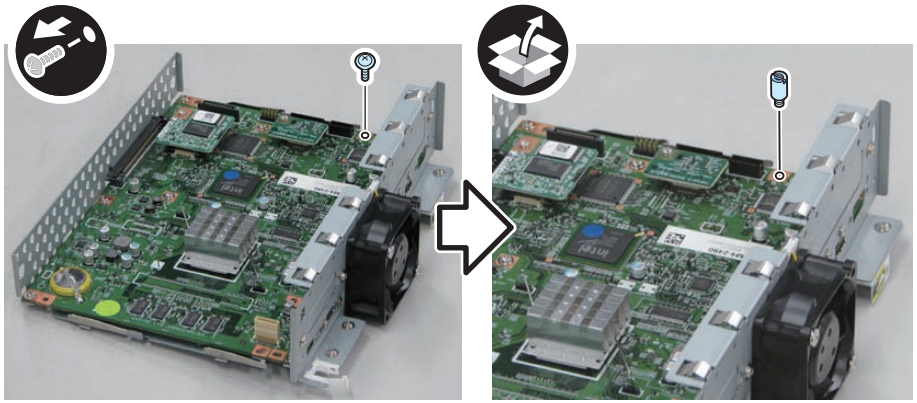
- 2 Screws (The removed screw will not be used.)




F-9-671

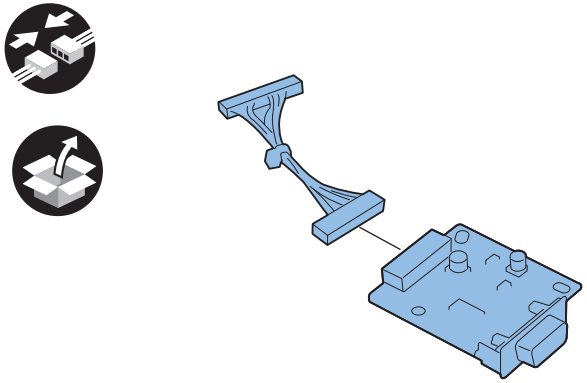
□

2) Remove the screw, and install the PCB Spacer. (The removed screw will be used in step 4).



□

3) Connect the RS Conversion Cable to the Serial RS Conversion Board.

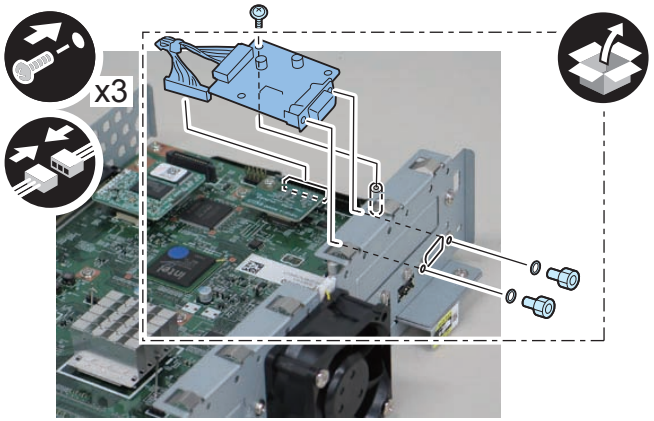


F-9-672

□

4) Install the Serial RS Conversion Board.

- 1 Screw (Use the screw removed in step 2.)
- 2 Washers
- 2 Hexagon Screws
- 1 Connector



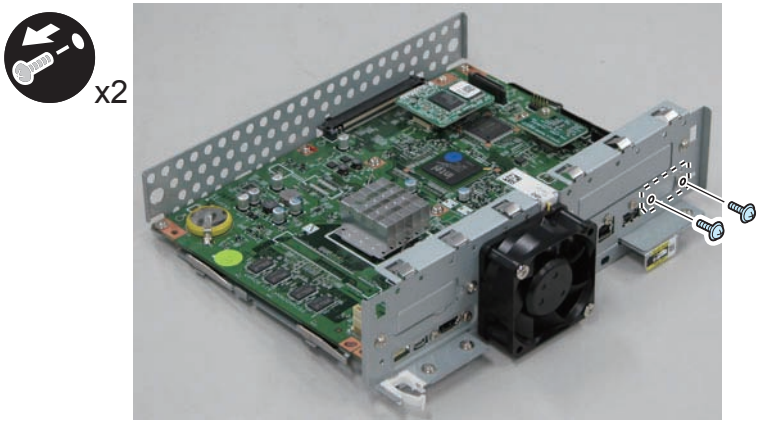

F-9-673

## Installing the Copy Control Interface Kit-A1

□

1) Remove the Face Cover from the Main Controller PCB 1. (The removed Face Cover will not be used.)

- 2 Screws (The removed screws will not be used.)

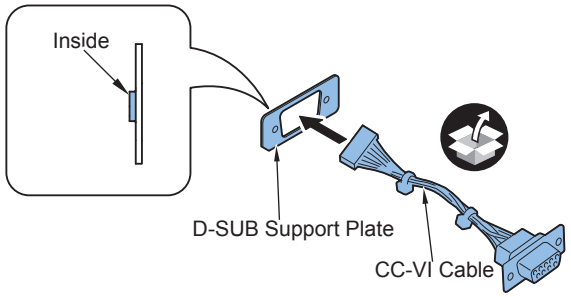



F-9-674

□

2) Put the CC-VI Cable through the D-SUB Support Plate.

CAUTION:
Install the extruded side of the D-SUB Support Plate as shown in the figure.

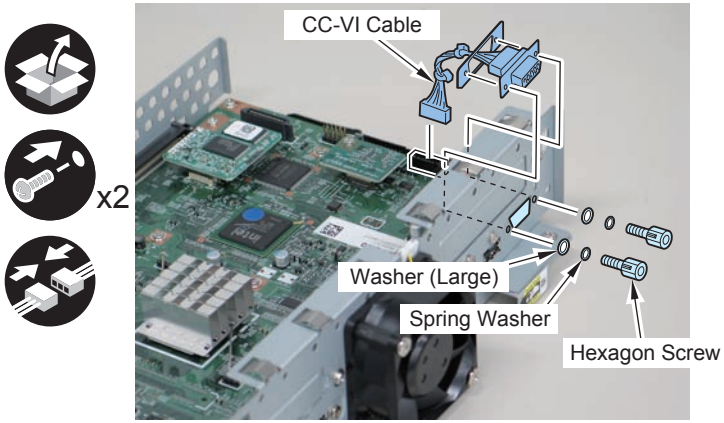



F-9-675

□

3) Connect the CC-VI Cable to the Main Controller PCB 1.

- 2 Hexagon Screws
- 2 Spring Washers
- 2 Washers (Large)
- 1 Connector



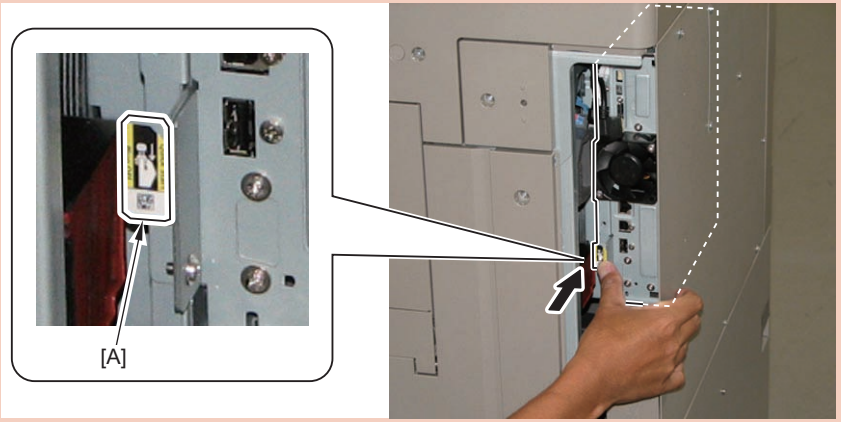

F-9-676

□

4) Install the Main Controller PCB 1.

CAUTION: Points to Note when Inserting the Main Controller PCB 1

- Install the Main Controller PCB 1 while paying attention not to trap cables.
- Be sure to push the handle [A] in horizontally. If pushing any part other than the handle, the Main Controller PCB 1 may not be inserted horizontally. In such case, note that connector connection error (or damage of connector) or deformation of plate may occur.




F-9-677

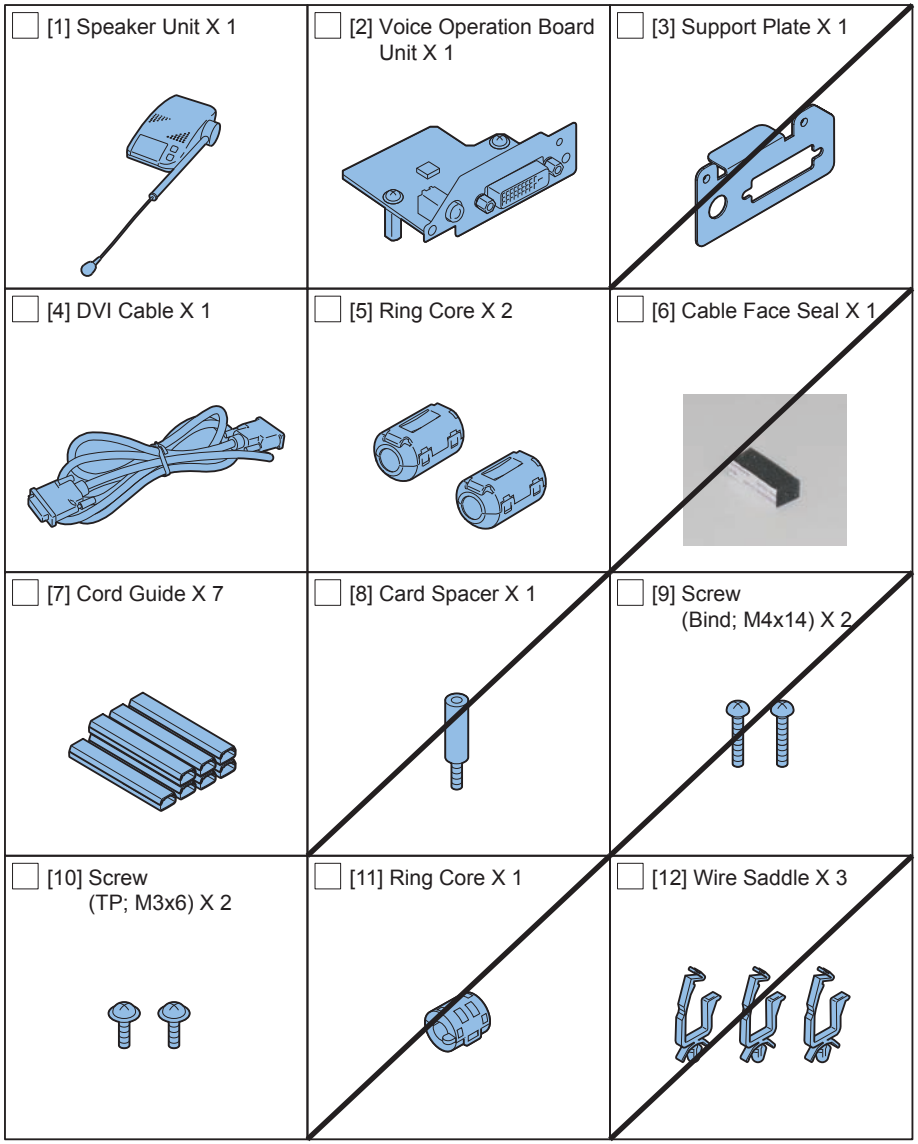
5) Insert the USB Cable and the Control Panel Cable. (1 Edge Saddle)
6) Install the Side Cover. (1 Screw)
7) Close the Right Rear Cover 1.
8) Connect the power plug to the outlet.
9) Turn ON the main power.

# Voice Operation Kit-C2

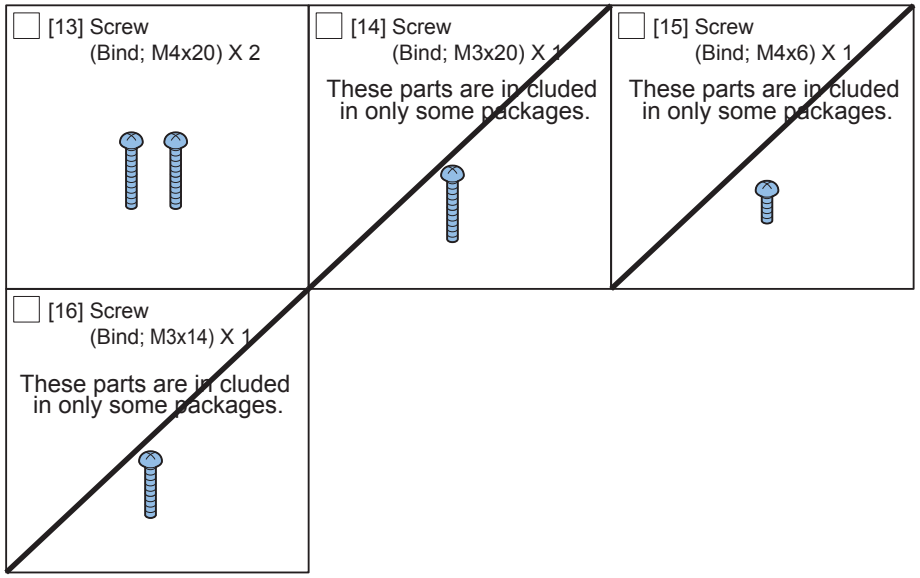
## Points to Note at Installation

- To use the equipment, the Reader Unit is required.
- Although model with the Upright Control Panel is used for illustration in this procedure, the same procedure is applied to model with the Flat Control Panel.
- Refer to "Combination of options" when installing this equipment before operation.

## Checking the Contents




F-9-678




F-9-679

[11]: This is used for the user installed option and should be handed over to the user.

<CD/Guides>

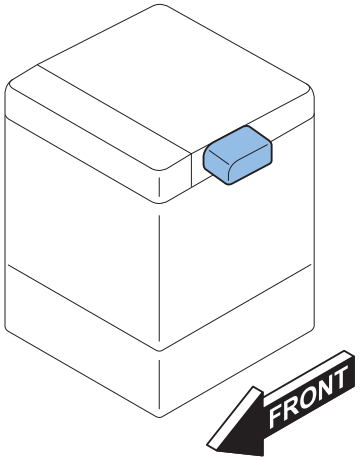
- User's Guide
- Voice Guidance Kit User's Guide
- Voice Guidance Manual CD
- FCC/IC-A DOCUMENT

## Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

## Installation Outline Drawing

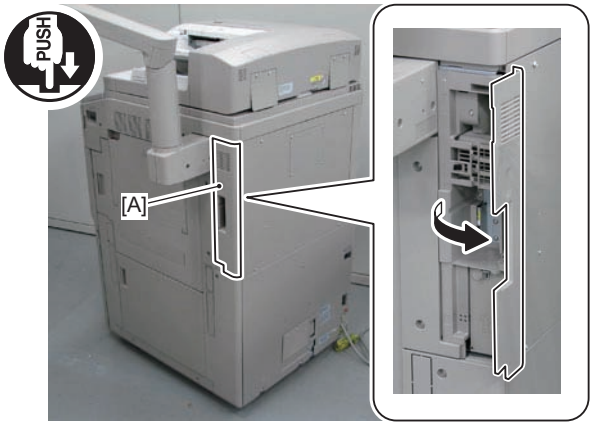



F-9-680

# Installation Procedure

☐

1) Press [A] part, and open the Right Rear Cover 1.

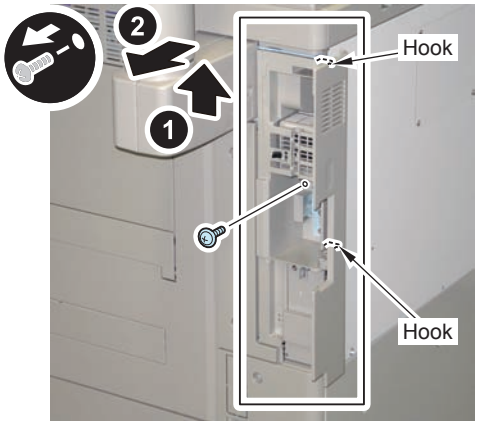



F-9-681

☐

2) Remove the Side Cover.

- 1 Screw (The removed screw will be used in step 13.)
- 2 Hooks



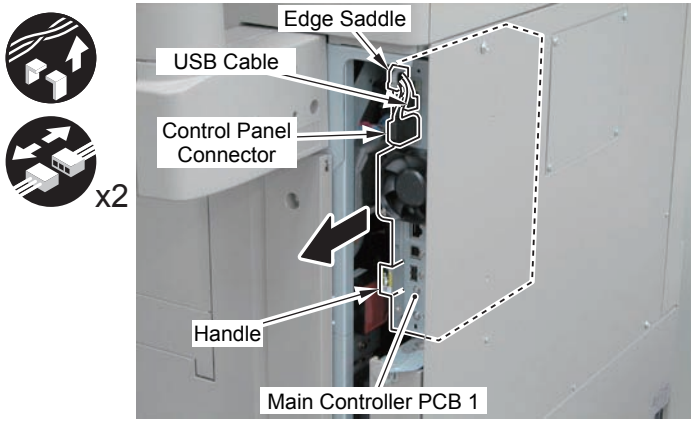

F-9-682

☐

3) Disconnect the USB Cable and the Control Panel Cable.

- 1 Edge Saddle

4) Route the removed cable to the open space and remove the Main Controller PCB 1.

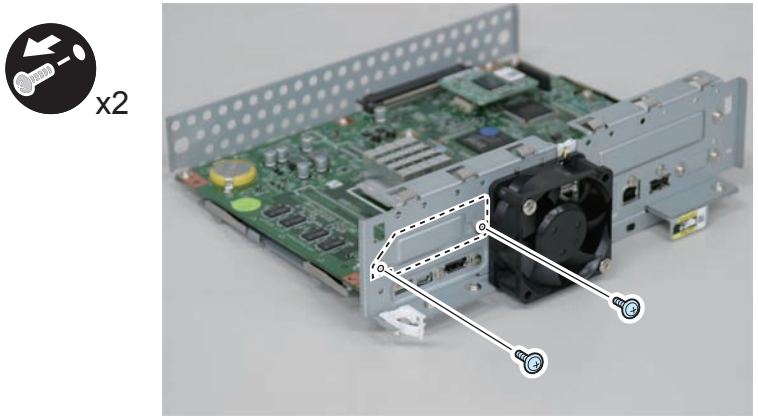



F-9-683

☐

5) Remove the Face Plate. (The removed Face Plate will not be used.)

- 2 Screws (The removed screws will be used in later steps.)



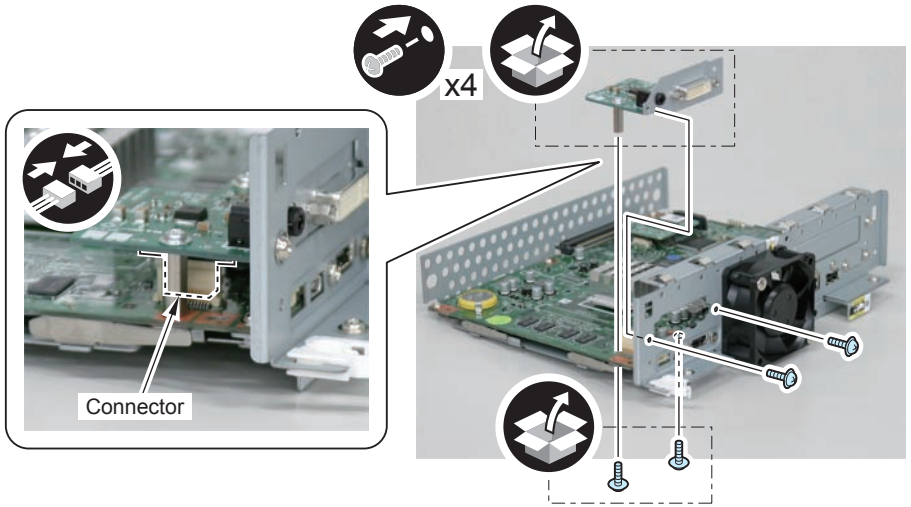

F-9-684

☐

6) Install the Voice Operation Board Unit to the Main Controller PCB 1.

- 1 Connector
- 2 screws (The removed screws from a previous step)
- 2 Screws (TP; M3x6)

NOTE:
Check that the connector is connected properly.



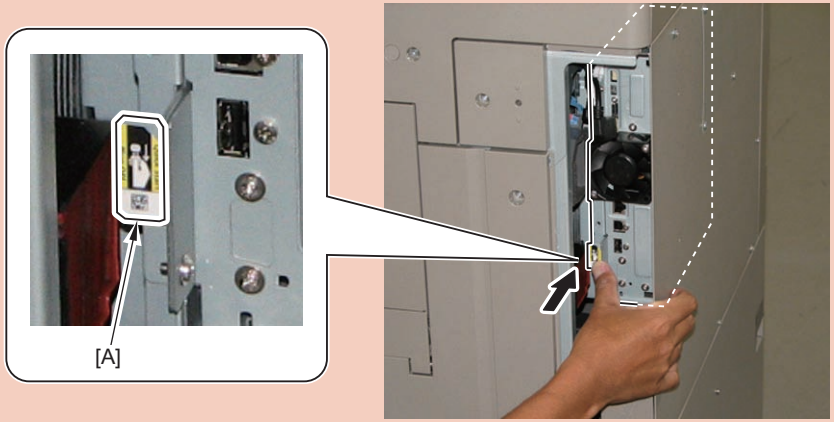

F-9-685

☐

7) Insert the Main Controller PCB 1 until it stops.

CAUTION: Points to Note when Inserting the Main Controller PCB 1

- Be sure to install the Main Controller PCB 1 while paying attention not to trap cables.
- Be sure to push the handle [A] in horizontally. If pushing any part other than the handle, the Main Controller PCB 1 may not be inserted horizontally. In such case, note that connector connection error (or damage of connector) or deformation of plate may occur.



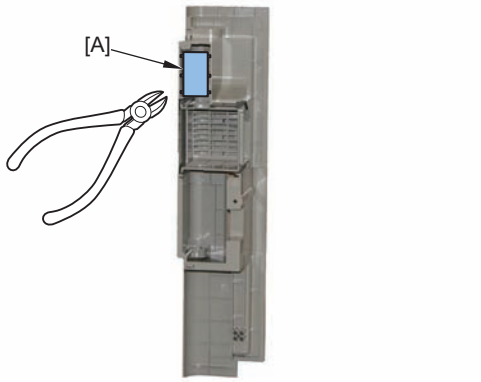

F-9-686

8) Connect the USB Cable and the Control Panel Cable.

- 1 Edge Saddle

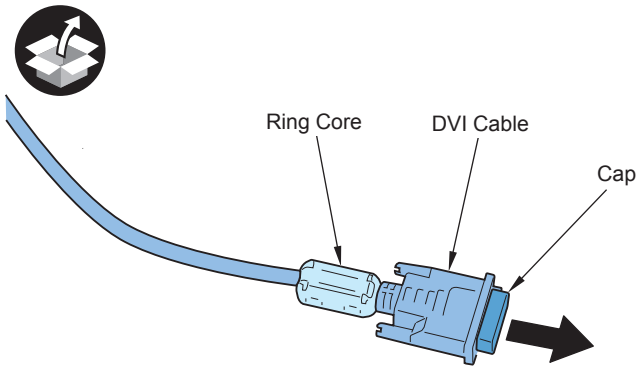
☐
9) Cut off [A] part of the Side Cover with nippers.

CAUTION:
When cutting off the part, be sure not to make burrs.




F-9-687

☐
10) Attach the 2 Ring Cores to both ends of the DVI Cable.



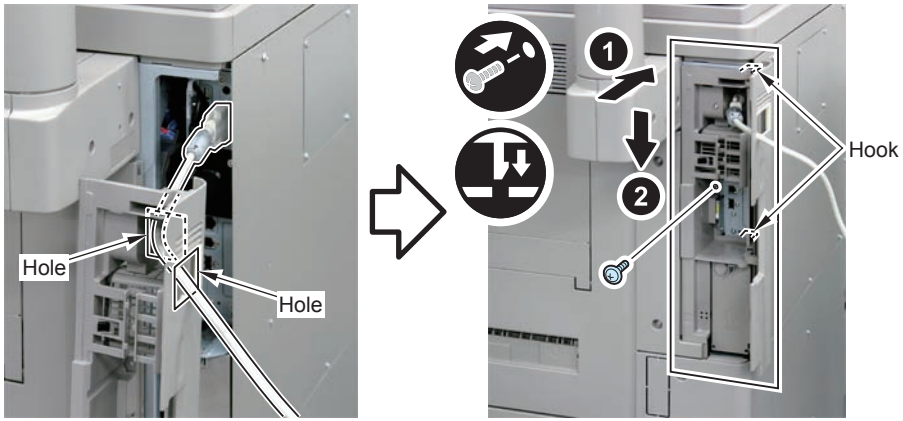

F-9-688

☐
11) Connect the DVI Cable to the Voice Operation Board Unit.

F-9-689

☐
12) Put the IDVI Cable through holes of the Side Cover and Right Rear Cover.
13) Install the Side Cover.

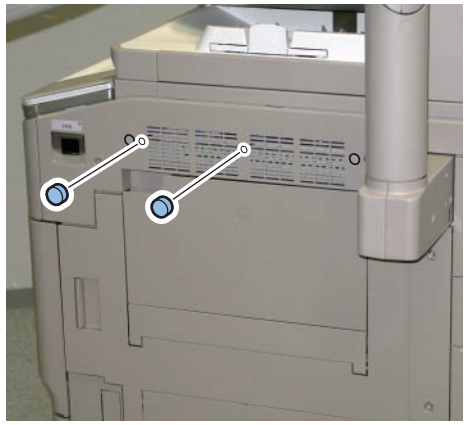
- 2 Hooks
- 1 Screw (Use the screw removed in step 2.)




F-9-690

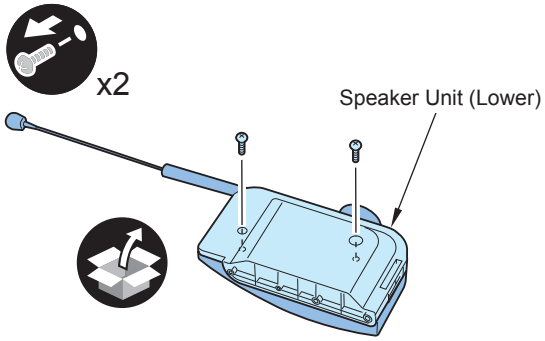
☐
14) Close the Right Rear Cover 1.

☐
15) Remove the 2 Rubber Caps from the Right Upper Cover. (The removed Rubber Caps will not be used.)



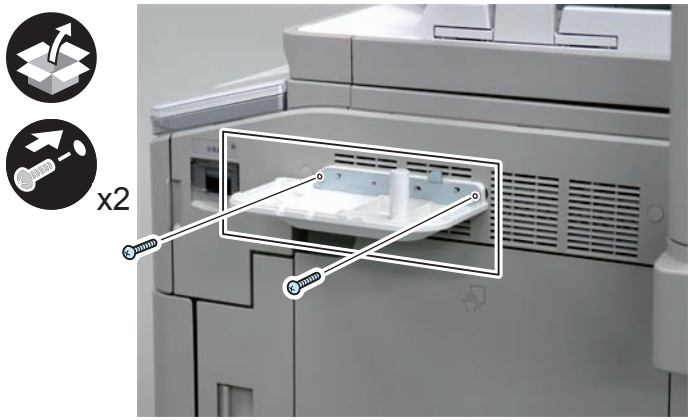
F-9-691

☐
16) Remove the Speaker Unit (Lower) from the Speaker Unit.
- 2 Screws (The removed screws will be used in step 18.)



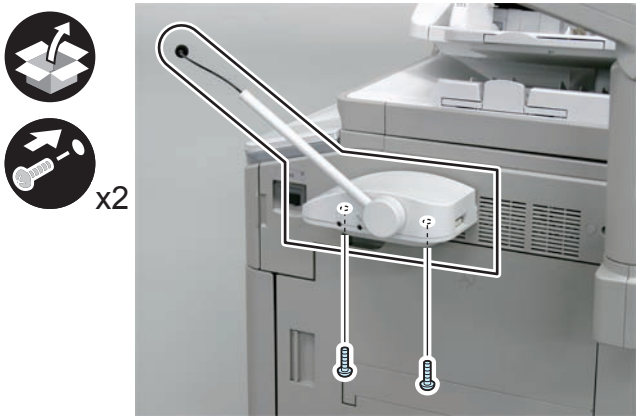

F-9-692

☐
17) Install the Speaker Unit (Lower).
- 2 Screws (Binding; M4x20)




F-9-693

☐
18) Install the Speaker Unit (Upper).
- 1 Screw (Binding; M4x6)




F-9-694

☐
19) Insert the DVI Cable to the Speaker Unit.

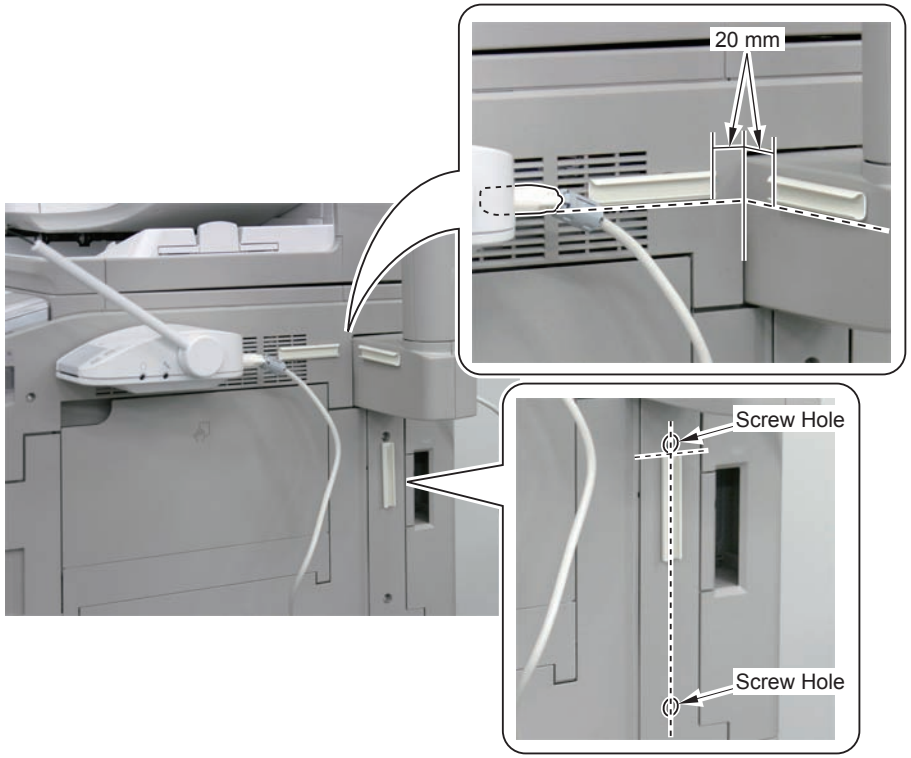
F-9-695

☐
20) Remove the cover of Cord Guide and affix it to the area indicated in the figure.

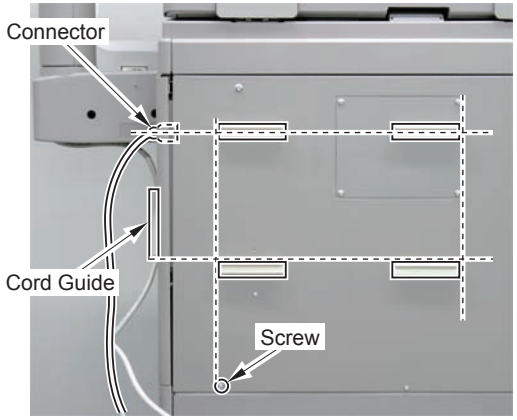
NOTE:
Affix the Cord Guide at the location indicated in the figure.

<In the Case of Upright Control Panel>

- Use 7 Cord Guides.



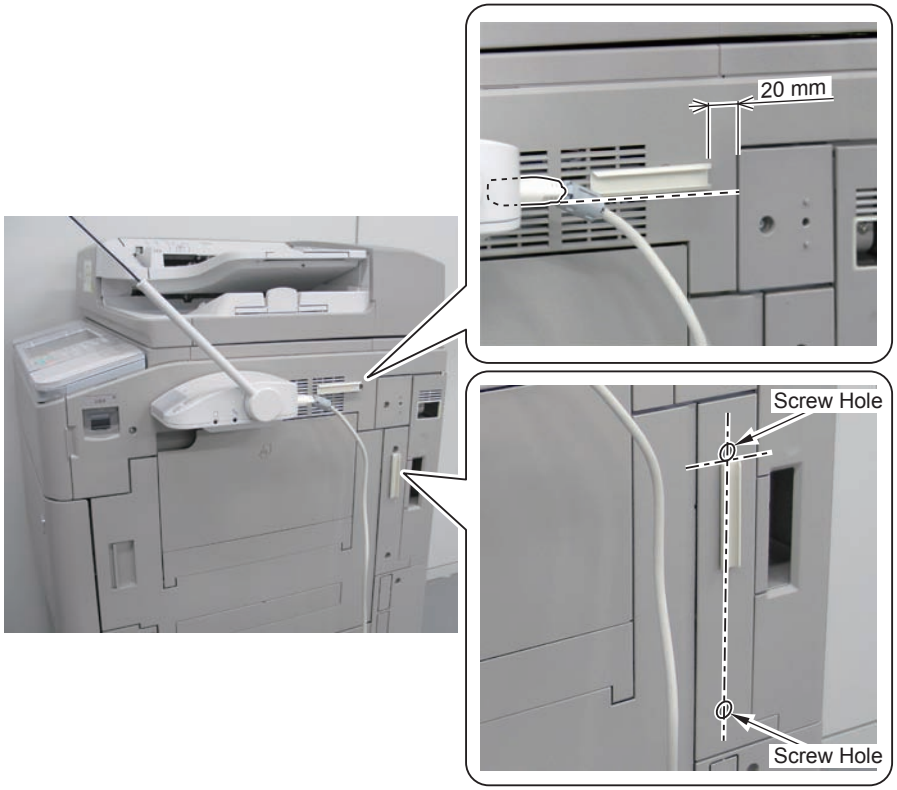

F-9-696



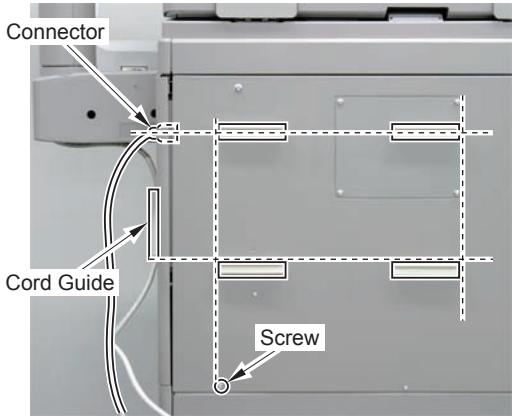

F-9-697

<In the Case of Flat Control Panel>

- Use 6 Cord Guides.




F-9-698

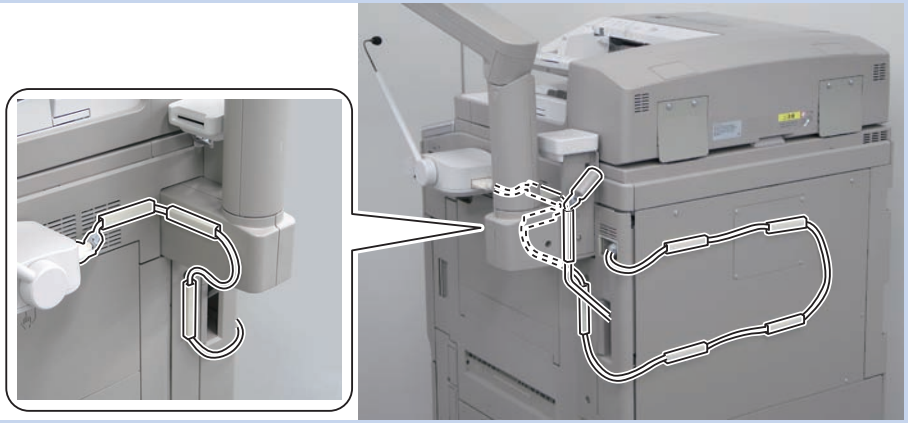



F-9-699

NOTE:
Steps for the rear are same with both the Upright Control Panel model and Flat Control Panel model.

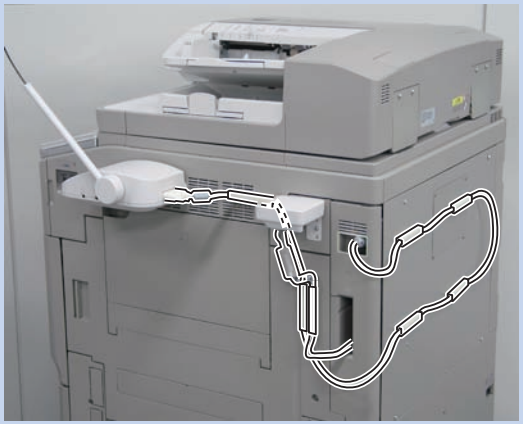
NOTE: When using together with the Copy Card Reader

<In the Case of Upright Control Panel>



F-9-700

<In the Case of Flat Control Panel>

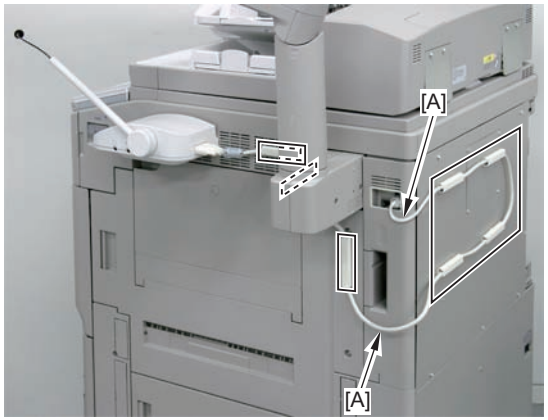


F-9-701

21) Put the Speaker Cable through the Cord Guide, and install the cover of the guide.

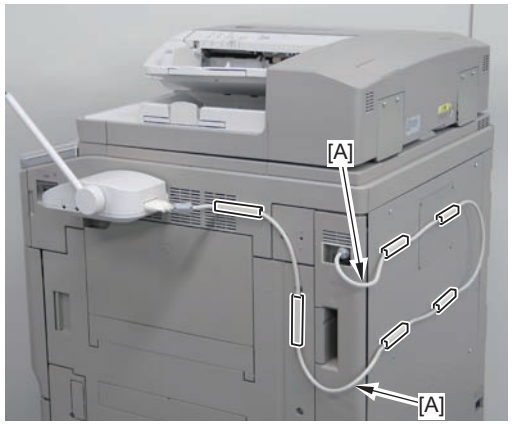
CAUTION:
Be sure to slack off [A] part for not interfering to open/close the Right Rear Cover 1.

<In the Case of Upright Control Panel>




F-9-702

<In the Case of Flat Control Panel>




F-9-703

22) Connect the power plug of the host machine to the power outlet.
23) Turn the main power switch ON.

## Checking after Installation

NOTE:
When changing the settings upon user's request, it is required to log in as a system manager in accordance with instructions from the user administrator.

1) Select [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Use Voice Navigation], and check that the setting is ON.
2) Select [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Voice Navigation at Startup], and check that "Select Mode at Startup" is set.
3) Select [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings], and check that "Tune Microphone" is displayed.
4) To make the setting value effective, turn OFF/ON the main power of the Host Machine.

## Operation Check

### When Starting to Use

1) Press "Reset" key or the Voice Recognition button for more than 3 seconds.
2) In "Select the Voice Navigation type." on the Control Panel screen, select "Manual + Vocal Mode", "Vocal Mode" or "Manual Mode", and press OK.
3) Once the indication on the screen is framed in red, the "Voice Operation Kit" becomes enabled.

NOTE:
When "Manual Mode" is selected in "Select the Voice Navigation type.", nothing happens by pressing the Voice Recognition button.

In case the Voice Operation Kit fails to operate, check the following.

- Make the following selection; [Service Mode (Level 1) ] > [COPIER] > [DISPLAY] > [VERSION], and check that [TTS-JA/TTS-EN] and [ASR-JA/ASR-EN] are installed correctly.

### When Stopping to Use

1) Press "Reset" key or the Voice Recognition button for more than 3 seconds.

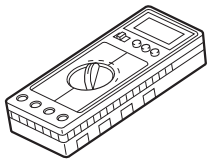
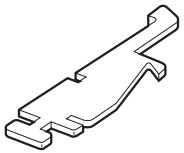
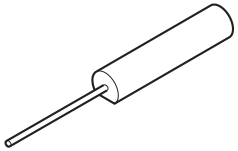
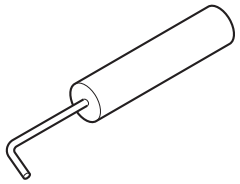
# Appendix

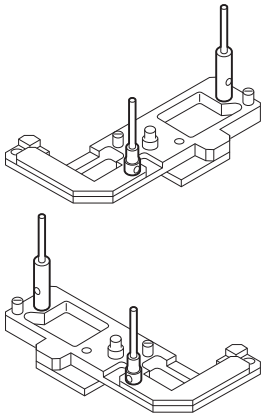
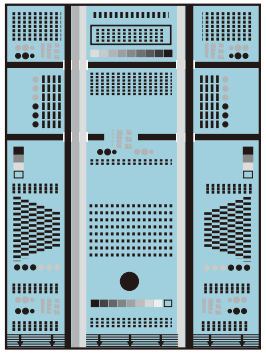
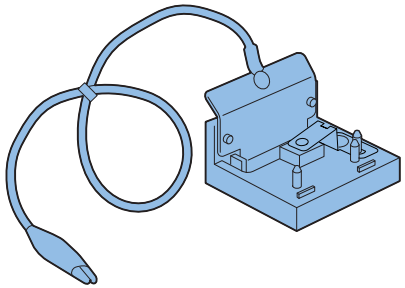
- Service Tools
- General Timing Chart
- General Circuit Diagram
- List of User Mode
- Backup Data
- Detail of HDD partition
- Soft Counter List

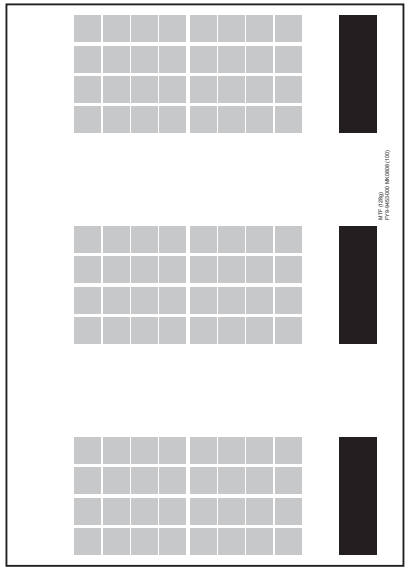
# Service Tools

## Special Tools

In addition to the standard tools set, the following special tools are required when servicing the machine:

| Tool name | Tool No | Ctgr | Appearance | Remarks |
|---|---|---|---|---|
| Digital multimeter | FY9-2002 | A |  | Used for electrical checks; for adjustment of laser power in com-bination with the laser power checker. |
| Cover switch | TKN-0093 | A |  | |
| Tester extension pin | FY9-3038 | A |  | |
| Tester extension pin(L-shaped) | FY9-3039 | A |  | Used as a probe ex-tension when makingelectrical checks. |

| Tool name | Tool No | Ctgr | Appearance | Remarks |
|---|---|---|---|---|
| Mirror positioning tool(front, rear) | FY9-3046-000 | B |  | Used for positioning the mirror mount 1 and the mirror mount 2. |
| NA-3 Test Sheet | FY9-9196 | A |  | Use for image adjustment / check |
| Electrode for checking potential sensor | FY9-3059-000 | B |  | Surface potential sensor for zero-level check |

| Tool name | Tool No | Ctgr | Appearance | Remarks |
|---|---|---|---|---|
| MTF TEST SHEET | FY9-9453 | N |  | MTF adjustment |

T-10-1

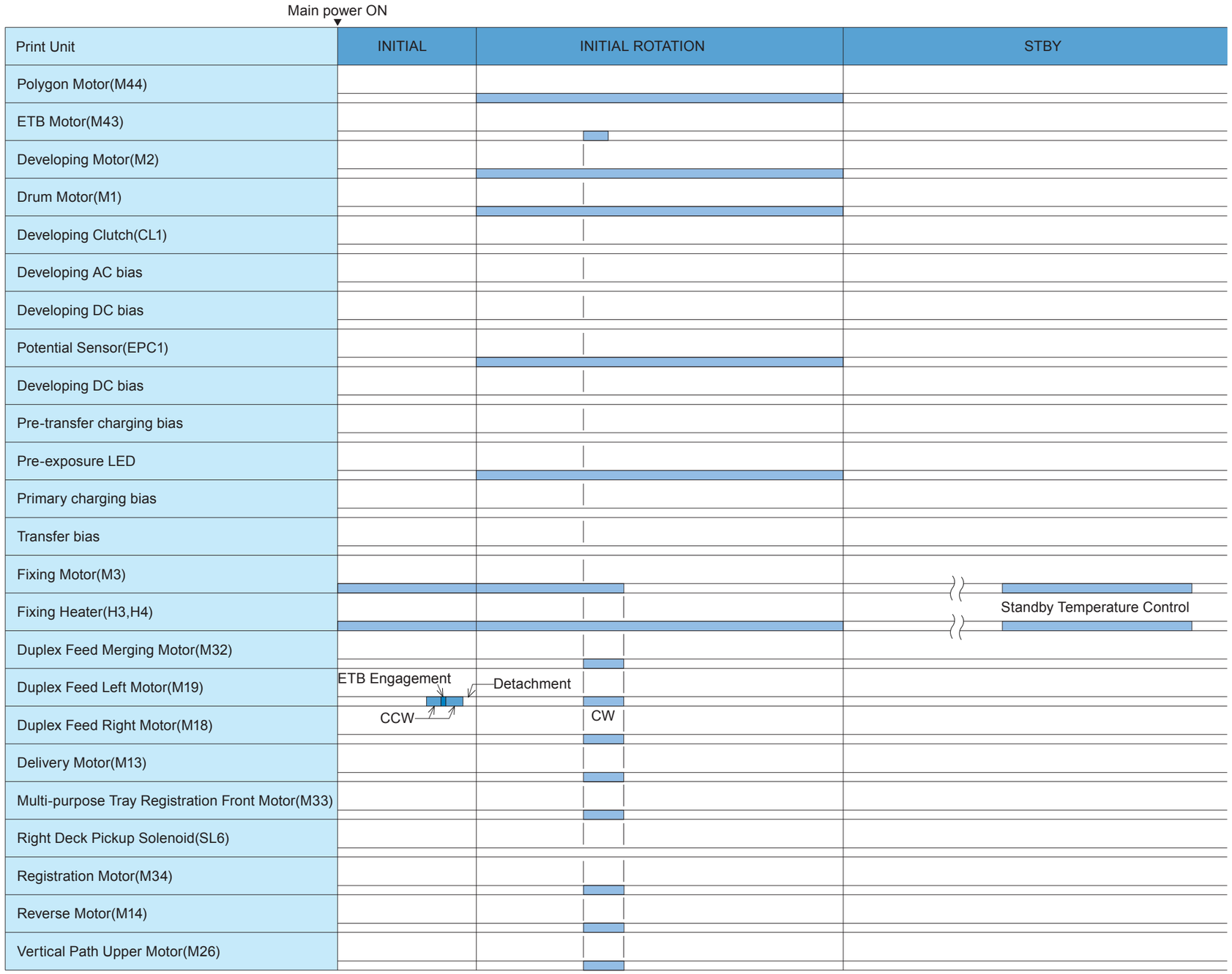
# Solvents and Oils

| Name | Uses | Composition | Remarks |
|---|---|---|---|
| Alcohol | Cleaning; e.g., glass, plastic, rubber; external covers. | Fluoride-family hydrocarbon<br>Alcohol<br>Surface activating agent<br>Water | • Do not bring near fire.<br>• Procure locally.<br>Substitute: IPA (isopropyl alcohol) |
| Alcohol | Cleaning; e.g., metal; oil or toner stain. | Fluoride-family hydrocarbon<br>Chlorine-family hydrocarbon<br>Alcohol | • Do not bring near fire.<br>• Procure locally<br>Substitute: MEK |
| Lubricating oil (EM-50L) | Lubrication; e.g., gears. | Special oil<br>Special solid lubricating agent<br>Lithium soap | Tool No.: HY9-0007 |
| Lubricating oil | Lubrication; e.g., scanner rail | Synthetic oil | • Synthetic oil<br>NTN Corporation EU-1<br>• Tool No.: FY9-6028 (50 cc) |
| Super lube grease | Apply to the gear of the fixing assembly | Chemical synthesis oil | • Chemical synthesis oil<br>• Tool No.: FY9-6005 (80g) |
| Tospearl (lubricant for Photo-sensitive drum cleaning blade) | Use it for preventing detachment of the drum cleaning blade. | - | Tool No.: FY9-6007 |
| Conducting grease | Drum sliding Assembly | Ether, polytera fluoethylene | Tool No.: FY9-6008 (10g) |
| Drum cleaning powder | Cleaning the photosensitive drum. | Aluminum oxide<br>Zirconium silicate | • FO #6000<br>Fujimi Incorporated<br>• Tool No.: |

T-10-2

# General Timing Chart

## Basic sequence at power ON



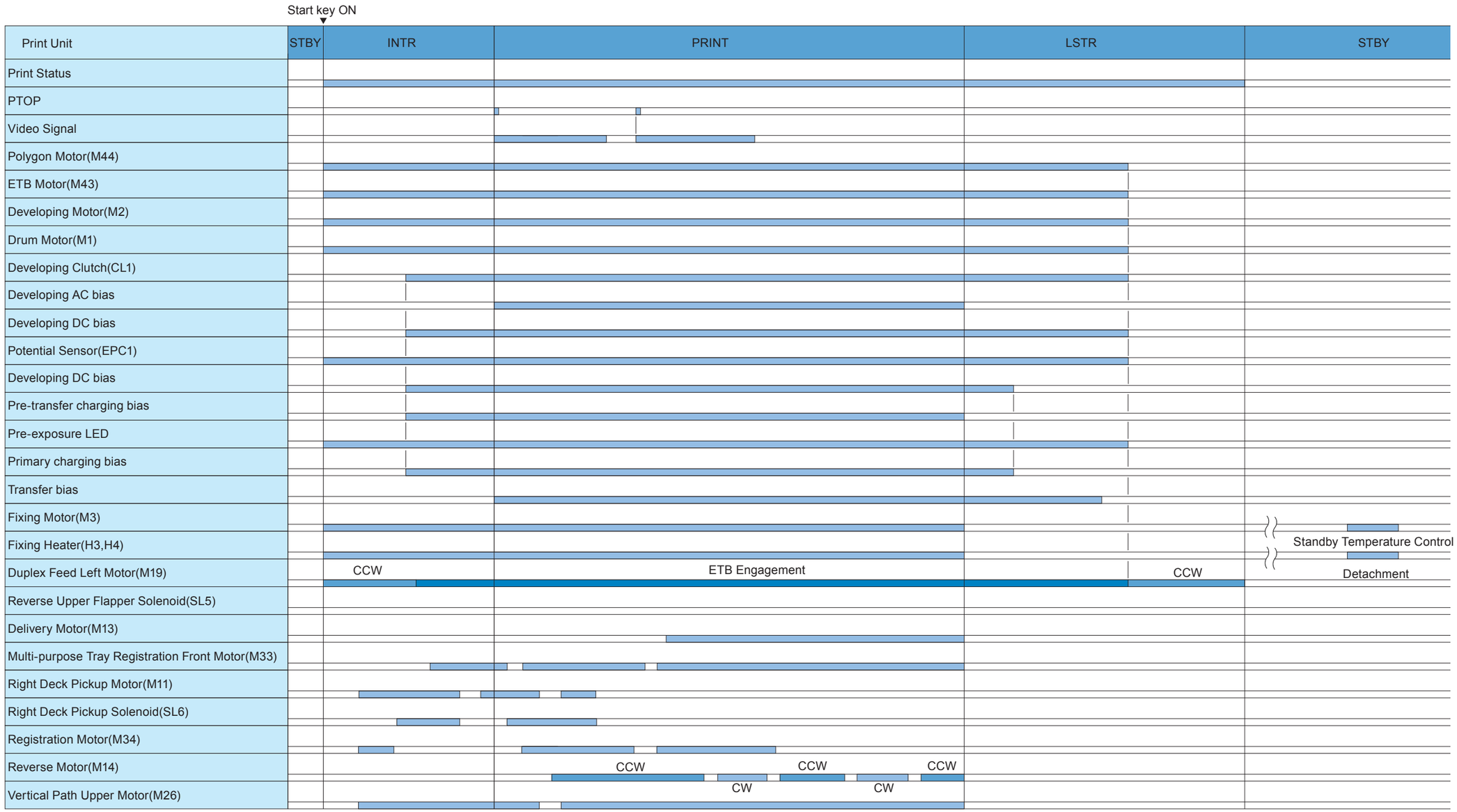

* CW=Positive Rotation,CCW=Negative Rotation

F-10-1




Appendix > General Timing Chart > Basic sequence at power ON

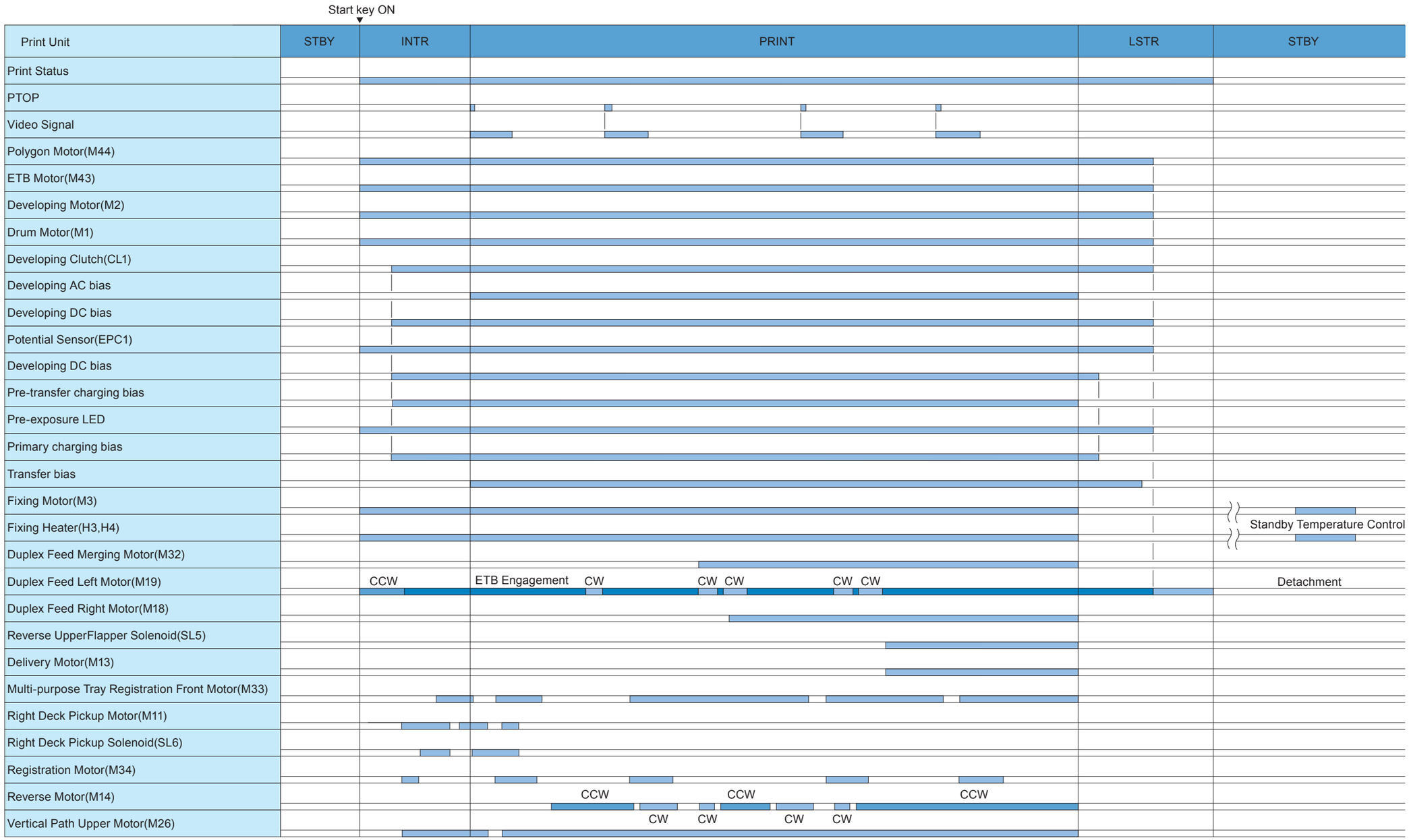
## Basic sequence at printing <Condition: A4 1-sided (2 sheets), Right deck, Reverse delivery>




* CW=Positive Rotation,CCW=Negative Rotation

F-10-2

## Basic sequence at printing <Condition: A4 2-sided (2 sheets), Right deck, Reverse delivery>




* CW=Positive Rotation,CCW=Negative Rotation

F-10-3

# General Circuit Diagram

## Signal Input/Output List

| Jack No. | Abbreviated Signal Name | Signal Name |
|---|---|---|
| J401 | 12V_FUSE_SW_2 | 12V Fuse Switch 2 |
| | 24VB_OCD_SW_2 | 24VB OCD Switch 2 |
| J411 | DRV1_1ST_J_CLK- | Main Driver High Speed Serial Clock Signal 1 (Differential -) |
| | DRV1_1ST_J_CLK+ | Main Driver High Speed Serial Clock Signal 1 (Differential +) |
| | DRV1_1ST_J_M2S+ | Main Driver High Speed Serial Transmission Signal 1 (Differential +) |
| | DRV1_1ST_J_M2S- | Main Driver High Speed Serial Transmission Signal 1 (Differential -) |
| | DRV1_2ND_J_M2S- | Main Driver High Speed Serial Transmission Signal 2 (Differential -) |
| | DRV1_2ND_J_M2S+ | Main Driver High Speed Serial Transmission Signal 2 (Differential +) |
| | DRV1_1ST_J_S2M- | Main Driver High Speed Serial Communication Reception Signal 1 (Differential -) |
| | DRV1_1ST_J_S2M+ | Main Driver High Speed Serial Communication Reception Signal 1 (Differential +) |
| | DRV1_2ND_J_S2M+ | Main Driver High Speed Serial Communication Reception Signal 2 (Differential +) |
| | DRV1_2ND_J_S2M- | Main Driver High Speed Serial Communication Reception Signal 2 (Differential -) |
| J412 | DRV1_3RD_J_S2M- | Main Driver High Speed Serial Communication Reception Signal 3 (Differential -) |
| | DRV1_3RD_J_S2M+ | Main Driver High Speed Serial Communication Reception Signal 3 (Differential +) |
| | DRV1_3RD_J_CLK- | Main Driver High Speed Serial Clock Signal 3 (Differential -) |
| | DRV1_3RD_J_CLK+ | Main Driver High Speed Serial Clock Signal 3 (Differential +) |
| | DRV1_3RD_J_M2S+ | Main Driver High Speed Serial Transmission Signal 3 (Differential +) |
| | DRV1_3RD_J_M2S- | Main Driver High Speed Serial Transmission Signal 3 (Differential -) |
| J413 | AD0 | Potential Sensor Detection Signal |
| | AD1 | Patch Sensor Detection Signal |
| | IH_PWM2 | IH Power Supply PWM Output 2 |
| | IH_PWM1 | IH Power Supply PWM Output 1 |
| | IH_PWM0 | IH Power Supply PWM Output 0 |
| | IH_I_LIMIT | IH Power Supply Over Currency Detection Signal |
| | DRV1_ANALOG_IF _CNCT_DTCX | Main Driver Connection Detection Signal |
| J414 | +5V | 5V Power Supply |
| | +3.3V | 3.3V Power Supply |

| Jack No. | Abbreviated Signal Name | Signal Name |
|---|---|---|
| J421 | DRV2_5TH_J_CLK- | Pickup Driver High Speed Serial Clock Signal 5 (Differential -) |
| | DRV2_5TH_J_CLK+ | Pickup Driver High Speed Serial Clock Signal 5 (Differential +) |
| | DRV2_5TH_J_M2S+ | Pickup Driver High Speed Serial Transmission Signal 5 (Differential +) |
| | DRV2_5TH_J_M2S- | Pickup Driver High Speed Serial Transmission Signal 5 (Differential -) |
| | DRV2_6TH_J_M2S- | Pickup Driver High Speed Serial Transmission Signal 6 (Differential -) |
| | DRV2_6TH_J_M2S+ | Pickup Driver High Speed Serial Transmission Signal 6 (Differential +) |
| | DRV2_5TH_J_S2M- | Pickup Driver High Speed Serial Communication Reception Signal 5 (Differential -) |
| | DRV2_5TH_J_S2M+ | Pickup Driver High Speed Serial Communication Reception Signal 5 (Differential +) |
| | DRV2_6TH_J_S2M+ | Pickup Driver High Speed Serial Communication Reception Signal 6 (Differential +) |
| | DRV2_6TH_J_S2M- | Pickup Driver High Speed Serial Communication Reception Signal 6 (Differential -) |
| J431 | DRV3_7TH_J_S2M- | Duplex Driver High Speed Serial Communication Reception Signal 7 (Differential -) |
| | DRV3_7TH_J_S2M+ | Duplex Driver High Speed Serial Communication Reception Signal 7 (Differential +) |
| | DRV3_8TH_J_S2M+ | Duplex Driver High Speed Serial Communication Reception Signal 8 (Differential +) |
| | DRV3_8TH_J_S2M- | Duplex Driver High Speed Serial Communication Reception Signal 8 (Differential -) |
| J432 | DRV3_7TH_J_CLK- | Duplex Driver High Speed Serial Clock Signal 7 (Differential -) |
| | DRV3_7TH_J_CLK+ | Duplex Driver High Speed Serial Clock Signal 7 (Differential +) |
| | DRV3_7TH_J_M2S+ | Duplex Driver High Speed Serial Transmission Signal 7 (Differential +) |
| | DRV3_7TH_J_M2S- | Duplex Driver High Speed Serial Transmission Signal 7 (Differential -) |
| | DRV3_8TH_J_M2S- | Duplex Driver High Speed Serial Transmission Signal 8 (Differential -) |
| | DRV3_8TH_J_M2S+ | Duplex Driver High Speed Serial Transmission Signal 8 (Differential +) |
| | DUP_DRAWER _CNCT_DTCX | Fixing Feed Drawer Connection Detection Signal |
| J441 | PVD_K0 | Printer Video Data Signal 0 |
| | PVD_K1 | Printer Video Data Signal 1 |
| | PVD_K2 | Printer Video Data Signal 2 |
| | PVD_K3 | Printer Video Data Signal 3 |
| | PVD_K4 | Printer Video Data Signal 4 |
| | PVD_K5 | Printer Video Data Signal 5 |
| | PVD_K6 | Printer Video Data Signal 6 |
| | PVD_K7 | Printer Video Data Signal 7 |
| | PHSYNC_K | Printer Horizontal Synchronization Signal |
| | PVCLK_K | Printer Video Transmission Clock |
| | PBD_K | Printer BD Signal |
| | PVREQ_K | Printer Image Request Signal |

| Jack No. | Abbreviated Signal Name | Signal Name |
|---|---|---|
| J442 | DDI_PPRTST | Printer Start Signal |
| | DDI_PPOWER | Printer Power Supply Control Signal |
| | DDI_PRTS | Controller Receivable Signal |
| | DDI_RXD | Printer Serial Command Signal (Main Controller→DC Controller) |
| | DDI_PCTS | Printer Receivable Signal |
| | DDI_TXD | Printer Serial Status Signal (DC Controller→Main Controller) |
| | DDI_PSCNST | Scan Start Signal |
| | DDI_PPRDY | Printer Power Ready Signal |
| | DDI_DCON_LIVE | Printer Operation Signal |
| | DDI_PPO1 | Printer Universal Output Signal |
| | DDI_INT_DCON | Printer Interruption Signal |
| | DDI_PCPRDY | Controller Power Ready Signal |
| | DDI_PPI2 | Printer Reset Signal |
| | DDI_PLIVEWAKE | Printer Live Wake Mode Signal |
| | DDI_DOWNLOAD | Printer Download Mode Signal |
| J451 | RMT_TEIHANX | Duplex Driver Power Supply Remote |
| | DTC_24VA_ILX | 24VA Interlock Detection Signal |
| | DTC_24VB_ILX | 24VB Interlock Detection Signal |
| | DTC_12V_LZX | 12V Interlock Detection Signal |
| | DCP_FAN_FULLX | Power Supply Fan Full Speed Signal |
| | DCP_FAN_ERR | Power Supply Fan Error Detection Signal |
| | RELAY_IF _CNCT_DTC | Relay Board Connection Detection Signal |
| J461 | CHOUHI_CLK | Clock (Option Deck Communication IF) |
| | DECK_CLK | Option Deck Pickup Motor Clock |
| | CHOUHI_TXEND | Transmission is complete (Option Deck Communication IF) |
| | CHOUHI_TXD | Reception Request Signal (Option Deck Communication IF) |
| | CHOUHI_RXLOAD | Reception is complete (Option Deck Communication IF) |
| | CHOUHI_RXD | Reception Signal (Option Deck Communication IF) |
| | CHOUHI_TXOUTEN | Output Enable (Option Deck Communication IF) |
| J462 | FIN_RMTX | Finisher Remote Signal |
| | IPC_RXD | Finisher Communication Reception Signal |
| | IPC_TXD | Finisher Communication Transmission Signal |
| | FIN_MODE | Finisher Mode Signal |
| | FIN_RESET | Finisher Reset Signal |
| | FIN_DOWNLOAD | Finisher Download Signal |
| J471 | K_LDG_P | LDG Data (Differential +) |
| | K_LDG_N | LDG Data (Differential -) |
| | K_LDH_P | LDH Data (Differential +) |
| | K_LDH_N | LDH Data (Differential -) |
| | K_LDF_P | LDF Data (Differential +) |
| | K_LDF_N | LDF Data (Differential -) |
| | K_LDE_P | LDE Data (Differential +) |
| | K_LDE_N | LDE Data (Differential -) |

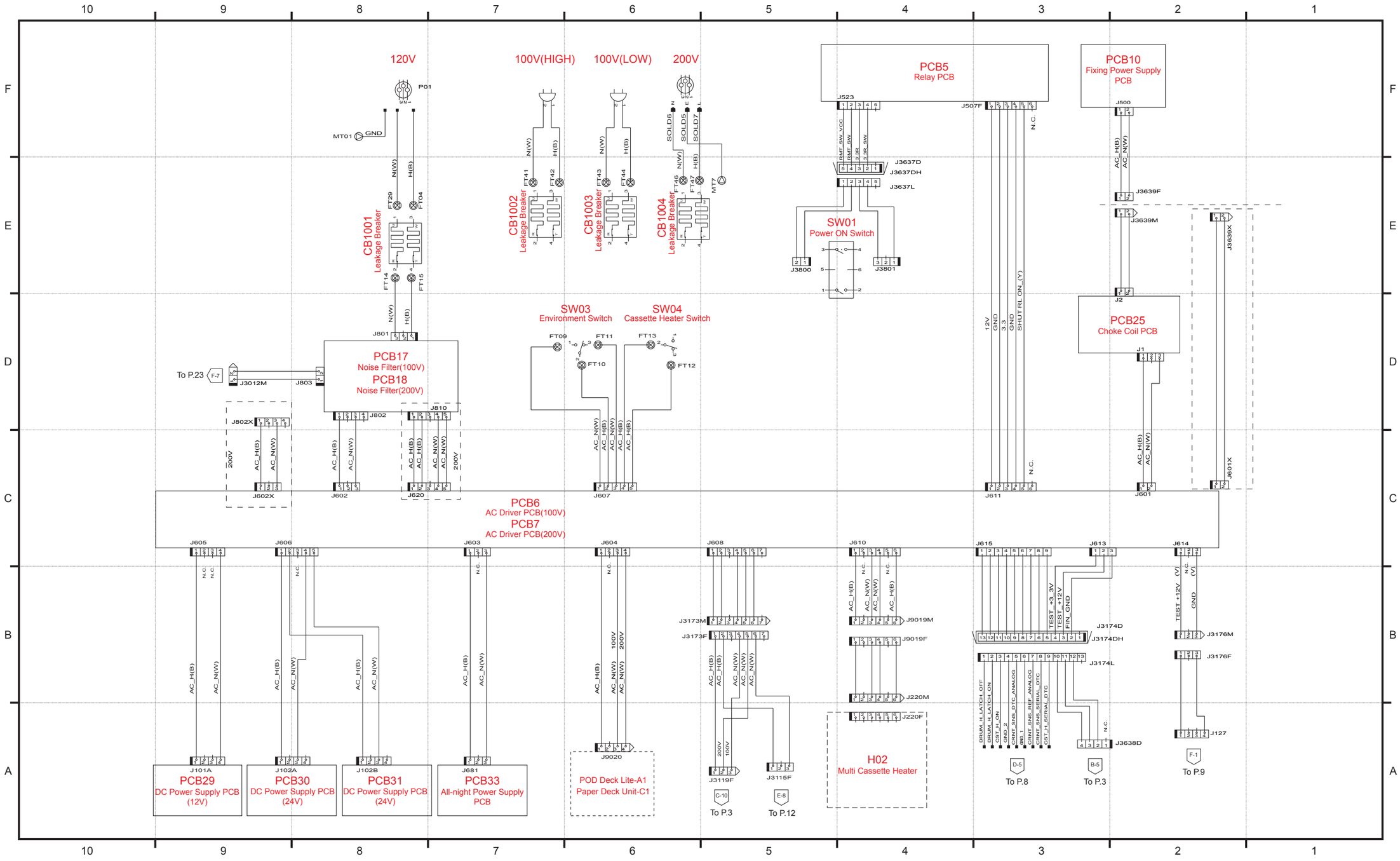
| Jack No. | Abbreviated Signal Name | Signal Name |
|---|---|---|
| J471 | K_5V_MON | 5V Monitor Signal |
| | K_SDCLK | Shading Clock |
| | K_WENN | Serial Interface Right Enable Signal |
| | K_WCLK | Shading IO Clock |
| | K_SD_DATA_E | Shading Data(E) |
| | K_SD_DATA_F | Shading Data(F) |
| | K_SD_DATA_H | Shading Data(H) |
| | K_SD_DATA_G | Shading Data(G) |
| | K_AKM_SCLK | AKM Clock |
| | K_DIO | Data Input/Output |
| | K_AKM1_IC_SELN | APC Control Chip Selection 1 |
| | K_INT_APC | Initial APC Signal |
| | K_APC_SEL | APC Selection Signal |
| | K_CTL0 | Laser Operation Control Signal 0 |
| | K_CTL1 | Laser Operation Control Signal 1 |
| | K_CTL2 | Laser Operation Control Signal 2 |
| | K_CTL3 | Laser Operation Control Signal 3 |
| | K_GAIN_FIX | Gain Fixed Signal |
| | K_AKM2_IC_SELN | APC Control Chip Selection 2 |
| | K_SD_DATA_A | Shading Data (A) |
| | K_SD_DATA_B | Shading Data (B) |
| | K_SD_DATA_C | Shading Data (C) |
| | K_SD_DATA_D | Shading Data (D) |
| | K_LDD_N | LDD Data (Differential -) |
| | K_LDD_P | LDD Data (Differential +) |
| | K_LDC_N | LDC Data (Differential -) |
| | K_LDC_P | LDC Data (Differential +) |
| | K_LDA_N | LDA Data (Differential -) |
| | K_LDA_P | LDA Data (Differential +) |
| | K_LDB_N | LDB Data (Differential -) |
| | K_LDB_P | LDB Data (Differential +) |
| J472 | K_E2PROM_CS | EEPROM Chip Selection |
| | K_AKM_2_CSN | AKM2 Chip Selection |
| | K_AKM_1_CSN | AKM1 Chip Selection |
| | K_PO_DEC | Polygon Motor Deceleration Signal |
| | K_PO_ACC | Polygon Motor Acceleration Signal |
| | K_PO_FG | Polygon Motor Rotation Signal (FG Signal) |
| | S/S | Start/Stop Signal |
| | K_SYS_OE | System Output Enable Signal |
| | K_BD | BD Signal |

| Jack No. | Abbreviated Signal Name | Signal Name |
|---|---|---|
| J463 | -CLK | Clock Signal (-CLK) |
| | +CLK | Clock Signal (+CLK) |
| | +TX | Transmission Signal (+TX) |
| | -TX | Transmission Signal (-TX) |
| | +RX | Reception Signal (+RX) |
| | -RX | Reception Signal (-RX) |

T-10-3

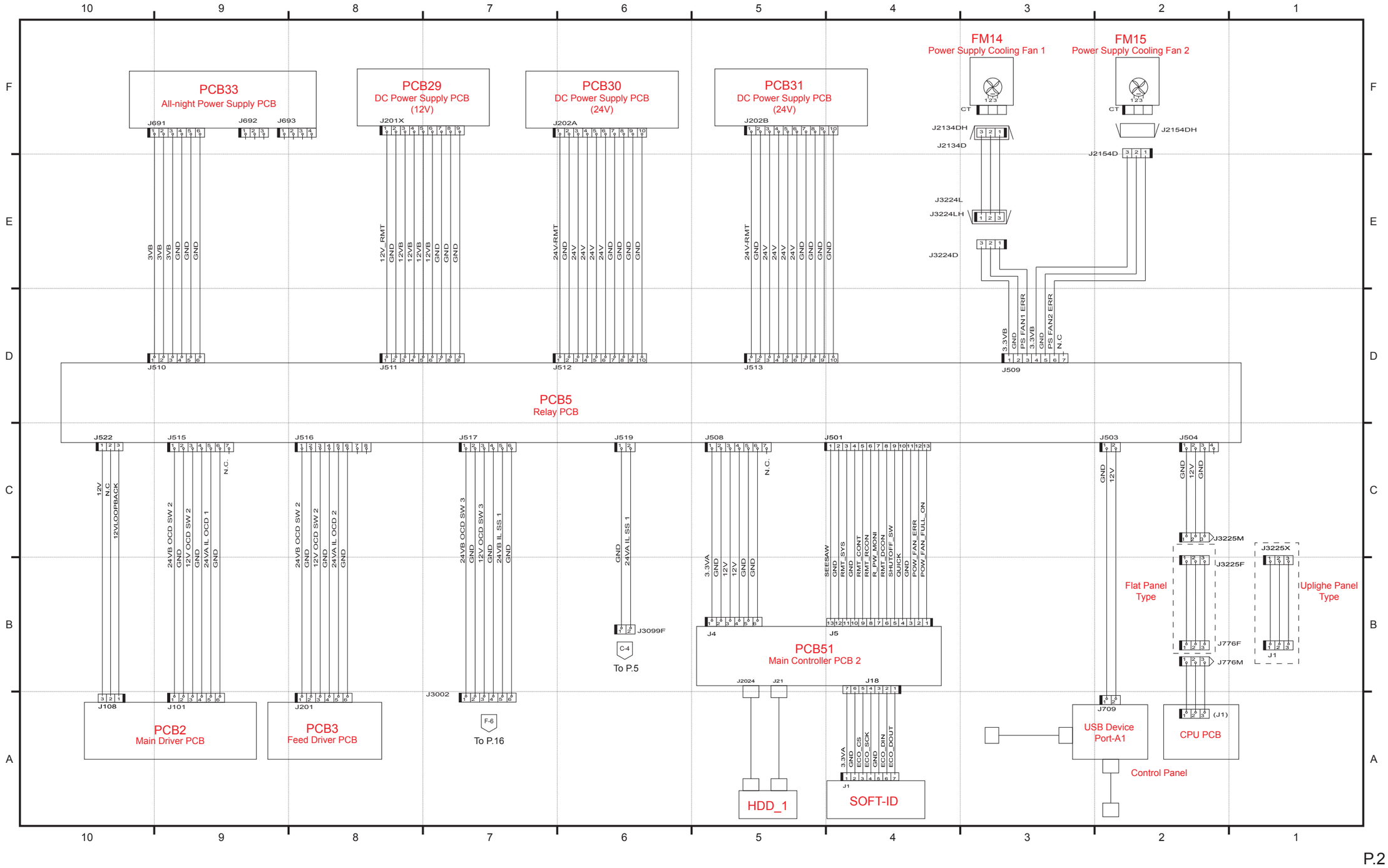
# General Circuit Diagram

## General Circuit Diagram (1/24)



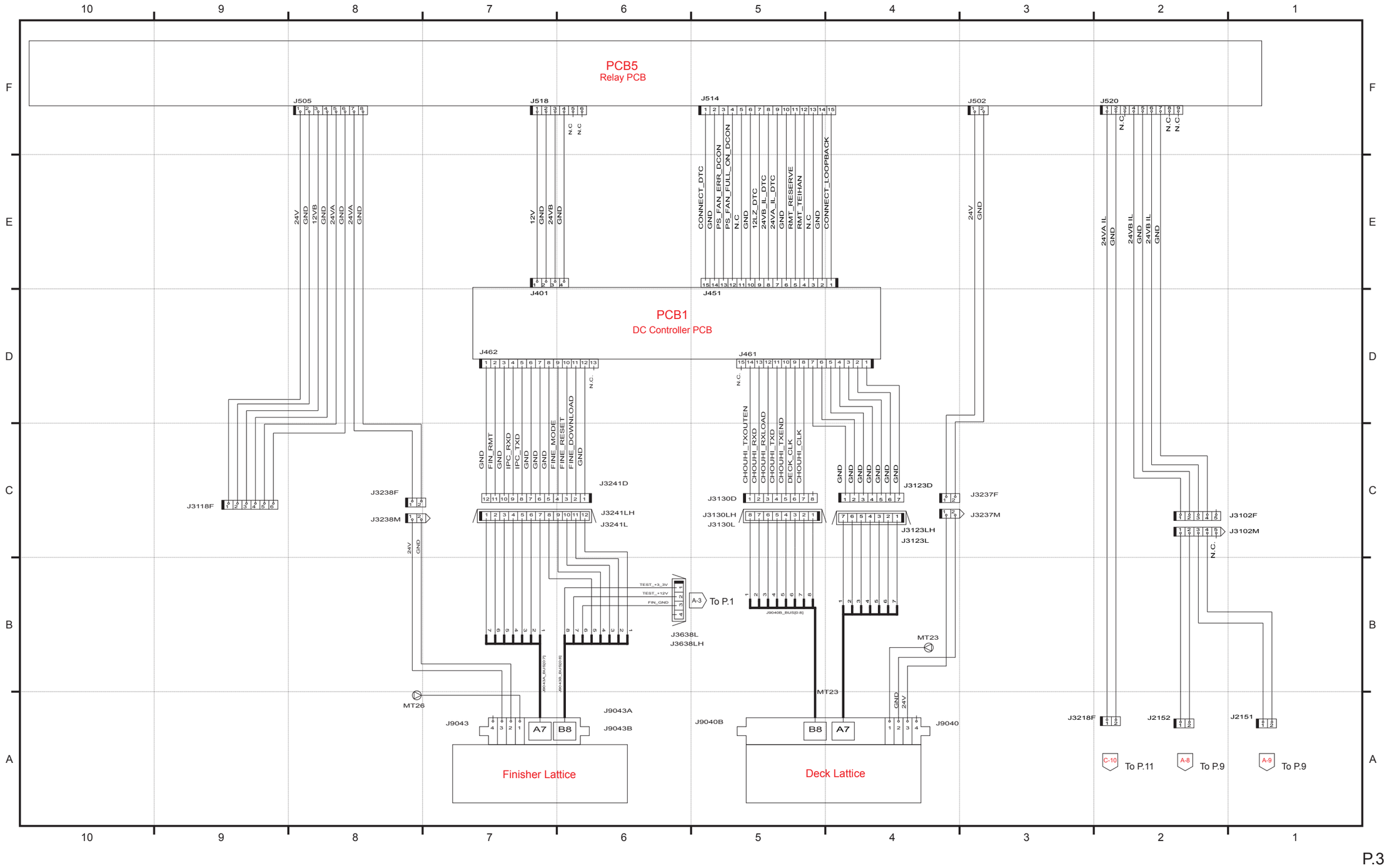

F-10-4

## General Circuit Diagram (2/24)



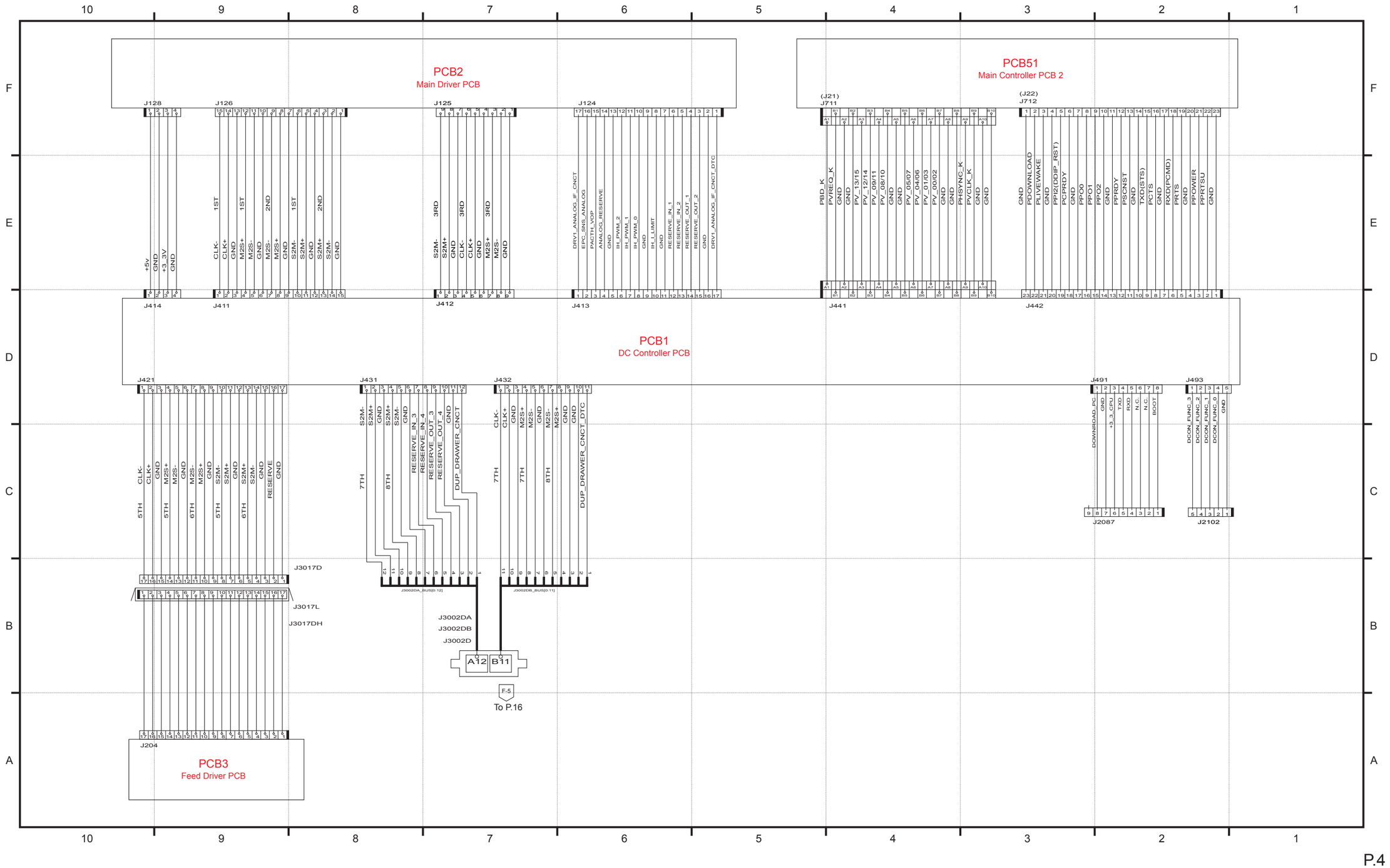

F-10-5

## General Circuit Diagram (3/24)




F-10-6

## General Circuit Diagram (4/24)

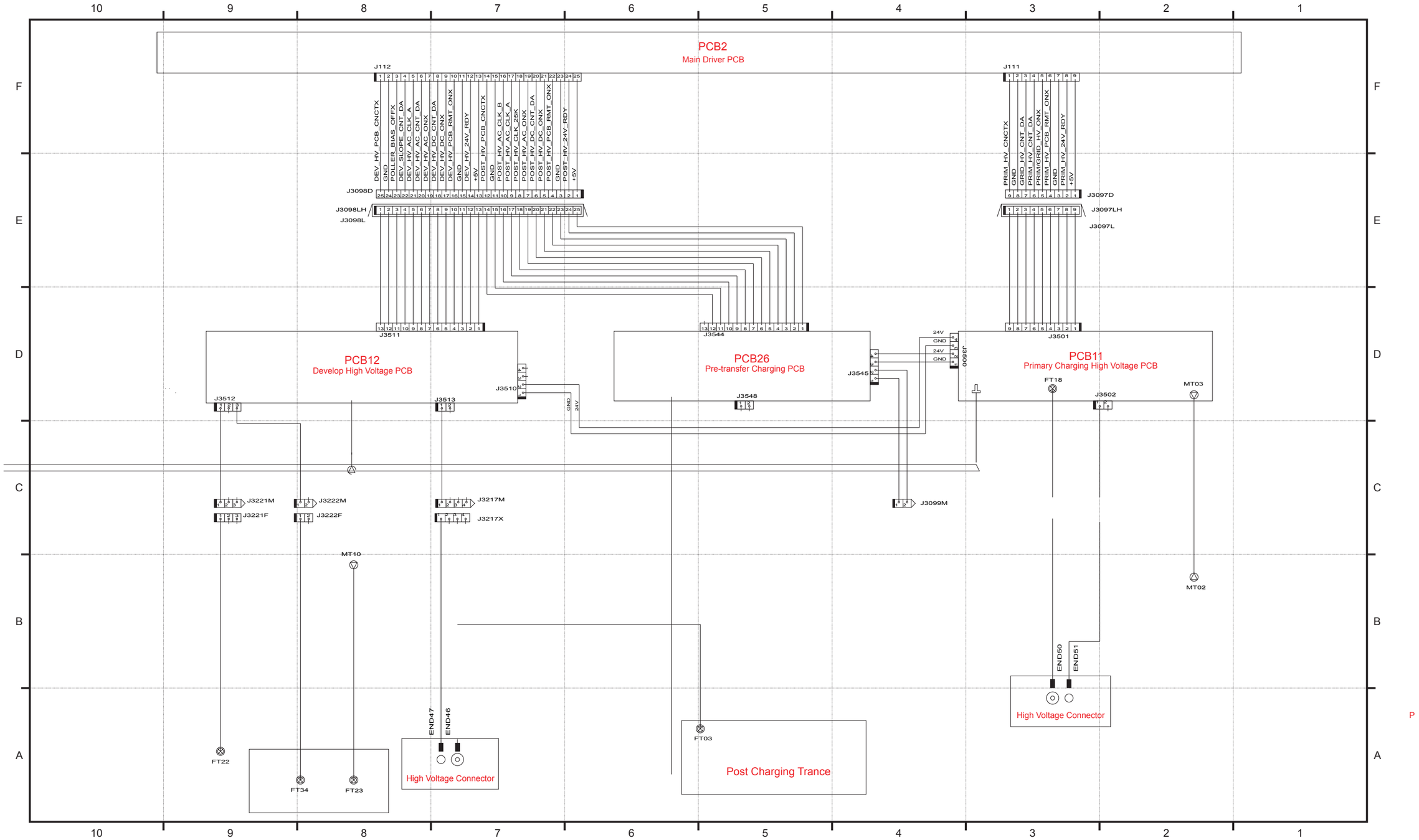



F-10-7

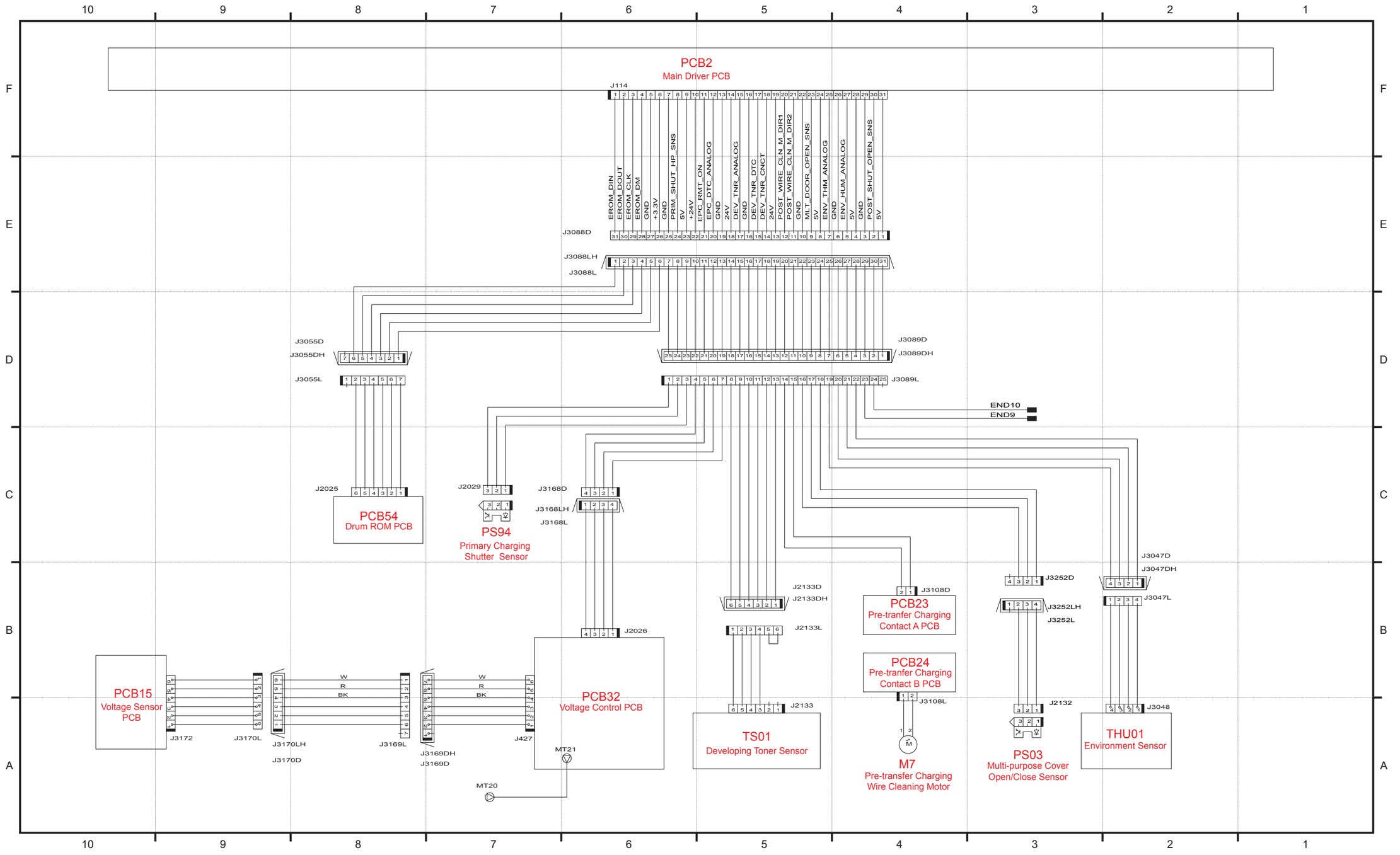


Appendix > General Circuit Diagram > General Circuit Diagram (4/24)

## General Circuit Diagram (5/24)



## General Circuit Diagram (6/24)



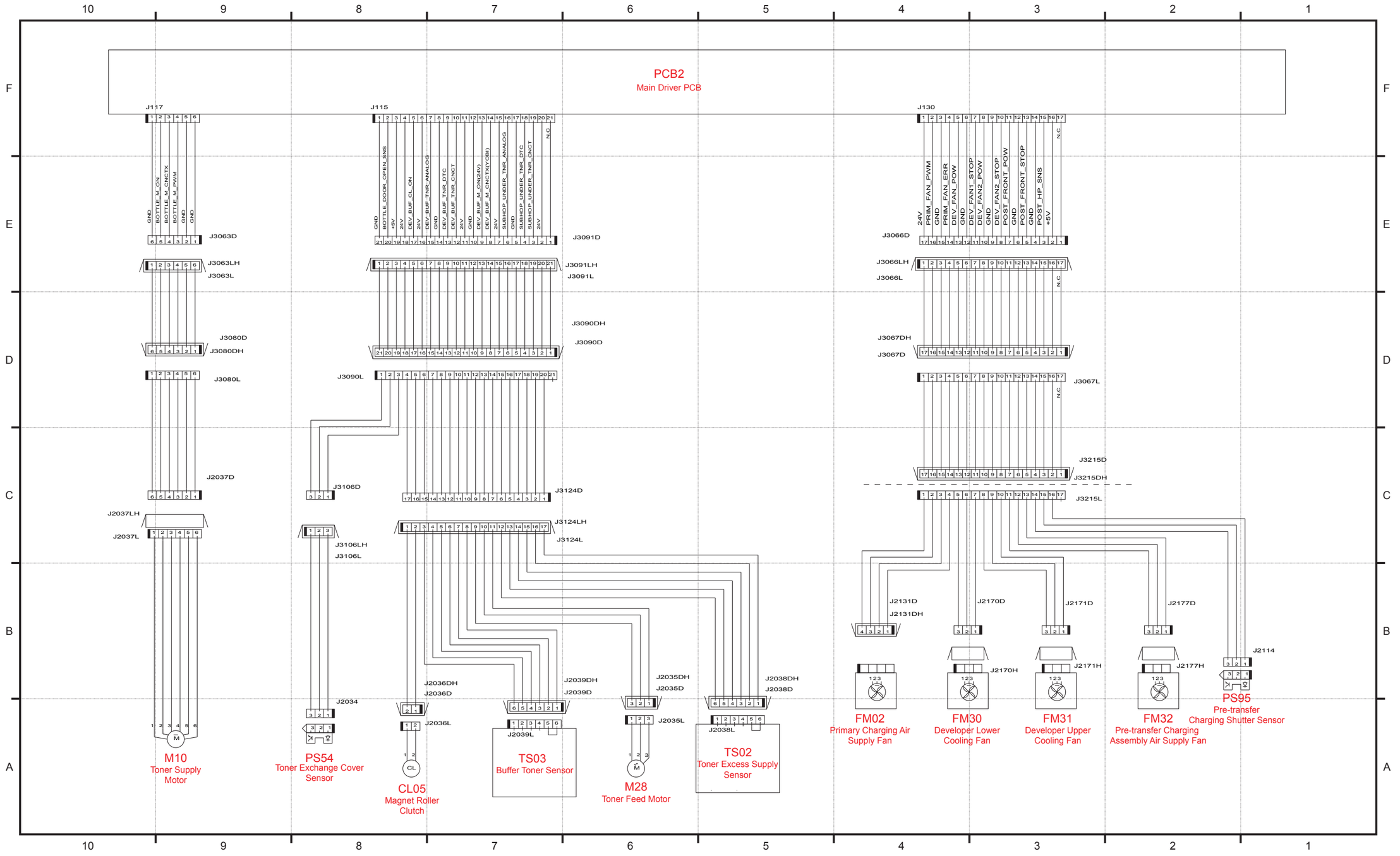

P.6

F-10-9



Appendix > General Circuit Diagram > General Circuit Diagram (6/24)

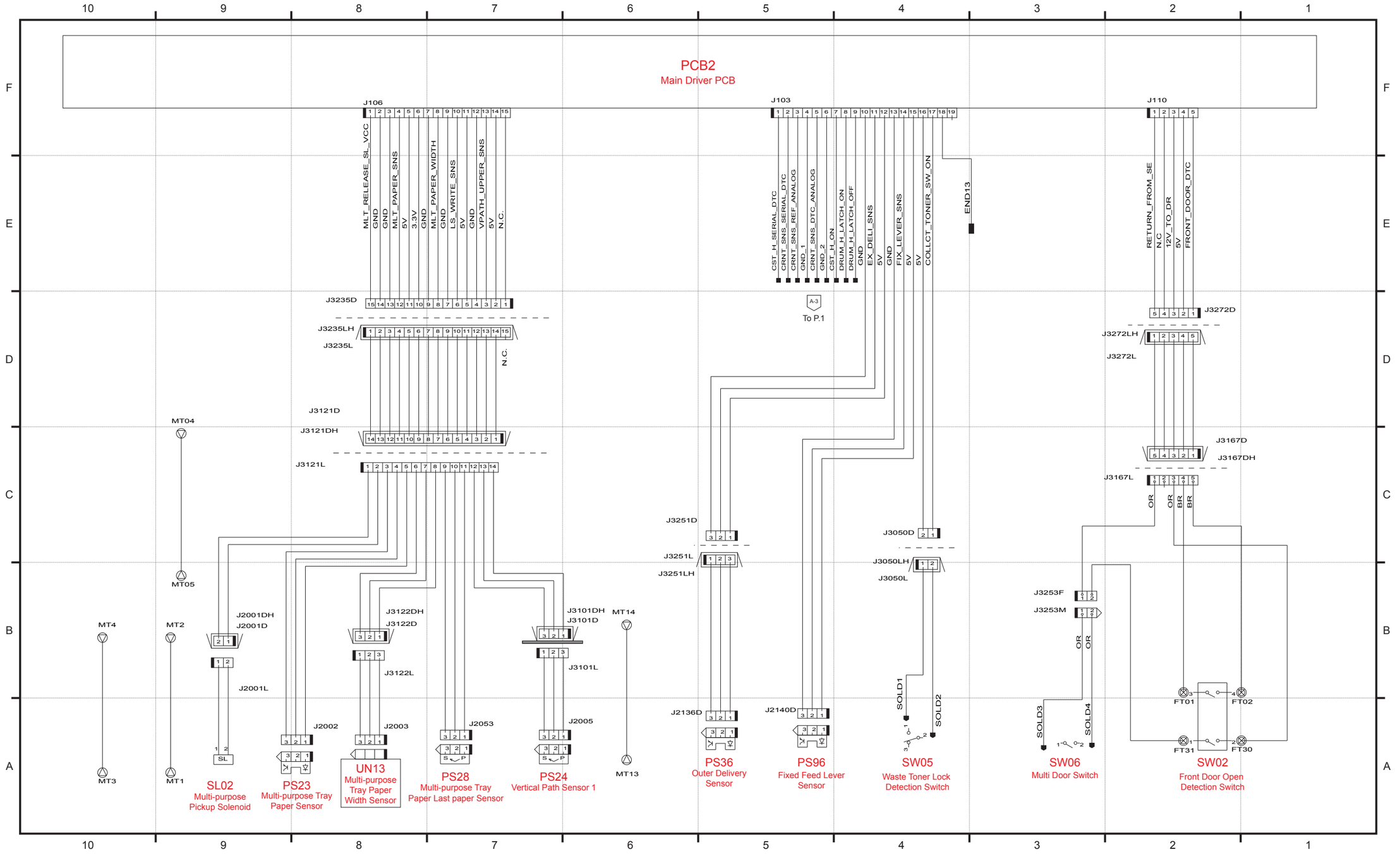
## General Circuit Diagram (7/24)




P.7

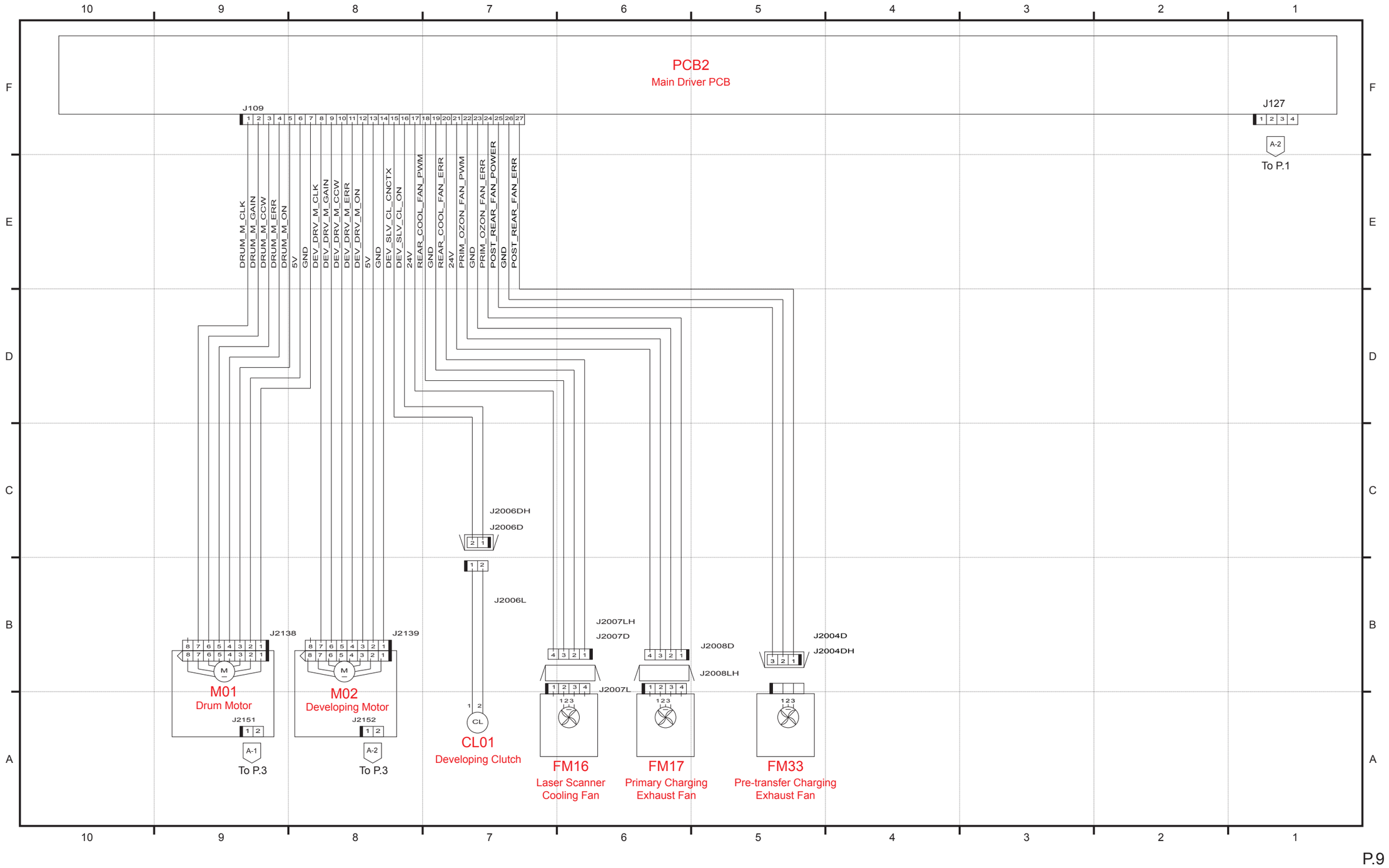
F-10-10

## General Circuit Diagram (8/24)




F-10-11

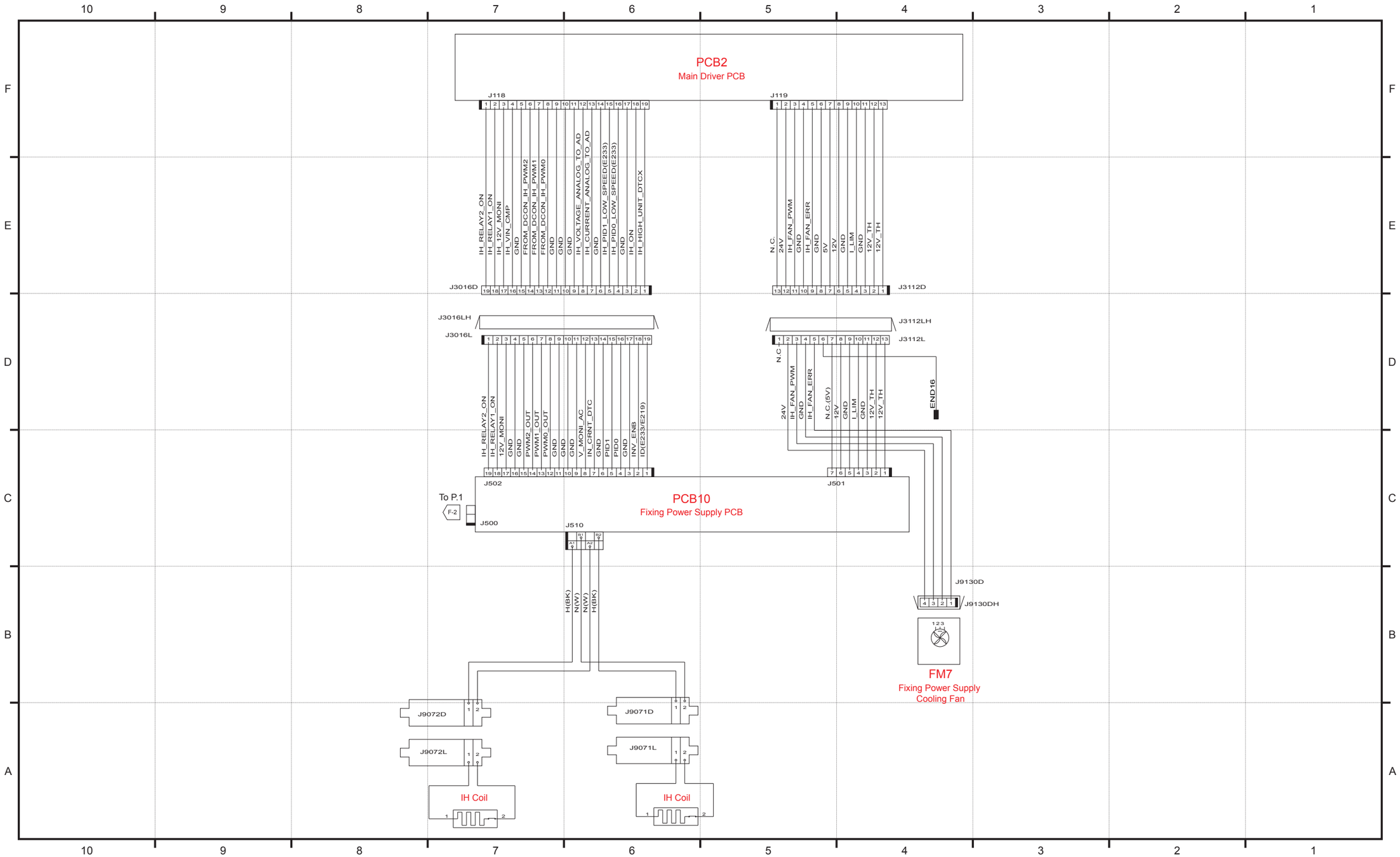
## General Circuit Diagram (9/24)




P.9

F-10-12

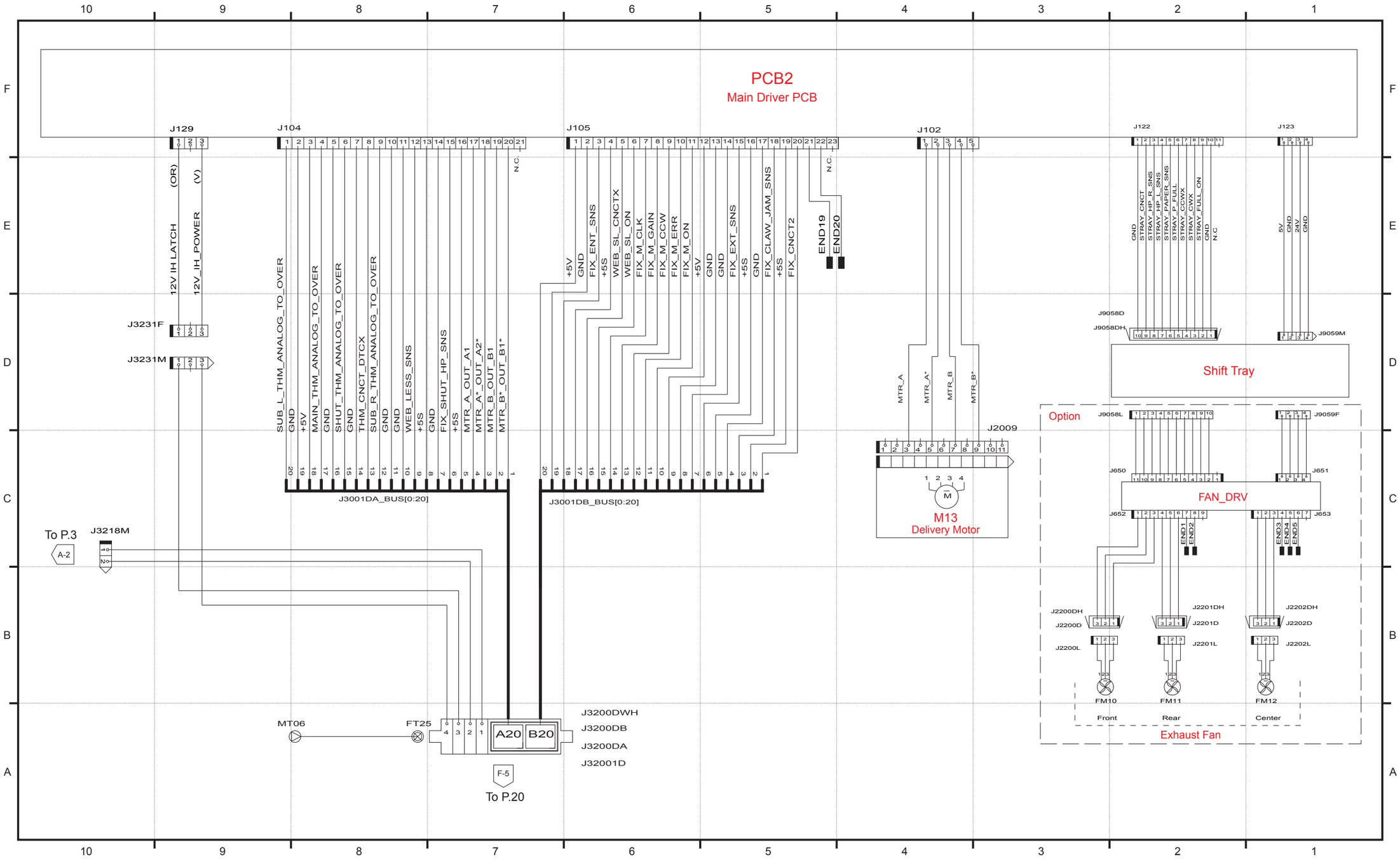
## General Circuit Diagram (10/24)




P.10

F-10-13

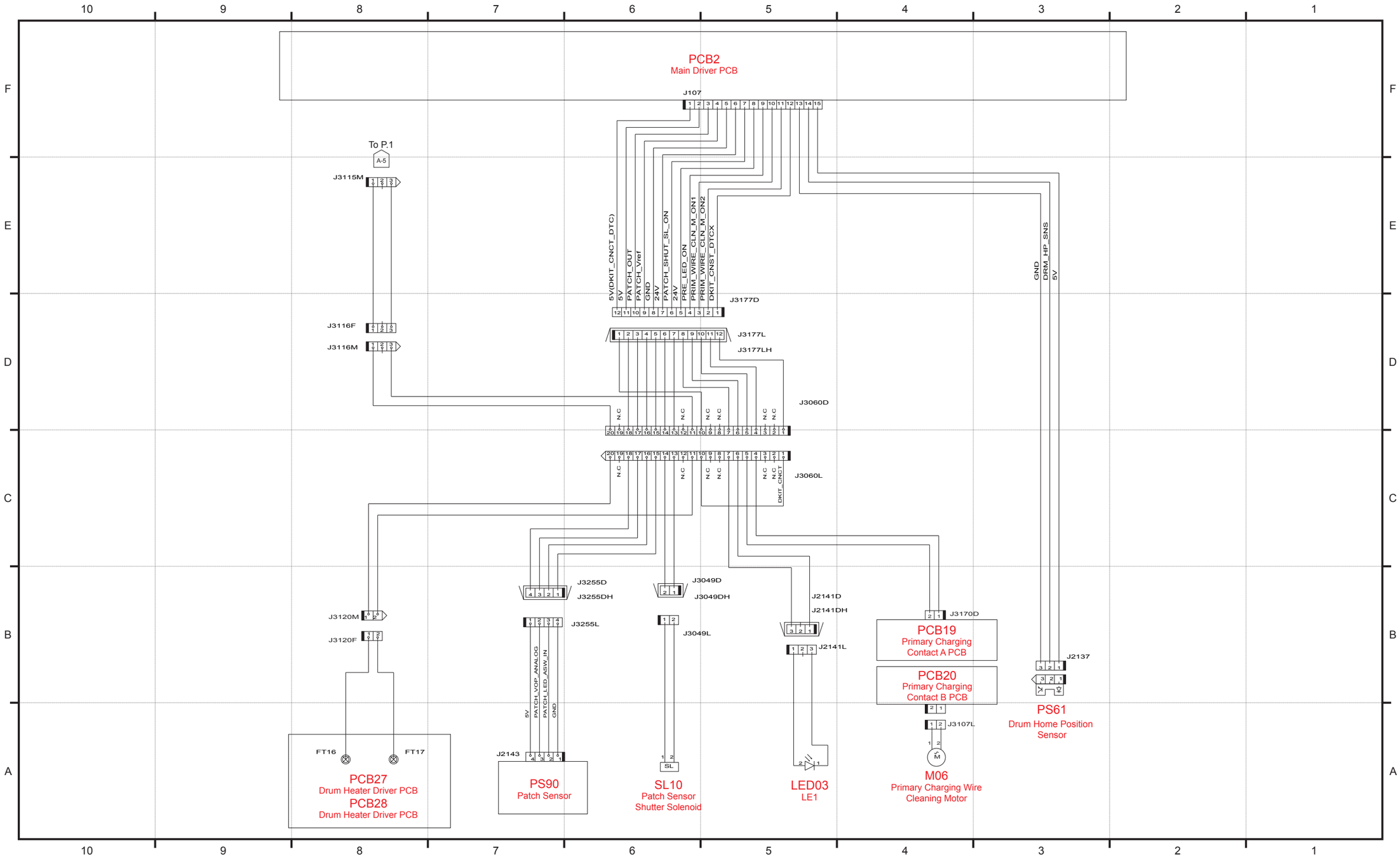
## General Circuit Diagram (11/24)




P.11

F-10-14

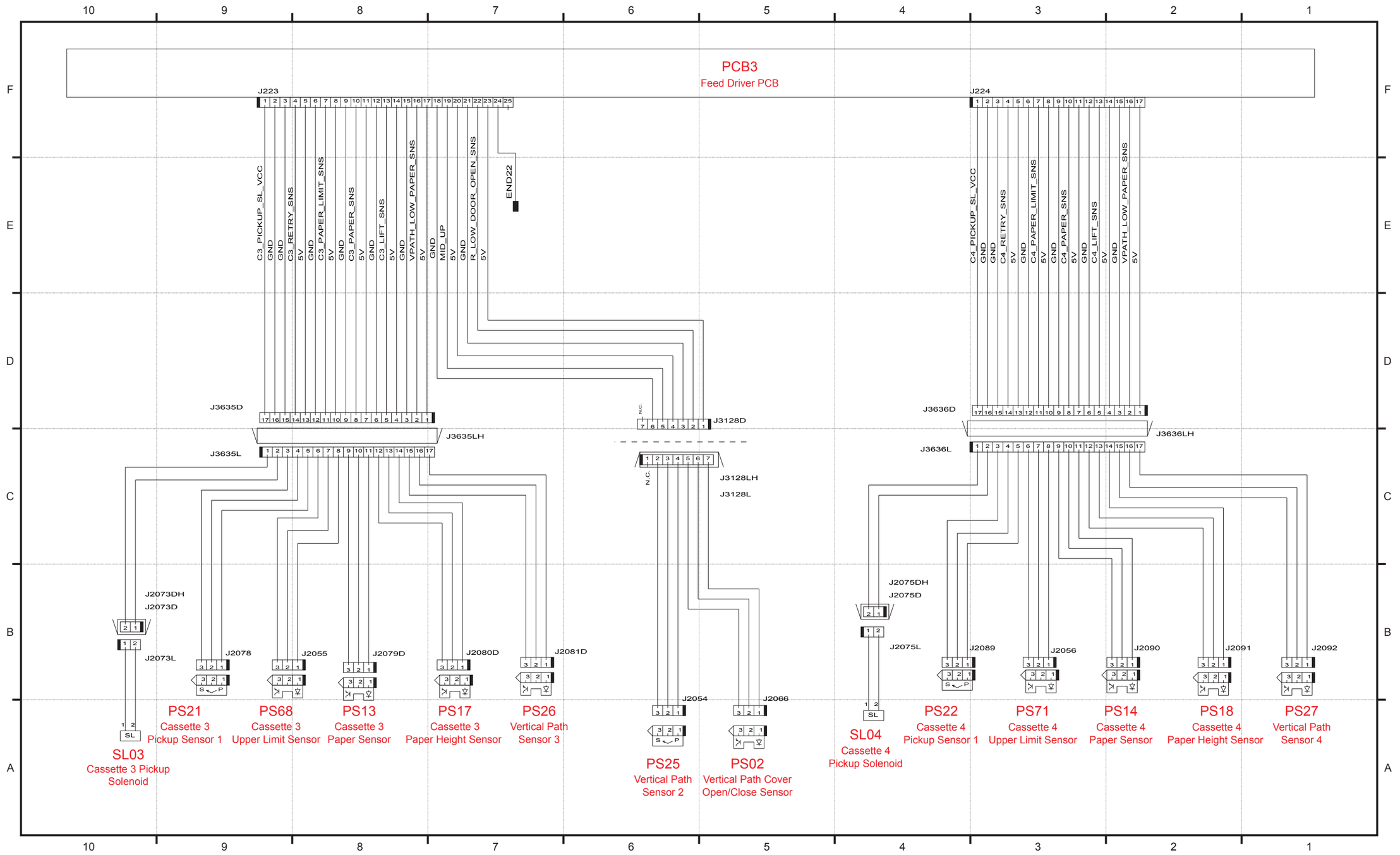
## General Circuit Diagram (12/24)




P.12

F-10-15

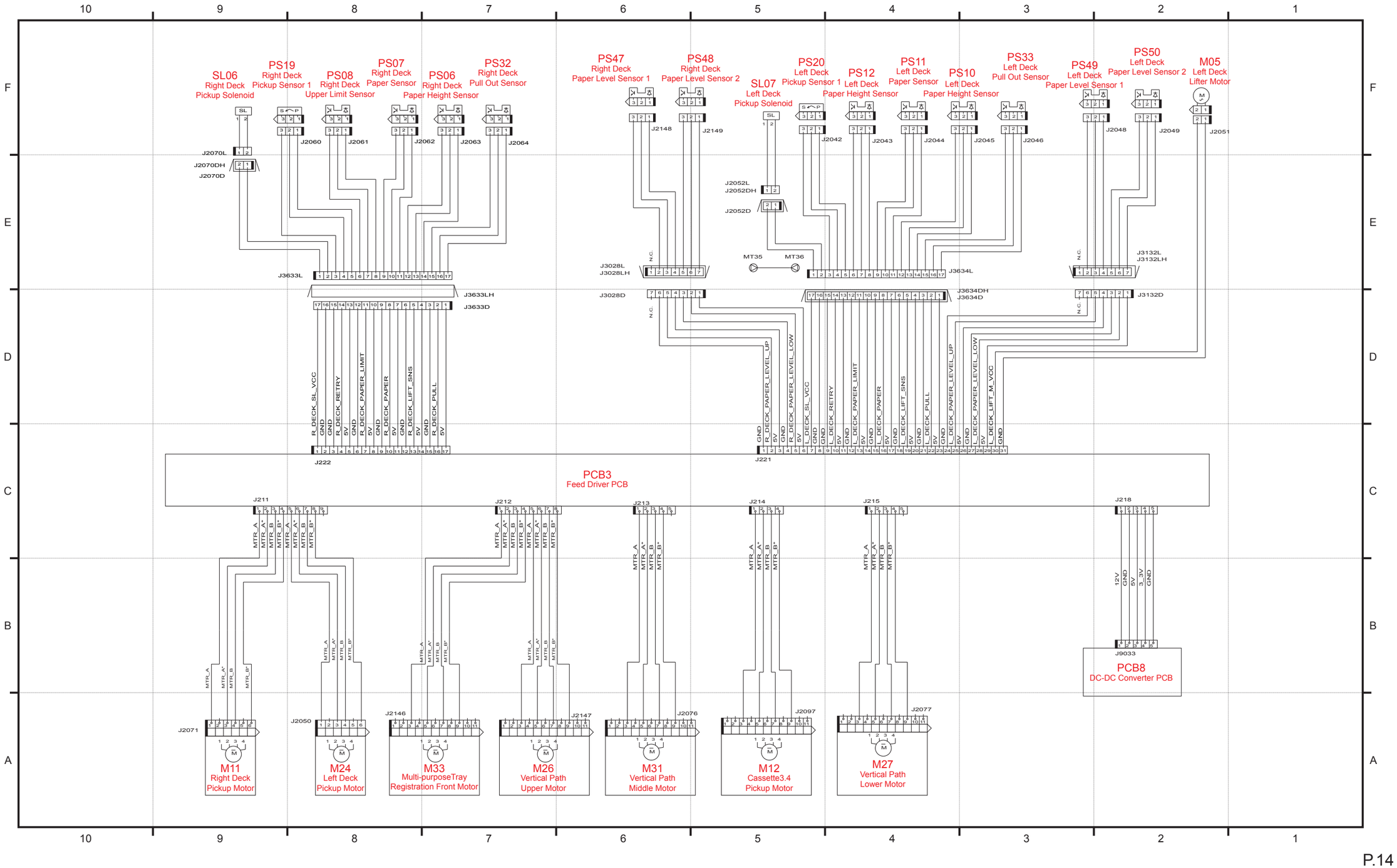
## General Circuit Diagram (13/24)




P.13

F-10-16

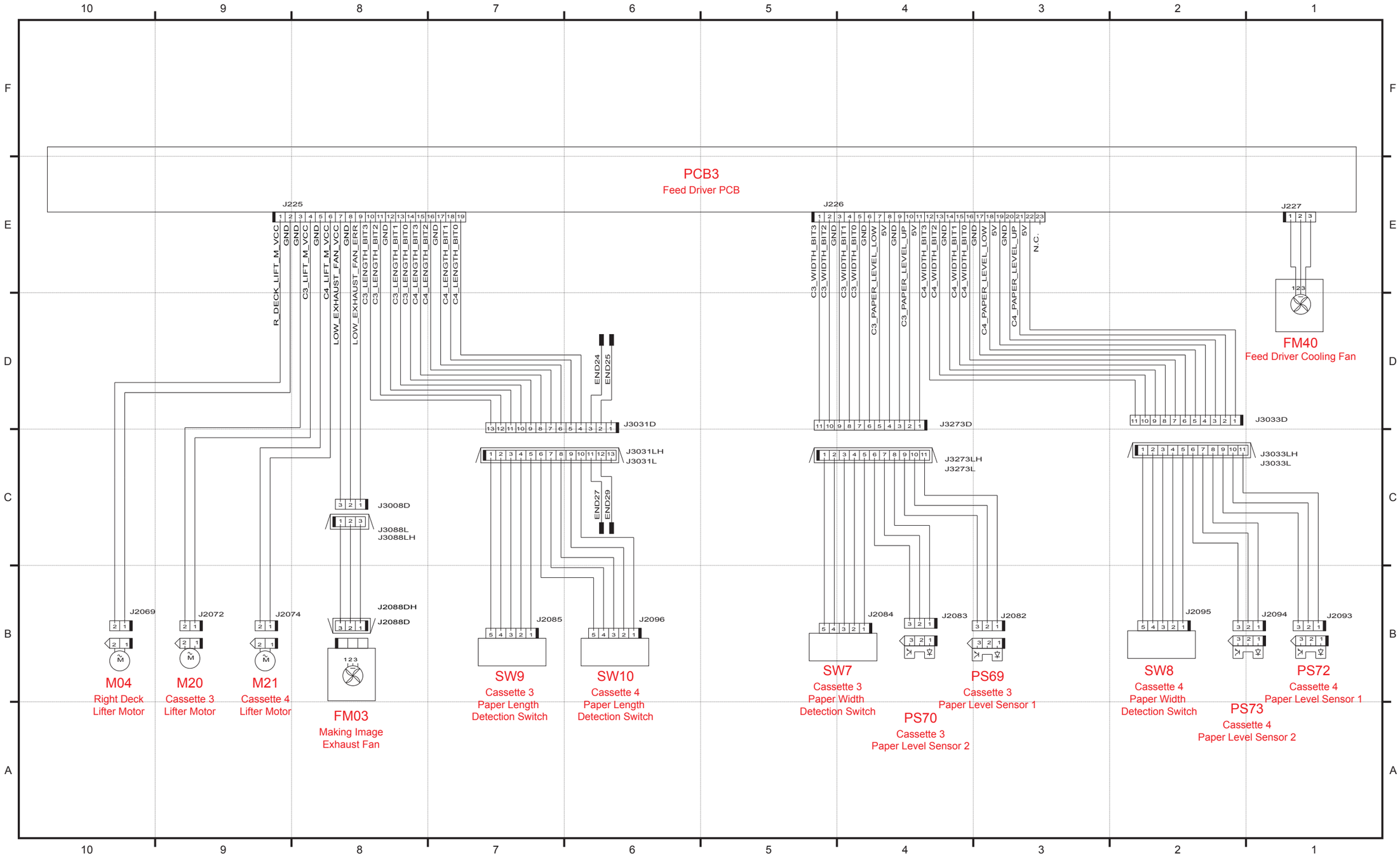
## General Circuit Diagram (14/24)




P.14

F-10-17

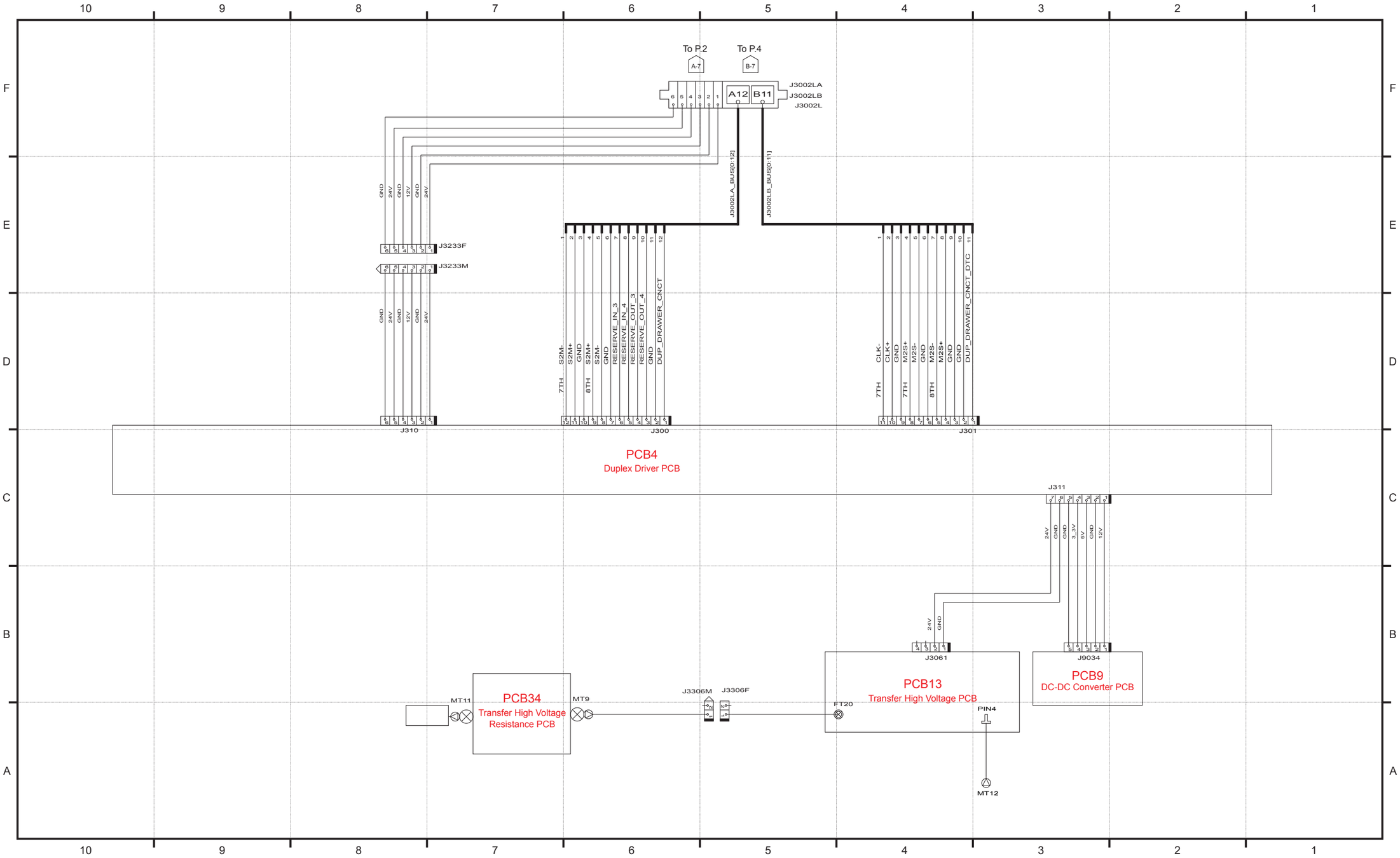
## General Circuit Diagram (15/24)




P.15

F-10-18

## General Circuit Diagram (16/24)



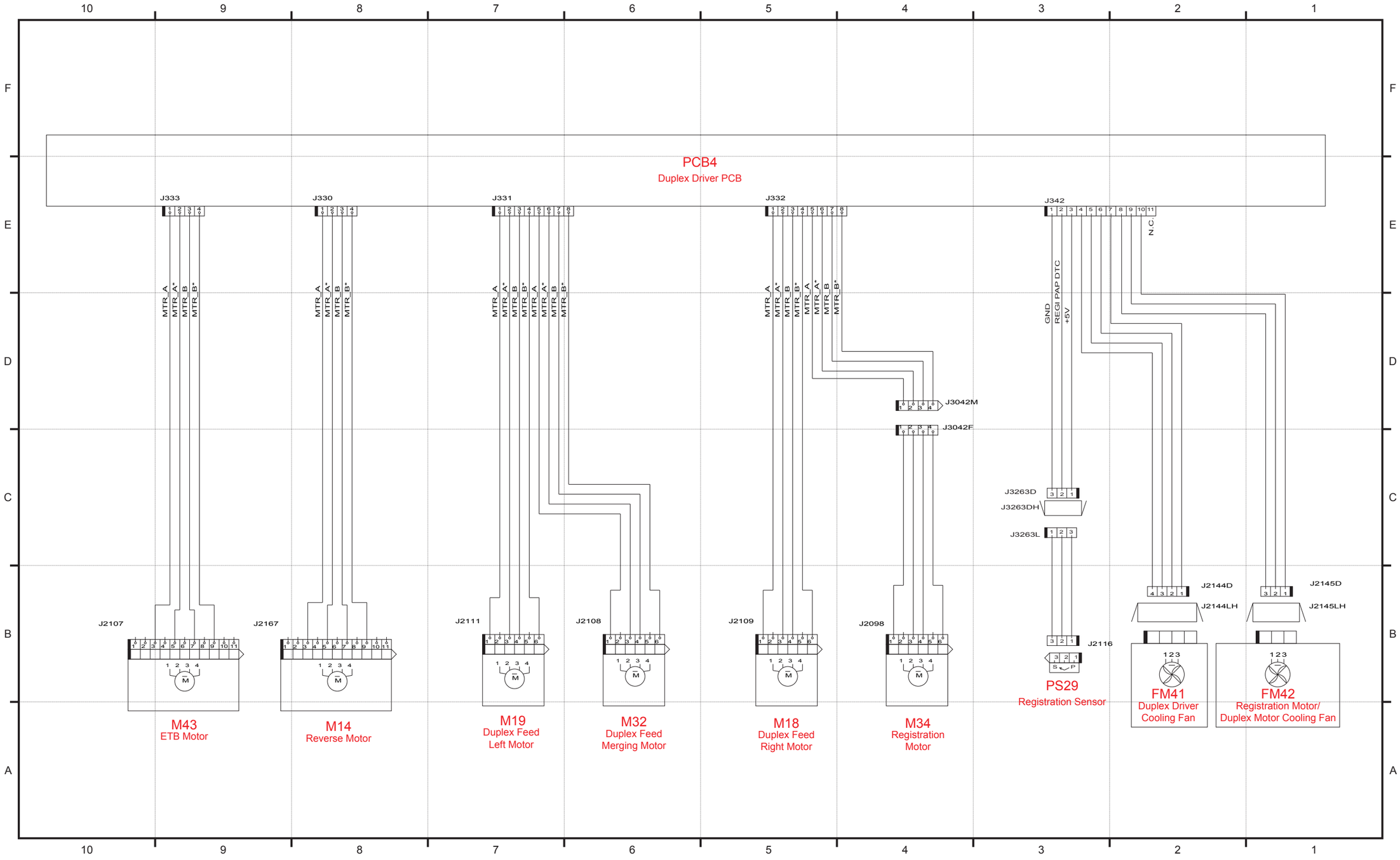

P.16

F-10-19



Appendix > General Circuit Diagram > General Circuit Diagram (16/24)

## General Circuit Diagram (17/24)



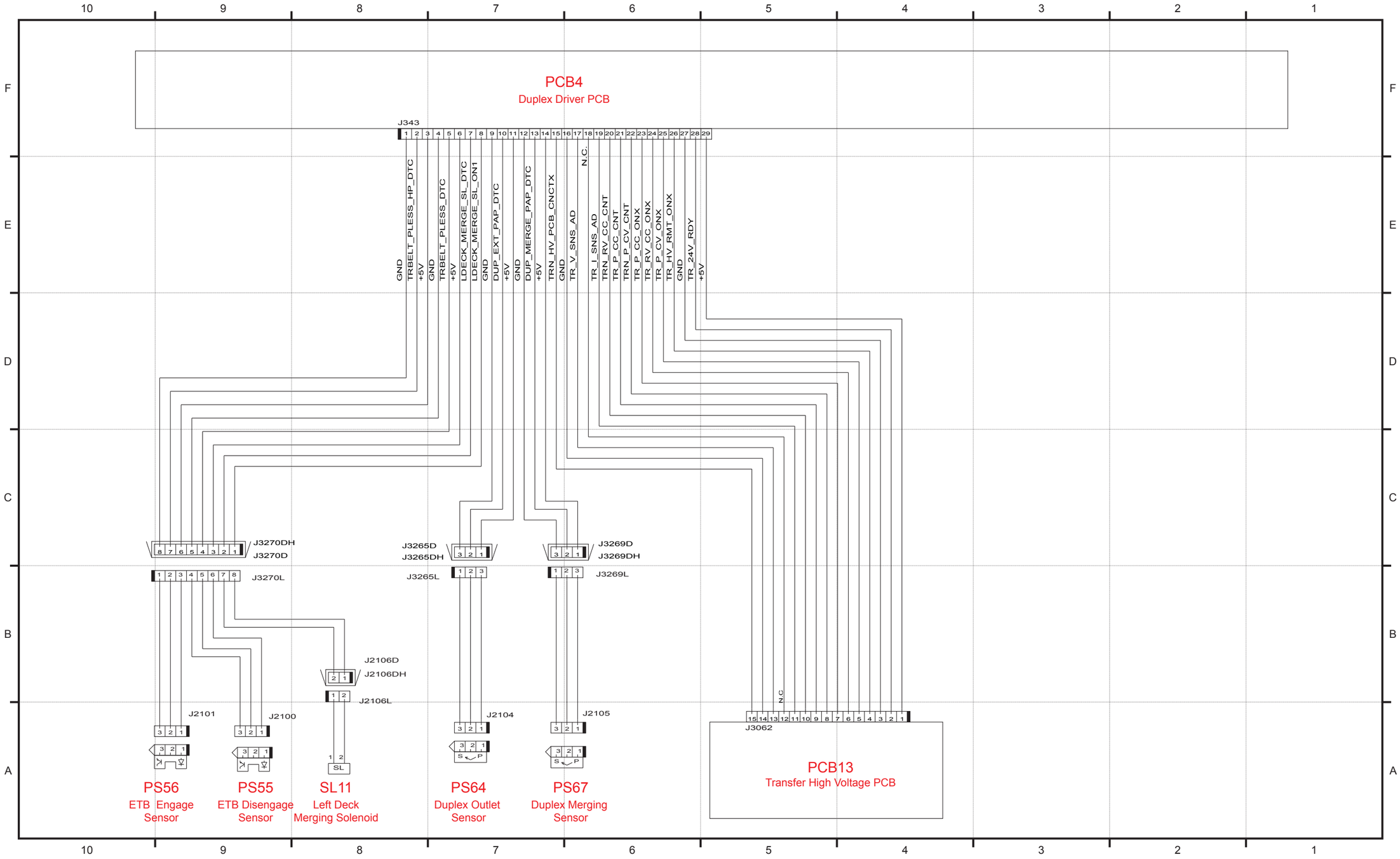

P.17

F-10-20



Appendix > General Circuit Diagram > General Circuit Diagram (17/24)

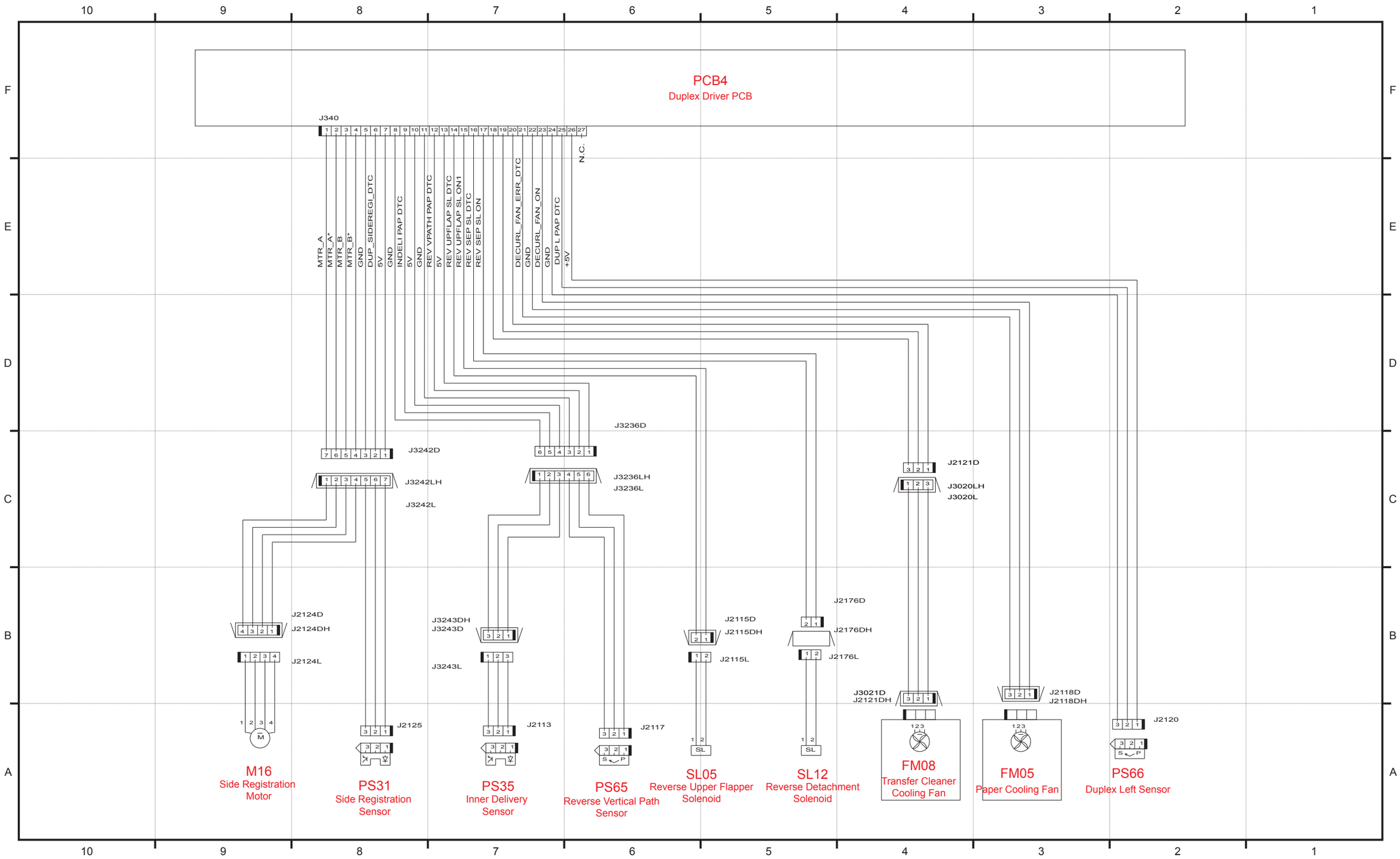
## General Circuit Diagram (18/24)




P.18

F-10-21

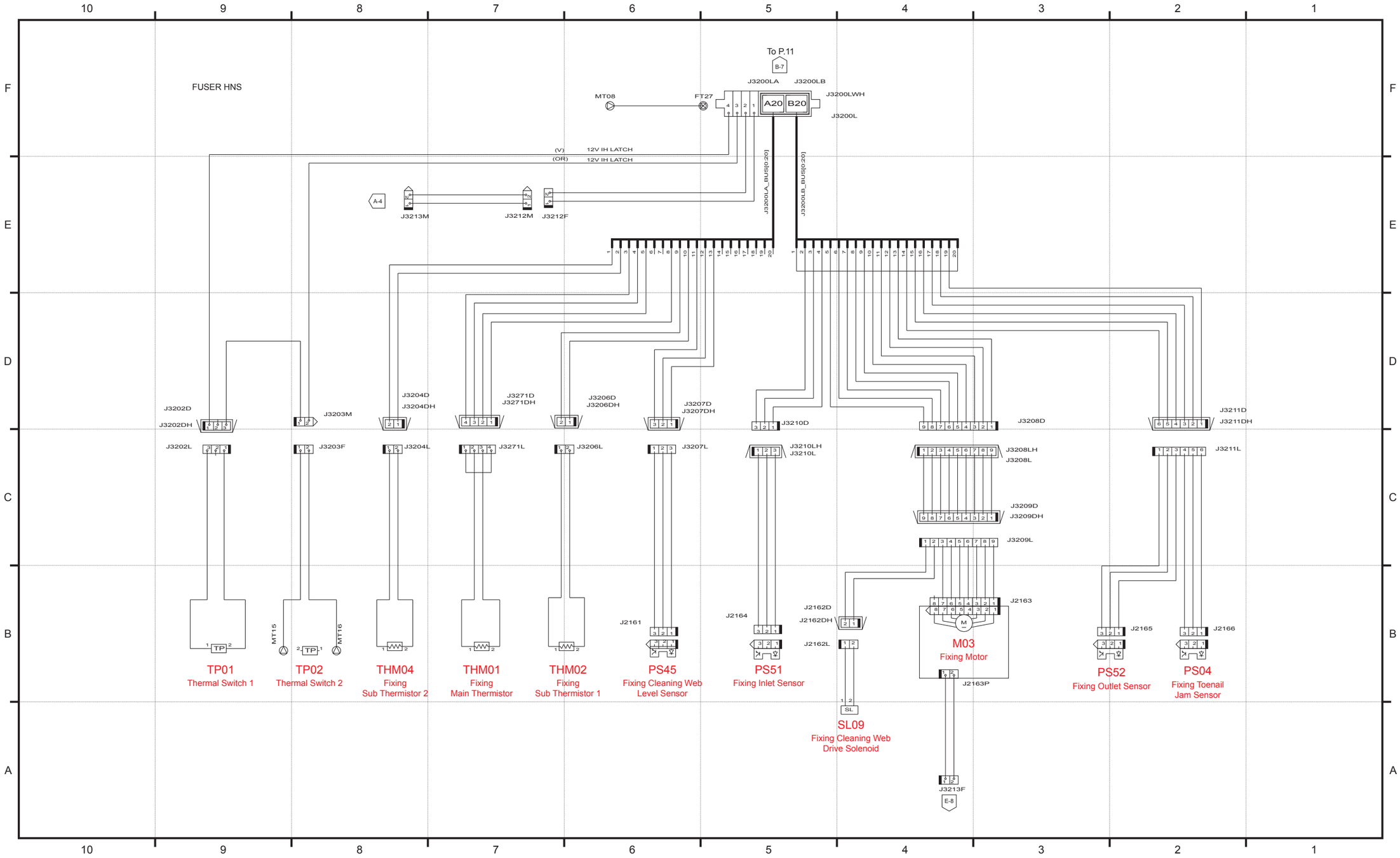
## General Circuit Diagram (19/24)





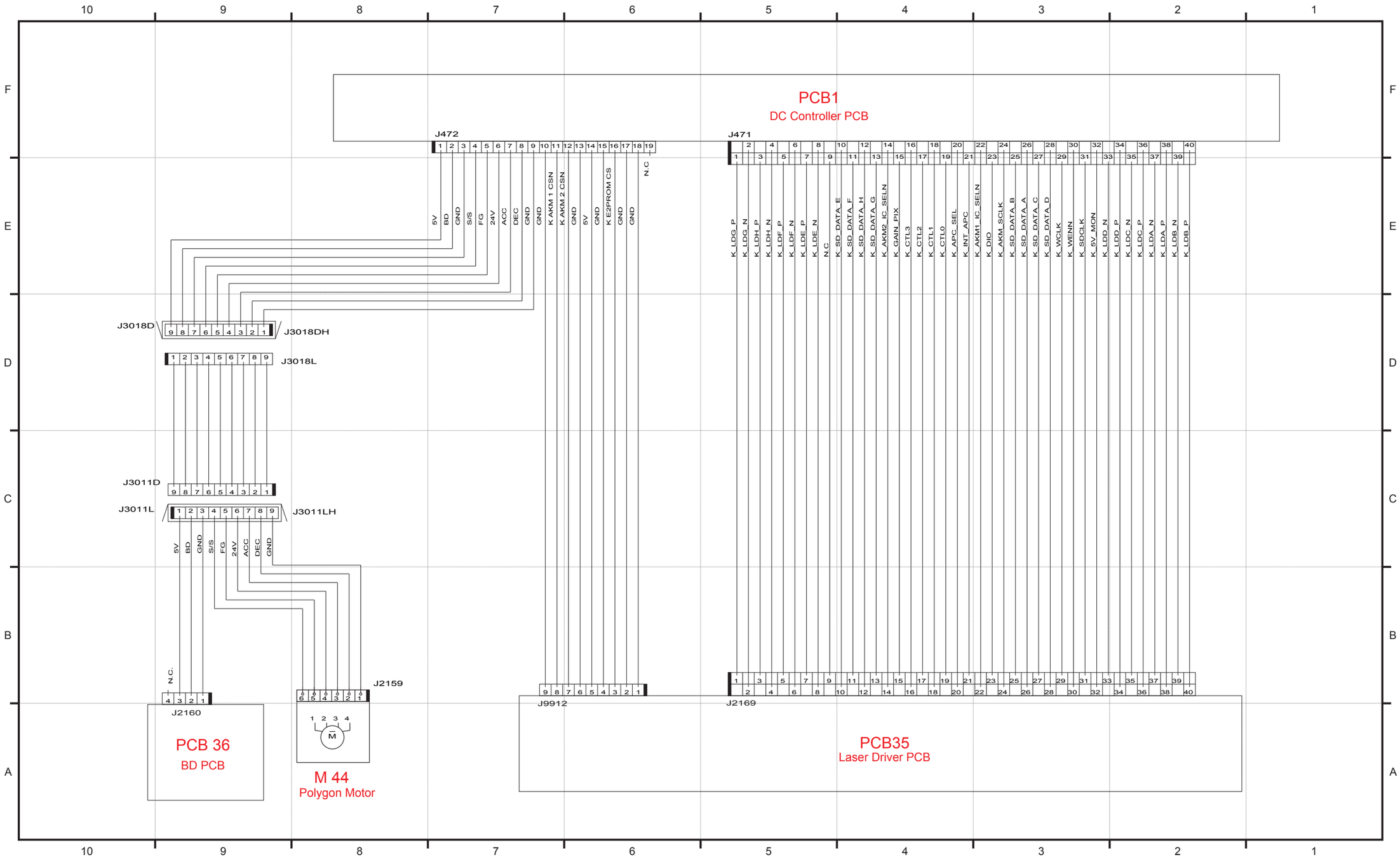

F-10-22

## General Circuit Diagram (20/24)




F-10-23

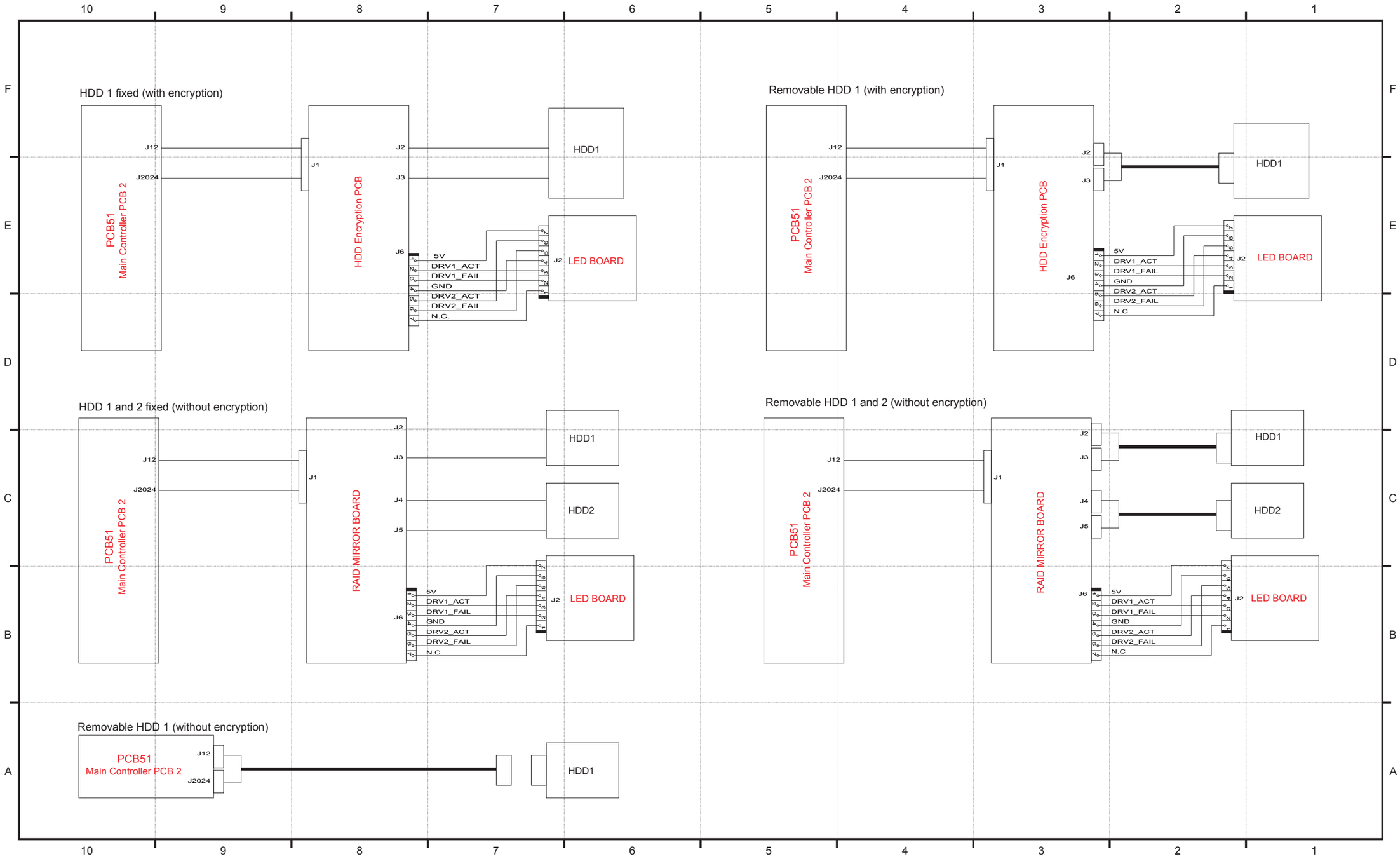
## General Circuit Diagram (21/24)




P.21

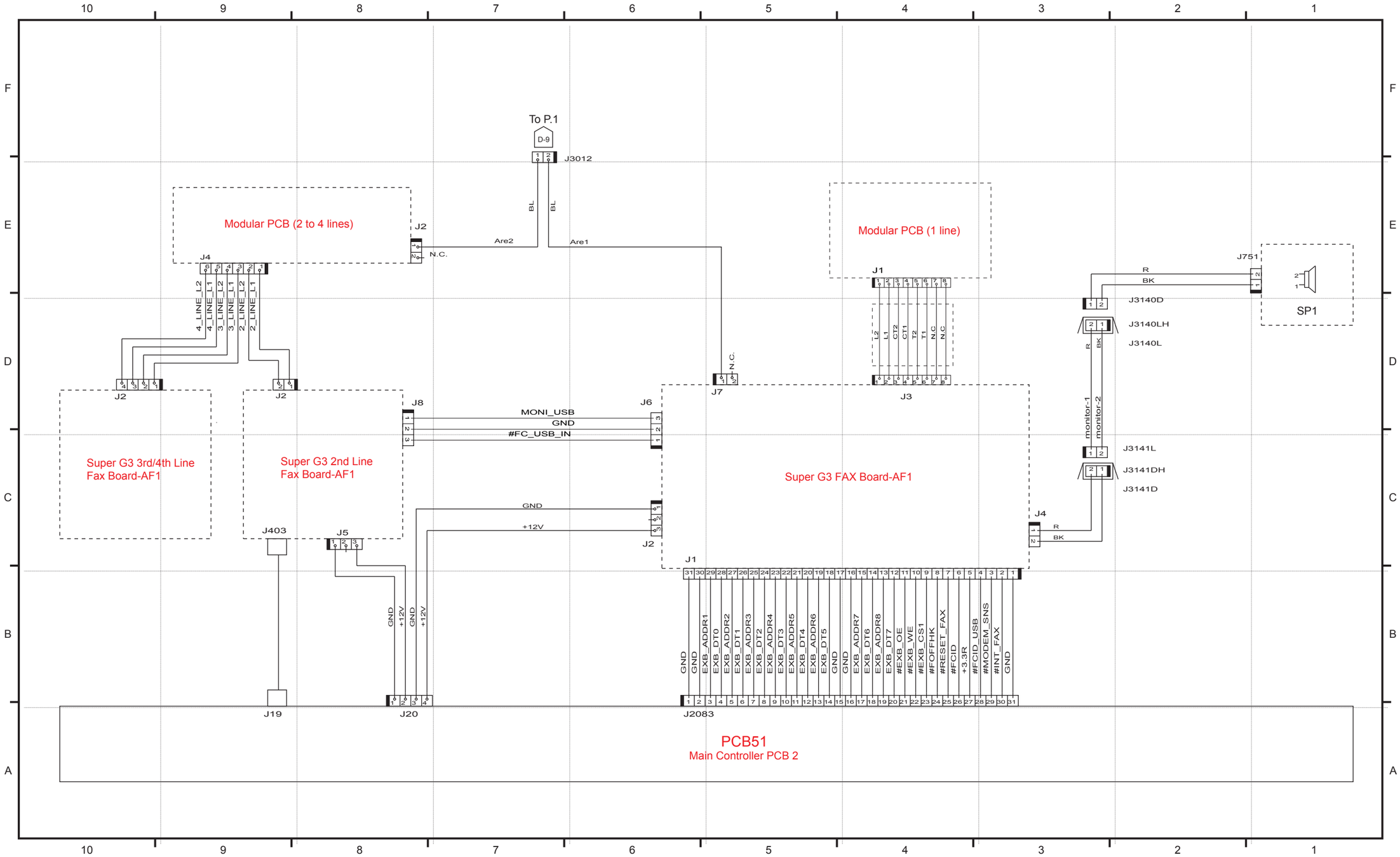
F-10-24

## General Circuit Diagram (22/24)




F-10-25

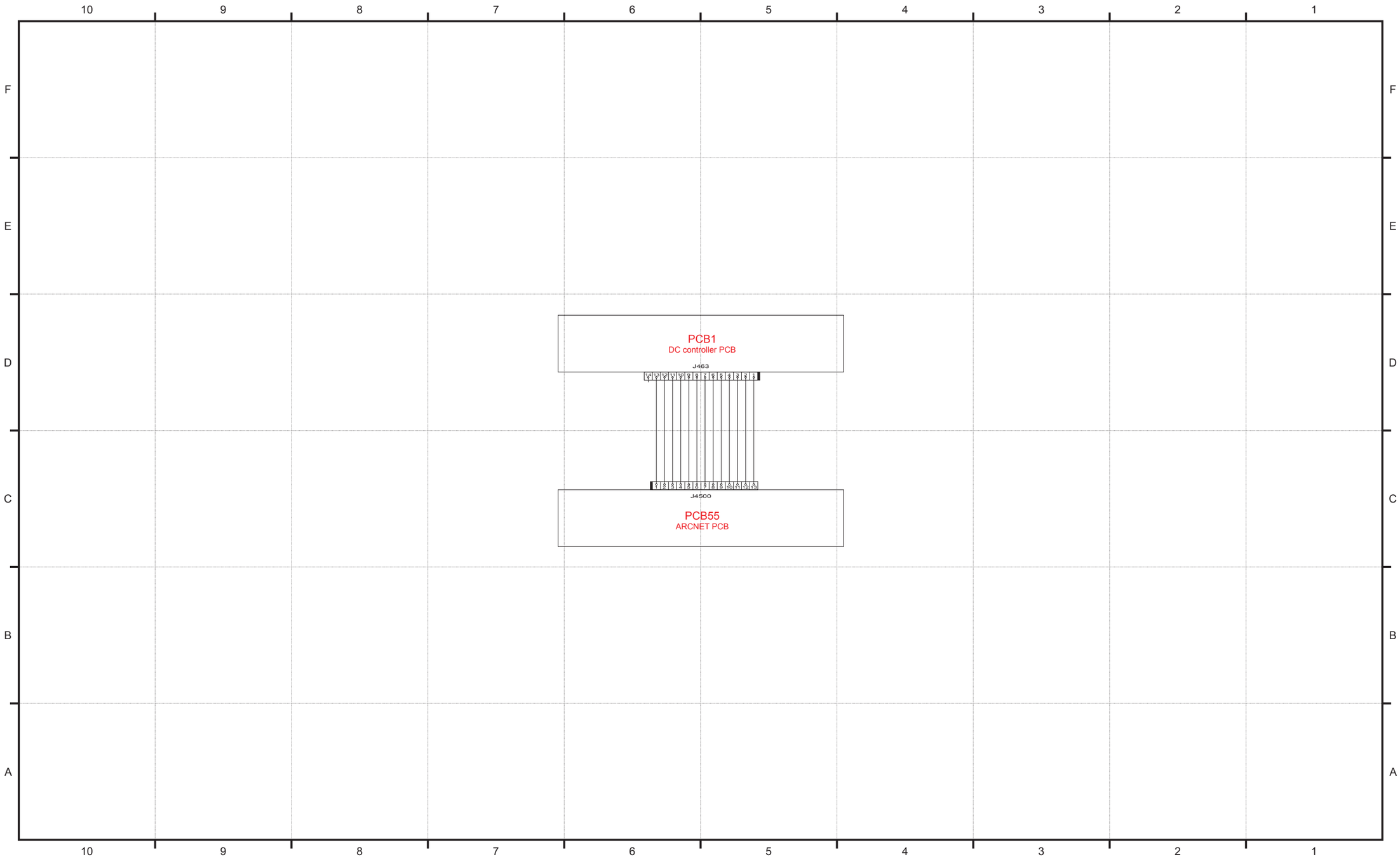
## General Circuit Diagram (23/24)




P.23

F-10-26

## General Circuit Diagram (24/24)




P.24

F-10-27

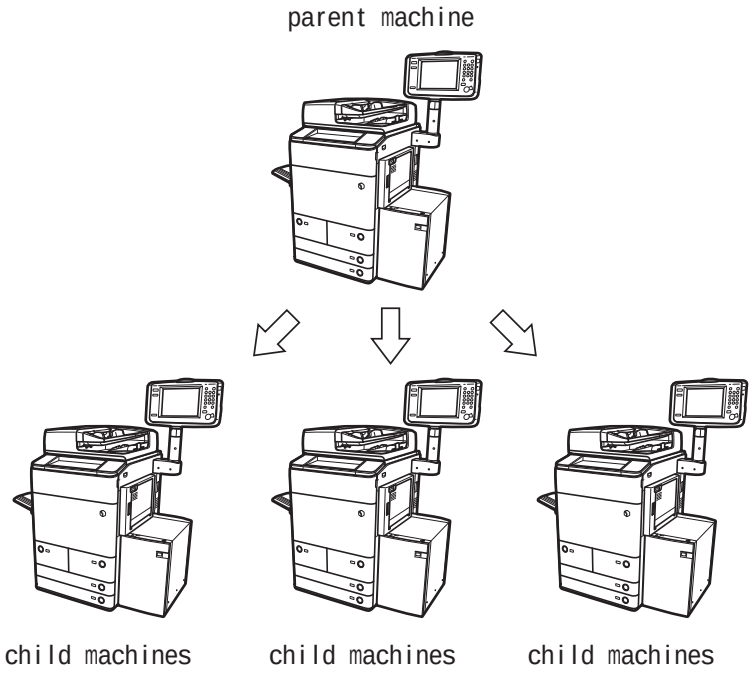
Appendix > General Circuit Diagram > General Circuit Diagram (24/24)

# List of User Mode

## Device Information Delivery Settings

Registering device information in your machine enables you to set the machine to deliver the same device information to other machines that are connected to the same network. This enables you to easily manage multiple machines at the same time.

Your machine is capable of both sending and receiving device information, which can be delivered manually and automatically.




F-10-28

# Environment Settings

## Paper Settings

* Default Settings

| Item | Setting Description | Device Information DeliveryAvailable |
|---|---|---|
| Paper Settings | Thin, Plain*, Heavy 1, Heavy 2, Heavy 3, Color, Recycled, Tracing, Transparency, Labels, Bond, Tab, Pre-punched, Letterhead | No |
| A5R/STMTR Original Selection | A5R, STMTR* | No |
| B5/EXEC Original Selection | B5, EXEC* | No |
| Paper Type Management Settings | Details/Edit<br>• Name, Category, Basis Weight, Type, Finish, Creep (Displacement) Correction Adjustment, Color, Adjusting Image Position | Yes |
| | Duplicate, Delete | No |
| Register Multi-Purpose Tray Defaults | On, Off* | No |
| Register Custom Size | Register/Edit, Delete, Register Name | Yes |

T-10-4

## Display Settings

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

*2 If the Duplex Color Image Reader Unit is not attached, the default setting is [On].

| Item | Setting Description | Device Information DeliveryAvailable |
|---|---|---|
| Default Screen at Startup | Main Menu*, Quick Menu, Copy*1, Scan and Send, Fax*1, Scan and Store, Access Stored Files, Fax/I-Fax Inbox, Secured Print, Web Browser, Workflow Composer, Remote Scanner, Print Server, Scan Lock Analyzer, Tutorial | No |
| | Open Status Monitor/Cancel: On, Off*2 | No |
| Default Screen (Status Monitor/Cancel) | Default Status Type: Copy/Print*, Send, Receive, Store, Consumables | No |
| | Status/Log: Job Status*, Log | No |
| | Details: Print Jobs, Send Jobs, Receive Jobs, Copy*1, Fax*1, Forward, Local Print, Printer, Cascade Copy, RX Print, Print Report | No |
| Copy Screen Display Settings*1 | Regular Copy*, Express Copy | No |
| Display Fax Function*1 | On*, Off | No |
| | On<br>Enable Fax in Scan and Send Function: On*, Off | No |
| Store Location Display Settings | Mail Box: On*, Off | No |
| | Advanced Box/Network: On*, Off | No |
| | Memory Media: On, Off* | No |
| Language/Keyboard Switch On/Off | On, Off* | No |
| Language/Keyboard Switch | Language, Keyboard Layout | No |
| Display Remaining Paper Message | On*, Off | No |
| No. of Copies/Job Duration Status | On*, Off | No |
| Display Original Scanning Cleaning Area*1 | On*, Off | No |
| Select Paper Screen Priority | Simple*, Detailed | No |
| mm/Inch Entry Switch | mm, inch* | Yes |
| ID/User Name Display On/Off | On*, Off | No |
| Edit Puncher Unit Die Name*1 | Edit | No |

T-10-5

## Timer/Energy Settings

* Default Settings

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Adjust Time | 00: 00 to 23: 59, in one minute increments (00: 00*) | No |
| Date/Time Settings | Date and Time Setting (12 digit number) | No |
| | Time Zone: GMT -12: 00 to GMT +12: 00 (GMT -05:00*) | No |
| | Daylight Saving Time: On, Off* | No |
| Time Format | 24 Hour, 12 Hour* | No |
| Auto Reset Time | 0 (Off), 10 to 50 seconds in 10 seconds increments, 1 to 9 minutes in one minute increments (2minutes*) | Yes |
| Function After Auto Reset | Initial Function*, Selected Function | Yes |
| Auto Sleep Time | 10 secs, 1, 2, 10, 15*, 20, 30, 40, 50 min., 1 hour, 90 min., 2, 3, 4 hours (1 mins*) | Yes |
| Sleep Mode Energy Use | Low*, High | Yes |
| Weekly Timer Settings | Sunday to Saturday, 00: 00 to 23: 59, in one minute increments | Yes |
| Energy Saver/Sleep Mode Exit Time Settings | 00: 00 to 23: 59, in one minute increments | Yes |
| Change Energy Saver Mode | -10*,-25,-50%, None | Yes |
| Silent Mode Time | 0 (Off) to 9 minutes, in one minute increments (1 mins*) | Yes |

T-10-6

## Network

If you are configuring the settings for the first time in "Interface Settings," "TCP/IPv4 Settings," "TCP/IPv6 Settings," or "Settings Common to TCP/IPv4 and TCP/IPv6," use the control panel of the machine. After configuring the TCP/IP settings, you can change them using the Remote UI.

In the NetWare or AppleTalk network, the TCP/IP protocol must be used to specify the settings with software other than the control panel of the machine. The setting items are shown below.

- Some items can be set using the Remote UI. Use the control panel of the device to set items which cannot be set using the Remote UI.

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

*2 Indicates items that appear only when the PS Printer Kit is activated.

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| User Data List | Plint List | Yes | No |
| Confirm Network Connection Set. Changes | On, Off* | No | Yes |
| TCP/IP Settings | | | |
| IPv4 Settings | | | |
| Use IPv4 | On*, Off | Yes | No |
| IP Address Settings | IP Address: 0.0.0.0* | Yes | No |
| | Subnet Mask: 0.0.0.0* | Yes | No |
| | Gateway Address: 0.0.0.0* | Yes | No |
| | DHCP: On, Off* | Yes | Yes |
| | RARP: On, Off* | Yes | Yes |
| | BOOTP: On, Off* | Yes | Yes |
| PING Command | IP Adress: 0.0.0.0* | No | No |
| IPv6 Settings | | | No |
| Use IPv6 | On, Off* | Yes | No |
| Stateless Address Settings | Use Stateless Address: On*, Off | Yes | No |
| Manual Address Settings | Use Manual Address: On, Off* | Yes | No |
| | Manual Address: IPv6 Address (39characters maximum) | Yes | No |
| | Prefix Length: 0 to 128 (64*) | Yes | No |
| | Default Router Address (39 characters maximum) | Yes | No |
| Use DHCPv6 | On, Off* | Yes | Yes |
| PING Command | IPv6 Address: (39characters maximum) | Yes | No |
| Host Name | 48 characters maximum | Yes | No |
| DNS Settings | | | |
| DNS Server Address Settings | | | |
| IPv4 | Primary DNS Server: IP Address:0.0.0.0* | Yes | No |
| | Secondary DNS Server: IP Address:0.0.0.0* | Yes | No |
| IPv6 | Primary DNS Server: IPv6 Address | Yes | No |
| | Secondary DNS Server: IPv6 Address | Yes | No |
| DNS Host/Domain Name Settings | | Yes | No |
| IPv4 | Host Name: 47 characters maximum<br>(Canon + represents the last six digits of a MAC address) | Yes | No |
| | Domain Name: 47 characters maximum | Yes | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| IPv6 | Use Same Host Name/Domain Name as IPv4:On, Off* | Yes | No |
| | Host Name: 47 characters maximum<br>(Canon + represents the last six digits of a MAC address) | Yes | No |
| | Domain Name: 47 characters maximum | Yes | No |
| DNS Dynamic Update Settings | | | |
| IPv4 | DNS Dynamic Update: On, Off* | Yes | No |
| IPv6 | DNS Dynamic Update: On, Off* | Yes | No |
| | Register Stateless Address: On, Off* | Yes | No |
| | Register Manual Address: On, Off* | Yes | No |
| | Register Stateless Address: On, Off* | Yes | No |
| WINS Settings | | | |
| WINS Resolution | On, Off* | Yes | No |
| WINS Server Address | IP Address: 0.0.0.0* | Yes | No |
| Node Type | Auto Set, display only | No | No |
| Scope ID | 63 characters maximum | Yes | No |
| LPD Print Settings | | | |
| LPD Print Settings | On*, Off | Yes | Yes |
| LPD Banner Page[*1] | On, Off* | Yes | Yes |
| RAW Print Settings | | | |
| RAW Print Settings | On*, Off | Yes | Yes |
| Bidirectional Communication | On, Off* | Yes | Yes |
| SNTP Settings | | | |
| Use SNTP | On, Off* | Yes | No |
| Polling Interval | Interval for performing time synchronization (1 to 48 hours) (24hours*) | Yes | No |
| NTP Server Address | IP address or host name | Yes | No |
| Check NTP Server | - | Yes | No |
| FTP Print Settings | | | |
| Use FTP printing | On, Off* | Yes | Yes |
| User | User name for FTP server login (24 characters maximum) | Yes | No |
| Password | Password for FTP server login (24 characters maximum) | Yes | No |
| WSD Print Settings | | | |
| Use WSD | On, Off* | Yes | Yes |
| Use WSD Browsing | On, Off* | Yes | Yes |
| Use Multicast Discovery | On, Off* | Yes | Yes |
| Use FTP PASV Mode | | | |
| Use FTP PASV Mode | On, Off* | Yes | Yes |
| IPP Print Settings | | | |
| IPP Print Settings | On, Off* | Yes | Yes |
| Use SSL | On, Off* | Yes | No |
| Use Authentication | On, Off* | Yes | No |
| User | User name for IPP authentication (24 characters maximum) | Yes | No |
| Password | Password for IPP authentication (24 characters maximum) | Yes | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| Multicast Discovery Settings | | | |
| Response | On* Off | Yes | Yes |
| Scope name | Scope name to be used for a multicast discovery<br>(32 characters maximum) (default*) | Yes | No |
| Use HTTP | On* Off | Yes | Yes |
| Use Web DAV Server | On, Off* | Yes | Yes |
| SSL Settings | Settings that use SSL | Yes | No |
| Key and Certificate | | | |
| Set as the Default Key | - | Yes | No |
| Certificate Details | Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/<br>Public Key/Cert Thumbprint/Certificate | Yes | No |
| Display Use Location | Displays what the key pair is being used for | Yes | No |
| Proxy Settings | | | |
| Use proxy | On, Off* | Yes | No |
| Server Address | IP address or FQDN (128 characters maximum) | Yes | No |
| Port Number | 1 to 65535 (80*) | Yes | No |
| Use Proxy within the Same Domain | On, Off* | Yes | No |
| Set Authentication | | | |
| Use Proxy Auth. | On, Off* | Yes | No |
| User | 24 characters maximum | Yes | No |
| Password | 24 characters maximum | Yes | No |
| Confirm Dept. ID PIN | On, Off* | Yes | No |
| IPSec Settings | | | |
| Use IPSec | On, Off* | Yes | No |
| Receive Non-policy Packets | Allow*/Reject | Yes | No |
| Edit | | Yes | No |
| Delete | | Yes | No |
| Policy On, Off | | Yes | No |
| Register | | | |
| Policy Name | 24 characters maximum | Yes | No |
| Register: Selector Settings | Local Address:<br>All IP Addresses*/IPv4 Address/IPv6 Address/IPv4 Manual Settings/IPv6 Manual Settings | Yes | No |
| | Remort Address:<br>All IP Addresses*, All IPv4Address, All IPv6Address, IPv4Manual Settings, IPv6 Manual Settings | Yes | No |
| | Port: Specify by Port Number*/Specify by Service Name | Yes | No |
| IKE Settings | IKE mode : Main*/Aggressive | Yes | No |
| | Authentication Method : Pre-Shared Key Method*/Digital sig. Method | Yes | No |
| | Auth./Encryption Algorithm : Auto*/Manual Settings | Yes | No |
| IPSec Network Settings | Validity : Time (1 to 65535minuites)(480minuites*) | Yes | No |
| | Validity : Size (1 to 65535 MB)(65535 MB*) | Yes | No |
| | PFS : On, Off* | Yes | No |
| | Auth./Encryption Algorithm : Auto*/Manual Settings | Yes | No |
| | Connect. Mode : Transport, display only | - | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| Netware Settings | | Yes | No |
| Use NetWare | On, Off* | Yes | Yes |
| Frame Type | Auto Detect*/Ethernet II/Ethernet 802.2/Ethernet 802.3/Ethernet SNAP | Yes | No |
| IPX External Network Number | Auto Set, display only | - | No |
| Node Number | Auto Set, display only | - | No |
| Print Service | Bindery PServer, R Printer, NDS Pserver*, NPrinter | Yes | No |
| Packet Signature | Auto Set, display only | - | No |
| Bindery Pserver Settings | | | |
| Print Server Name | 47 characters maximum | Yes | No |
| File Server Name | 47 characters maximum | Yes | No |
| Print Server Password | 20 characters maximum | Yes | No |
| Printer Number | 0 to 15 (0*) | Yes | No |
| Polling Interval | 1 to 15seconds (5sedonds*) | Yes | No |
| Printer Form | 0 to 255 (0*) | Yes | No |
| Buffer Size | 1 to 20 KB (20KB*) | Yes | No |
| Service Mode | Service only currently mounted form/Change forms as needed/Minimize form changes across print queues/ Minimize form changes within print queues* | Yes | No |
| Rprinter Settings | | | |
| Print ServerName | 47 characters maximum | Yes | No |
| File ServerName | 47 characters maximum | Yes | No |
| Printer Number | 0 to 15 (0*) | Yes | No |
| NDS PServer Settings | | | |
| Printer Number | 64 characters maximum | Yes | No |
| Tree Name | 32 characters maximum | Yes | No |
| Context | 256 characters maximum | Yes | No |
| Print Server Password | 20 characters maximum | Yes | No |
| Printer Number | 0 to 254 (0*) | Yes | No |
| Polling Interval | 1 to 255 seconds (5seconds*) | Yes | No |
| Printer Form | 0 to 255 (0*) | Yes | No |
| Buffer Size | 3 to 20KB (20KB*) | Yes | No |
| Service Mode | Service only currently mounted form/Change forms as needed/Minimize form changes across print queues/ Minimize form changes within print queues* | Yes | No |
| NPrinter Settings | | | |
| Print ServerName | 64 characters maximum | Yes | No |
| Tree Name | 32 characters maximum | Yes | No |
| Context | 256 characters maximum | Yes | No |
| Printer Number | 0 to 254 (0*) | Yes | No |
| Apple Talk Settings | | | |
| Use Apple Talk | On, Off* | Yes | Yes |
| Phase | Phase 2 (fixing) | - | No |
| Service Name | 32 characters maximum (Model name*) | Yes | No |
| Zone | 32 characters maximum | Yes | No |
| Print Mode[*2] | Both*, Spool, Direct | Yes | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| SMB Server Settings | | | |
| Use SMB Server | On, Off* | Yes | No |
| ServerName | 15 characters maximum (Canon+represents the last six digits of a MAC address) | Yes | No |
| Workgroup | 15 characters maximum (WORKGROUP*) | Yes | No |
| Comment | 48 characters maximum | Yes | No |
| LM Announce | On, Off* | Yes | No |
| SMB Printer Settings | | | |
| Use SMB Print | On, Off* | Yes | No |
| Printer Name | 13 characters maximum (PRINTER*) | Yes | No |
| SMB Auth. Settings | | | |
| Use SMB Authentication | On, Off* | Yes | No |
| Authentication Type | NTLMv1*, NTLMv2* | Yes | No |
| SNMP Settings | | Yes | No |
| Get Printer Mgmt Info from Host | On, Off* | Yes | Yes |
| Use SNMPv1 | On*, Off | Yes | Yes |
| Community Name1Settings | | | |
| Community Name1 | On*, Off | Yes | No |
| MIB Access Permission | Read/Write/Read Only* | Yes | No |
| Community Name | Community Name (32 characters maximum) (public*) | Yes | No |
| Community Name2 Settings | | Yes | No |
| Community Name2 | On, Off* | Yes | No |
| MIB Access Permission | Read/Write/Read Only* | Yes | No |
| Community Name | Community Name (32 characters maximum) (public2*) | Yes | No |
| Use SNMPv3 | On, Off* | Yes | No |
| User Settings | | | |
| User On, Off | - | Yes | No |
| Register | User/MIB Access Permission/Security Settings/Authent.Algorithm/Authent.Password/Encryption Algorithm/ Encryption Password | Yes | No |
| Details/Edit | User/MIB Access Permission/Security Settings/Authent.Algorithm/Authent.Password/Encryption Algorithm/ Encryption Password | Yes | No |
| Delete | - | Yes | No |
| Context Settings | | | |
| Register | Context Name (32 characters maximum) | Yes | No |
| Edit | Context Name (32 characters maximum) | Yes | No |
| Delete | - | Yes | No |
| Dedicated Port Settings | | | |
| Dedicated Port Settings | On*, Off | Yes | Yes |
| Use Spool Function | | | |
| Use Spool Function | On, Off* | Yes | Yes |
| Startup Settings | | | |
| Startup Settings | 30 to 300 seconds (30*) | Yes | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| Ethernet Driver Settings | | | |
| Auto Detect | On*, Off | Yes | No |
| Communication Mode | Half Duplex*/Full Duplex | Yes | No |
| Ethernet Type | 10 Base-T*, 100 Base-TX, 1000 Base-T | Yes | No |
| MAC Address | Display only | - | No |
| IEEE802.1X Settings | | | |
| Use IEEE802.1X | On, Off* | Yes | No |
| Login Name | 24 characters maximum | Yes | No |
| User | Name of the user to be authenticated with IEEE802.1X authentication | Yes | No |
| Password | Password of the user to be authenticated with IEEE802.1X authentication | Yes | No |
| TLS Settings | | | |
| Use TLS | On, Off* | Yes | No |
| Key and Certificate | | | |
| Set as the Default Key | - | Yes | No |
| Certificate Details | Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/Public Key/Cert.Thumbprint/Certificate | Yes | No |
| Display Use Location | Displays what the key pair is being used for. | Yes | No |
| TTLS Settings | | | |
| Use TTL | On, Off* | Yes | No |
| TTLS Settings | MSCHAPv2*, PAP | Yes | No |
| PEAP Settings | | | |
| Use PEAP | On, Off* | Yes | No |
| Same User Name as Login Name | On*, Off | Yes | No |
| Firewall Settings | | | |
| IP Address Block Log | Time, Category, IP Address, Result | Yes | No |
| IPv4 Address Filter | | | |
| TX Filter | | Yes | No |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| IPv4 Address | Up to 16 IPv4 addresses can be stored. | Yes | No |
| RX Filter | | | |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| IPv4 Address | Up to 16 IPv4 addresses can be stored. | Yes | No |
| IPv6 Address Filter | | Yes | No |
| TX Filter | | | |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| IPv6 Address | Up to 16 IPv4 addresses can be stored. | Yes | No |
| RX Filter | | | |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| IPv6 Address | Up to 16 IPv4 addresses can be stored. | Yes | No |

| Item | Setting Description | Can be set in Remote UI | Device Information Delivery Available |
|---|---|---|---|
| MAC Address Filter | | | |
| TX Filter | | | |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| MAC Address | Up to 100 IPv4 addresses can be stored. | Yes | No |
| RX Filter | | | |
| Use Filter | On, Off* | Yes | No |
| Default Policy | Allow*/Reject | Yes | No |
| MAC Address | Up to 100 IPv4 addresses can be stored. | Yes | No |

T-10-7

## External Interface

* Default Settings

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| USB Settings | | |
| Use USB Device | On*, Off | Yes |
| Use MEAP Driver for USB Device | On, Off* | Yes |
| Use MEAP Driver for USB External Drive | On, Off* | Yes |

T-10-8

## Accessibility

* Default Settings

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Key Repetition Settings | Standard*, Slightly Slow, Slow | No |
| Reversed Display (Color) | On, Off* | No |

T-10-9

# Adjustment/Maintenance

## Adjust Image Quality*1

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Auto Adjust Gradation | Quick Adjust: Press [Start]<br>Full Adjust: Automatic after the machine prints and scans four sets of test pages | No |
| Correct Density | Copy/Scan and Store (Mail Box), Black Send/Scan and Store (other than Mail Box), Color Send/Scan and Store (Other Than Mail Box)Light, Dark: 1 to 9 levels (5levels*) | No |
| Fine Adjust Zoom | X, Y: -1.0% to +1.0%, in 0.1% increments (X: 0.0%* Y: 0.0%*) | No |

T-10-10

## Adjust Action*1

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Change Stitching Position | -2.00 mm to +2.00 mm, in 0.25 mm increments (0.00 mm*) | No |
| Adjust Saddle Stitch Fold Position | -2.00 mm to +2.00 mm, in 0.25 mm increments (0.00 mm*) | No |
| Finisher Puncher Switch | Speed Priority, Precision Priority | No |
| Adjust Trim Width | 2.0 mm to 20.0 mm (0.08" to 0.78"), in 0.1 mm (0.01") increments (2.0 mm, 0.08*) | No |
| Adjust Fold Position | | |
| Adjust Z-Fold Position | -2.0 mm to +1.5 mm, 0.5 mm increments (0.0 mm*) | No |
| Adjust C-Fold Position | -7.0 mm to +5.0 mm, in 0.5 mm increments (-1.0 mm*) | No |
| Adjust Accordion Z-Fold Position | -7.0 mm to +5.0 mm, 0.5 mm increments (-1.0 mm*) | No |
| Adjust Half Fold Position | -2.0 mm to +2.0 mm, 0.5 mm increments (0.0 mm*) | No |
| Adjust Saddle Fold Position | -2.00 mm to +2.00 mm, 0.25 mm increments (0.00 mm*) | No |
| Adjust Paper Deck Plates | Press [Start] | No |

T-10-11

## Maintenance

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Clean Feeder*1 | Press [Start] | No |
| Clean Wire | Press [Start] | No |
| Clean Drum | Press [Start] | No |
| Original Scanning Area Cleaning Method*1 | Display the cleaning method | No |

T-10-12

# Function Settings

## Common

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

*2 Indicates information that is delivered only if the number of output trays in the host machine and client machines is the same.

*3 Indicates items that cannot be used with the default setting. Also, the Adobe LiveCycle Rights Management ES is necessary. Contact your local authorized Canon dealer.

| Item | Setting Description | Device information Delivery Available |
|---|---|---|
| Paper Feed Settings | | |
| Paper Drawer Auto Selection On/Off | Copy, Printer, Access Stored Files, Receive/Fax*1, Other | No |
| Multi-Purpose Tray | On, Off* | No |
| Other | On*, Off | No |
| Copy | Consider Paper Type : On*, Off | No |
| Suspended Job Timeout On | On, Off* | Yes |
| | 0 to 999 min. (5min*) | |
| Paper Output Settings | | |
| Output Tray Settings | | |
| If the Staple Finisher/Booklet Finisher Is Attached | | |
| Tray A | Copy, Access Stored Files*, Printer, Receive, Fax, Other | No*2 |
| Tray B | Copy*, Access Stored Files*, Printer, Receive, Fax, Other | No*2 |
| Tray C | Copy*, Access Stored Files*, Printer*, Receive, Fax, Other | No*2 |
| Tray Home Position | Off, Tray A*, Tray B, Tray C | No*2 |
| Offset Jobs*1 | On*, Off | Yes |
| Job Separator Between Jobs | On, Off* | Yes |
| Job Separator Between Copies | On, Off* | No |
| Different Paper Sizes for the Output Tray | On*, Off | No |
| Unfinished Tab Paper Forced Output | On, Off* | Yes |
| Print Settings | | |
| Print Priority | | |
| Copy | 1*,2,3 | Yes |
| Printer | 1,2*,3 | Yes |
| Access Stored File, Receive/Fax*1, Other | 1,2,3* | Yes |
| Local Print Default Settings | | |
| Select Paper | All Paper Sources, Auto* | No |
| No. of Prints | 1 to 9,999 sets (1set*) | No |
| Finishing*1 | | |
| If the Stapele Finisher is Attached. | Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Face Up/Face Down | No |
| If the Booklet Finisher is Attached. | Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Saddle Fold, Adjust Fold Position, Face Up/Face Down | No |
| If the Staple Finisher and Puncher Unit-BF1/Professional Puncher Are Attached. | Do Not Collate, Collate (Page Order), Offset, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Hole Punch, Face Up/Face Down | No |

| Item | Setting Description | Device information Delivery Available |
|---|---|---|
| If the Staple Finisher/Booklet Finisher and Paper Folding Unit Are Attached: | Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Fold, Face Up/Face Down | No |
| If the Staple Finisher/Booklet Finisher, Puncher Unit-BF1/ Professional Puncher, and Paper Folding Unit-G1 Are Attached. | Do Not Collate, Collate (Page Order), Offset*, Group (Same Pages), Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Hole Punch, Fold, Face Up/Face Down | No |
| 2-Sided Printing | On, Off* | No |
| Delete File After Printing | On, Off* | No |
| Merge and Print | On, Off* | No |
| Output Report Default Settings | | |
| 2-Sided Printing | On, Off* | Yes |
| Register Form | Register (Solid/Transparent)*1, Delete, Check Print, Details | No |
| Register Characters for Page No./Watermark | Register, Edit, Delete | Yes |
| Copy Set Numbering Option Settings | On, Off* | Yes |
| Number Option ON | | |
| ID/User Name | On, Off* | Yes |
| Date | On, Off* | Yes |
| Text | On, Off* | Yes |
| Secure Watermark/Document Scan Lock*1 | | |
| Forced Secure Watermark/Doc. Scan Lock | | |
| Copy | Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock | Yes |
| Mail Box | Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock | Yes |
| Printer | Do Not Set*, Forced Secure Watermark, Forced Document Scan Lock | Yes |
| Printer Driver Watermark/Doc. Scan Lock | Do Not Set*, Driver Secure Watermark, Driver Doc. Scan Lock | Yes |
| Adjust Background/Character Contrast | Print Settings, Sample Print, Initialize | No |
| Relative Contrast | -7 to +7 (0*) | No |
| Standard Value Settings | 1 to 64 (16*) | No |
| Latent Area Density: | 1 to 36 (8*) | No |
| Adjust TL Code | Dot Size, Dot Density, Relative Contrast (Sample Print), Standard Value Settings, Initialize | No |
| Dot Size | 4* | No |
| Dot Density | Standard*, Rough | No |
| Relative Contrast | -7 to +7 (-1*) | No |
| Standard Value Settings | 1 to 64 (12*) | No |
| Scan Settings*1 | | |
| Timing to Raise Feeder Tray | When Start is pressed*, When Panel Is Touched | Yes |
| Feeder Jam Recovery Method | From 1st Page*, From Stopped Original | Yes |
| Scanner Noise Settings | Speed Priority*, Quiet | Yes |
| Streak Prevention | On*, Off | Yes |
| LTRR/STMT Original Selection | Select Manually, Use LTRR Format*, Use STMT Format | Yes |
| Remote Scan Data Compression Ratio | High Ratio, Normal*, Low Ratio | Yes |
| Remote Scan Gamma Value | Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2 | Yes |
| Auto Online | On, Off* | Yes |
| Auto Offline | On, Off* | Yes |

| Item | | | Setting Description | Device information Delivery Available |
|---|---|---|---|---|
| Generate File | | | | |
| | High Compression Image Quality Level | | | |
| | | Image Level in Text/Photo Mode or Photo Mode | Data Size Priority, Normal*, Image Quality Priority | Yes |
| | | Image Level in Text Mode | Data Size Priority, Normal*, Image Quality Priority | Yes |
| | OCR (Text Searchable) Settings | | | |
| | | Smart Scan | On*, Off | Yes |
| | | No. of OCR File Name Characters | 1 to 24* | Yes |
| | Trace & Smooth Settings | | | |
| | | Outline Graphics | On*, Off | Yes |
| | | Graphics Recognition Level | Normal, Moderate*, High | Yes |
| | | Background Image Level | Data Size Priority, Normal*, Image Quality Priority | Yes |
| | Format PDF to PDF/A | | On, Off* | Yes |
| | Optimize PDF for Web | | On, Off* | Yes |
| | Rights Management Server Settings | | Server URL: 128 characters maximum | No |
| | | | User: 128 characters maximum | No |
| | | | Password: 24 characters maximum | No |
| | | | Use Password for Each User: On, Off* | No |
| | Document Scan Lock Settings | | | |
| | | Use Document Scan Lock/Embedded. Info. | On*, Off | Yes |
| | | Multiple Embedded Information Action | Continue Job, Cancel Job* | Yes |
| | | Use Document Scan Lock | On*, Off | Yes |
| | | Restrict Options | On*, Off | Yes |

T-10-13

## Copy*1

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Register/Edit Favorite Settings | Register/Edit, Delete (M1 to M9), Check Content | No |
| Change Default Settings | Register, Initialize | No |
| Register Options Shortcuts | | |
| Shortcut 1 | Finishing*, Unassigned | No |
| Shortcut 2 | 2-Sided*, Unassigned | No |
| Shortcut 3 | Density* Unassigned | No |
| Shortcut 4 | Original Type*, Unassigned | No |
| Shortcut 5 | Unassigned* | No |
| Register Options Shortcuts | | |
| Shortcut 1 | No Settings* | No |
| Shortcut 2 | No Settings* | No |
| Shortcut 3 | No Settings* | No |
| Shortcut 4 | No Settings* | No |
| Shortcut 5 | No Settings* | No |
| Shortcut 6 | No Settings* | No |
| Auto Collate | On*, Off | Yes |
| Image Orientation Priority | On, Off* | Yes |
| Auto Orientation | On*, Off | Yes |
| Photo Printout Mode | On, Off* | Yes |
| Register Remote Device for Cascade Copy | Register (Seven devices maximum), Details, Delete | No |
| Cascade Copy Communication Timeout | 5 to 30* seconds | Yes |

T-10-14

## Printer

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Output Report | | |
| PCL | | |
| Configuration Page | Print | No |
| Font List | Print | No |
| PS | | |
| Configuration Page | Start | No |
| Font List | Print | No |
| Printer Settings | Setting the Machine (PS/PCL/UFR II Printer) | Yes |
| Restrict Printer Jobs | On, Off* | Yes |
| PDL Selection (Plug-n-play) | UFR II, PCL5e, PCL6, PS3, FAX | No |

T-10-15

## Send

* Default Setting

*1 Indicates items that appear only when the appropriate optional equipment is attached.

*4 Indicates item that appears only if the Super G3 2nd Line Fax Board is installed in addition to installing the Super G3 FAX Board.

*5 Indicates item that appears only if the Super G3 3rd/4th Line Fax Board is installed in addition to installing the Super G3 FAX Board.

*6 Indicates item that appears according to the telephone line number specified in [No. of Sending Lines].

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Output Report | | |
| TX/RX User Data List | Print List | No |
| Fax User Data List*1 | Print List | No |
| Common Settings | | |
| Register Favorite Settings Edit Favorite Settings | Register/Edit, Delete (M1 to M18), Check Content | Yes |
| Show Comment | On, Off* | Yes |
| Display Confirmation for Favorite Settings | On*, Off | No |
| Default Screen | Standard*, Address Book, One-Touch, Favorite Settings | No |
| Change Default Settings | Register, Initialize | No |
| Register Options Shortcuts | | |
| Shortcut 1 | 2-Sided Original*, Unassigned | No |
| Shortcut 2 | Different Size Originals*, Unassigned | No |
| TX Report | For Error Only*, On, Off | Yes |
| Report with TX Image | On*, Off | Yes |
| Communication Management Report | | |
| Auto Print (100 Transmissions) | On*, Off | Yes |
| Specify Print Time | On, Off* | Yes |
| Timer Setting | 00 : 00 to 23 : 59 (00 : 00*) | Yes |
| Send/Receive Separate | On, Off* | Yes |
| TX Terminal ID | Print*, Do Not Print | Yes |
| | TX Terminal ID: Print<br>• Printing Position: Outside<br>• Display Destination Unit Name: On, Off<br>• Telephone # Mark*1: FAX, TEL | Yes |
| Delete Failed TX Jobs | On*, Off | Yes |
| Retry Times | 0 to 5 times (3 times*) | Yes |
| Data Compression Ratio | High Ratio, Normal*, Low Ratio | Yes |
| YCbCr TX Gamma Value | Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2 | Yes |
| Use Divided Chunk Send for WebDAV TX | On*, Off | Yes |
| Limit New Destinations | | |
| Fax | On, Off* | Yes |
| E-mail | On, Off* | Yes |
| I-Fax | On, Off* | Yes |
| File | On, Off* | Yes |
| Always Add Device Signature to Send*1 | On*, Off | Yes |
| Restrict File Formats | On, Off* | Yes |

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| E-mail/Ifax Settings | | |
| Register Unit Name | 24 characters maximum | No |
| Communication Settings | | |
| SMTP RX | On, Off* | Yes |
| POP | On* Off | Yes |
| SMTP Server | Server name or IP Address (48 characters maximum) | No |
| E-mail Address | 64 characters maximum | No |
| POP Server | Server name or IP Address (48 characters maximum) | No |
| POP Address | 64 characters maximum | No |
| POP Password | 32 characters maximum | No |
| POP Interval | 0* to 99 (If the interval is set to '0', the incoming e-mail is not checked automatically.) | No |
| POP AUTH Method | Standard*/APOP/POP AUTH | Yes |
| POP Authentication before Sending | On, Off* | No |
| SMTP Authentication (SMTP AUTH) | On, Off* | No |
| User | User name for SMTP authentication (64 characters maximum) | No |
| Password | Password for SMTP authentication (32 characters maximum) | No |
| Allow SSL (POP) | On, Off* | No |
| Allow SSL (SMTP Send) | On, Off* | No |
| Display Auth. Screen When Send | On, Off* | No |
| Allow SSL (SMTP Receive) | Always SSL,On, Off* | No |
| Maximum Data Size for Sending | 0=(Off)/1 to 99 MB (3MB*) | Yes |
| Default Subject | 40 characters maximum (Attached Image*) | Yes |
| Use SMTP Authentication for Each User | On*, Off | No |
| Specify Authentication User Dest. to Reply | On, Off* | No |
| Set Authorized User Destination to Sender | On*, Off | No |
| Allow Sending to Unregistered Destinations | On, Off* | Yes |
| Full Mode TX Timeout | 1 to 99 hours (24hours*) | Yes |
| Print MDN/DSN upon Receipt | On, Off* | Yes |
| Use Send via Server | On, Off* | Yes |
| Allow MDN Not via Server | On*, Off | Yes |
| Restrict TX Destination Domain | | |
| Restrict Sending to Domains | On, Off* | Yes |
| Permitted Domains | Register, Details/Edit, Delete | No |
| Fax Settings*1 | | |
| Default Screen | Standard*, Address Book | No |
| Change Default Settings | Register, Initialize | No |
| Register Options Shortcuts | | |
| Shortcut 1 | Density*, Unassigned | No |
| Shortcut 2 | Original Type*, Unassigned | No |
| Shortcut 3 | 2-Sided Original*, Unassigned | No |
| Shortcut 4 | Different Size Originals*, Unassigned | No |
| Register Sender Name (TTI) | 01 to 99: Register/Edit, Delete | No |
| ECM TX | On*, Off | Yes |

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Set Pause Time | 1 to 15 seconds (2 seconds*) | Yes |
| Auto Redial | On*, Off | Yes |
| Redial Times | 1 to 10 times (2 times*) | Yes |
| Redial Interval | 2 to 99 minutes (2 minutes*) | Yes |
| Redial When TX Error | Error and 1st page*, All pages, Off | Yes |
| Check Dial Tone Before Sending | On*, Off | Yes |
| Fax TX Report | For Error Only*, On, Off | Yes |
| Report with TX Image | On*, Off | Yes |
| Fax Activity Report | | |
| Auto Print (40 Transmissions) | On*, Off | Yes |
| Specify Print Time | On, Off* | Yes |
| Timer Setting | 00: 00 to 23: 59 (00: 00*) | Yes |
| Send/Receive Separate | On, Off* | Yes |
| Set Line | | |
| Register Unit Telephone Number | 20 digits maximum | No |
| Register Unit Name | 24 characters maximum | No |
| Select Line Type | Pulse, Tone* | No |
| Line | If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed:<br>• Line 2 | No |
| | If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed:<br>• Line 2, Line 3, Line 4 | No |
| Select TX Line | If the Super G3 FAX Board is installed:<br>• Line 1: Priority TX*, Prohibit TX | No |
| | If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed:<br>• Line 1: Priority TX*, Prohibit TX<br>• Line 2: Priority TX, Prohibit TX | No |
| | If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed:<br>• Line 1: Priority TX*, Prohibit TX<br>• Line 2: Priority TX, Prohibit TX<br>• Line 3: Priority TX, Prohibit TX<br>• Line 4: Priority TX, Prohibit TX | No |
| TX Start Speed | 33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps | Yes |
| PIN Code Access | On, Off* | Yes |
| Confirm Entered Fax Number | On, Off* | Yes |
| Allow Fax Driver TX | On*, Off | Yes |
| Remote Fax TX Settings | | |
| Remote Fax Server Address | Host name or the IP address (48 characters maximum) | No |
| TX Timeout | 1 to 99 hours (24 hours*) | Yes |
| No. of Sending Lines | 1 to 4 lines (1*) | No |
| Select Priority Line | Auto*, Line 1, Line 2[*6], Line 3[*6], Line 4[*6] | No |
| Remote Fax Settings | | |
| Use Remote Fax | On*, Off | Yes |

T-10-16

## Receive/Forward

* Default Setting

*1 Indicates items that appear only when the appropriate optional equipment is attached.

*7 Indicates item that is not delivered as device information.

Receive Type, Details/Edit, Delete, Print List, E-Mail Priority

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Output Report | | |
| TX/RX User Data List | Print List | No |
| Fax User Data List*1 | Print List | No |
| Common Settings | | |
| Print on Both Side | On, Off* | Yes |
| Select Drawer | | |
| Switch A | On*, Off | Yes |
| Switch B | On*, Off | Yes |
| Switch C | On*, Off | Yes |
| Switch D | On*, Off | Yes |
| Reduce Fax RX Size | On*, Off | Yes |
| | On<br>• Reduction Mode: Auto<br>• Reduction %: 90%<br>• Reduction Direction: Vertical Only | Yes |
| 2 On 1 Log | On, Off* | Yes |
| Received Page Footer | Print, Do Not Print* | Yes |
| Handle Files with Forwarding Errors | Always Print*, Store/Print, Off | Yes |
| Forwarding Settings | Type, Validate/Invalidate, Register (Registered Forwarding Settings), Forward w/o Conditions, E-Mail Priority, Details/Edit, Delete, Print List | Yes*7 |
| Set Fax/I-Fax Inbox | | |
| Set/Register Confidential Fax Inboxes | | |
| Inbox No. | 00 to 49 | Yes |
| Register Box Name: | 24 characters maximum | Yes |
| PIN | Seven digits maximum | Yes |
| URL Send Settings | - | Yes |
| Initialize | - | No |
| Memory RX Inbox PIN | Seven digit number | No |
| Use Fax Memory Lock*1 | On, Off* | Yes |
| Use I-Fax Memory Lock | On, Off* | Yes |
| Memory Lock Start Time | Everyday, Select Days, Off* | Yes |
| Memory Lock End Time | Everyday, Select Days, Off* | Yes |
| Divided Data RX Timeout | 0 to 99 hours (24hours*) | Yes |
| Always Send Notice for RX Errors | *On, Off | Yes |
| Fax Settings*1 | | |
| ECM RX | On*, Off | Yes |
| Fax RX Report | For Error Only, On, Off* | Yes |
| Confidential Fax Inbox RX Report | On*, Off | Yes |
| RX Start Speed | 33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps | Yes |
| RX Password | 20 digits maximum | No |

## Store/Access Files

* Default Setting

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Common Settings | | |
| Scan and Store Settings | | |
| Register/Edit Favorite Settings | Register, Rename, Delete (Up to 9 Set Keys), Check Content | No |
| Photo Printout Mode | On, Off* | Yes |
| Change Default Settings | Register, Initialize | No |
| Access Stored Files Settings | | |
| Register/Edit Favorite Settings | Register, Rename, Delete (Up to 9 Set Keys), Check Content | No |
| Change Default Settings | Register, Initialize | No |
| Mail Box Settings | | |
| Set/Register Mail Boxes | | |
| Mail Box No. | 00 to 99 | No |
| Register Box Name | 24 characters maximum | Yes |
| PIN | Seven digits | Yes |
| Time Until File Auto Delete | 0 (Off), 1, 2, 3, 6, 12 hours, 1, 2, 3*, 7, 30 days | No |
| URL Send Settings | - | Yes |
| Print upon Storing from Printer Driver | On, Off* | Yes |
| Initialize | - | No |
| Settings for All Mail Boxes | | |
| Time Until File Auto Delete | 0 (Off), 1, 2, 3, 6, 12 hours, 1, 2, 3*, 7, 30 days | No |
| Print When Storing from Printer Driver | On, Off* | No |
| Advanced Box Settings | | |
| Open to Public | By SMB, By WebDAV, Off* | Yes |
| WebDAV Server Settings | | |
| Authentication Type | Basic, Off* | Yes |
| Use SSL | On*, Off | Yes |
| Allow to Create Personal Space | On*, Off | Yes |
| Delete All Personal Spaces | Delete | No |
| Initialize Shared Space | Initialize | No |
| Prohibit Writing from External | On*, Off | Yes |
| Authentication Management | On, Off* | Yes |
| File Formats Allowed for Storing | Printable Formats Only*, Common Office Formats, All | Yes |
| Network Settings | | |
| Network Place Settings | Register, Details, Delete | No |
| Protocol for External Reference | | |
| SMB | On*, Off | No |
| WebDAV | On*, Off | No |

T-10-18

## Encrypted Secure Print

* Default Setting

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Only Allow Encrypted Print Jobs*1 | On, Off* | Yes |

T-10-19

# Set Destination

## Set Destination

* Default Setting

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | | Setting Description | Device Information Delivery Available |
|---|---|---|---|
| Address List | | Address List 1 to 10, One-touch | No |
| | | Print List: Print | No |
| Register Destinations | | Register New Dest., Details/Edit, Delete, Search by Name | Yes |
| Rename Address List | | Rename | Yes |
| Register One-Touch | | Register/Edit, Delete | Yes |
| Change Default Display of Address Book | | Local*, LDAP Server, Remote | No |
| Address Book PIN | | Seven digit number | Yes |
| Manage Address Book Access Numbers | | On, Off* | Yes |
| Register LDAP Server | | Register, Details/Edit, Delete, Register/Edit LDAP Search, Print List | No |
| Auto Search When Using LDAP Server | | On* Off | Yes |
| Acquire Remote Address Book | | | |
| | Acquire Address Book | On*, Off | Yes |
| | Remote Address Book Server Address | IP Address or Host Name (128 characters maximum) | No |
| | Communication Timeout | 15 to 120 seconds (30 seconds*) | Yes |
| | Fax TX Line Auto Select Adjustment | On*, Off | Yes |
| Make Remote Address Book Open | | | |
| | Make Address Book Open | On, Off* | Yes |

T-10-20

# Management Settings

## User Management

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | | Setting Description | Device Information Delivery Available |
|---|---|---|---|
| System Manager Information Settings | | | |
| | System Manager ID | Seven digit number maximum (7654321*) | Yes |
| | System PIN | Seven digit number maximum (7654321*) | Yes |
| | System Manager | 32 characters maximum | Yes |
| | E-Mail Address | 64 characters maximum | Yes |
| | Contact Information | 32 characters maximum | Yes |
| | Comment | 32 characters maximum | Yes |
| Department ID Management | | | |
| | Department ID Management | On, Off* | Yes |
| | Register PIN | Register, Edit, Delete, Limit Functions | Yes |
| | Page Totals | Clear, Print List, Clear All Totals, Large2 Count Management | No |
| | Allow Printer Jobs with Unknown IDs | On*, Off | Yes |
| | Allow Remote Scan Jobs With Unknown IDs | On*, Off | Yes |

T-10-21

## Device Management

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | | | Setting Description | Device Information Delivery Available |
|---|---|---|---|---|
| Device Information Settings | | | | |
| | Device Name | | 32 characters maximum | No |
| | Location | | 32 characters maximum | No |
| Device Information Delivery Settings | | | | |
| | Register Destinations | | Auto Search/Register, Register, Details, Delete, Print List | No |
| | | | Auto Search/Register<br>• List<br>• Search Depth (Router): 1 to 8<br>• Display Host Name: On, Off<br>• Start Auto Search | No |
| | Set Auto Settings | | Everyday, Specify Days, Off* | No |
| | | Settings/Registration Value | On, Off*<br>Network Settings: Include, Exclude* | No |
| | | Dept. ID | On, Off* | No |
| | | Address Book | On, Off* | No |
| | | Web Access Favorites | On, Off* | No |
| | | Printer Settings | On, Off* | No |
| | | Paper Information | On, Off* | No |

| Item | | | Setting Description | Device Information Delivery Available |
|---|---|---|---|---|
| | Manual Delivery | | | |
| | | Settings/Registration Value | On, Off*<br>Network Settings: Include, Exclude* | No |
| | | Dept. ID | On, Off* | No |
| | | Address Book | On, Off* | No |
| | | Web Access Favorites | On, Off* | No |
| | | Printer Settings | On, Off* | No |
| | | Paper Information | On, Off* | No |
| | Restrictions Receiving Device Information | | On*, Off | No |
| | Restore Data | | Settings/Registration Value, Dept. ID, Address Book, Web Access Favorites, Printer Settings, Paper Information | No |
| | Restrict Restriction for Each Function | | | |
| | | Settings/Registration Value | On*, Off | No |
| | | Dept. ID | On*, Off | No |
| | | Address Book | On*, Off | No |
| | | Web Access Favorites | On, Off* | No |
| | | Printer Settings | On*, Off | No |
| | | Paper Information | On*, Off | No |
| | Set Paper Information | | All, Basic Only* | No |
| | Communication Log | | Details, Print List, Report Settings | No |
| | | | Report Settings<br>• Auto Print (100 transmissions): On*, Off | No |
| | | | • Specify Print Time: On, Off* | No |
| | | | -00: 00* to 23:59 | No |
| | | | • Separate Report Type: On, Off* | No |
| Limited Functions Mode[*1] | | | | |
| | | Finissher Tray A/B/C | On, Off* | |
| | | Finissher Saddle Stitch Unit | On, Off* | |
| | | Folding Unit | On, Off* | No |
| | | Finissher Puncher | On, Off* | |
| Confirm Device Signature Certificate | | | Certificate Details: Certificate | No |
| Confirm User Signature Certificate | | | Certificate Details: Certificate | No |
| Certificate Settings | | | | |
| | Certificate Settings: Generate Key: Generate Network Communication Key | | | |
| | | Key Name | 24 characters maximum | No |
| | | Key Algorithm | RSA, Display only | No |
| | | Key Length (bit) | 512*, 1024 | No |
| | | Start Date of Validity | Month, Date, Year (2000/01/01~2048/12/31) | No |
| | | End Date of Validity | Month, Date, Year (2000/01/01~2048/12/31) | No |
| | | Country/Region | Country/Region name and code (2 characters maximum) (US*) | No |
| | | State | 24 characters maximum | No |
| | | City | 24 characters maximum | No |
| | | Organization | 24 characters maximum | No |
| | | Organization Unit | 24 characters maximum | No |
| | | Common Name | IP address or FQDN (24 characters maximum) | No |

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Certificate Settings:Generate Key | | |
| Generate/Update Device Signature Key*1 | - | No |
| Certificate Settings: Key and Certificate List: Key and Certificate List for this Machine Editing Key Pairs and Server Certificates Confirming a Key Pair and Device Certificate | | |
| Certificate Details | Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/Public Key/Cert. Thumbprint/Certificate | No |
| Delete | - | No |
| Display Use Location | Displays what the key pair is being used for | No |
| Certificate Settings: Key and Certificate List: Key and Certificate List for Users* | | |
| Certificate Details | Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/ Public Key/Cert. Thumbprint(SHA1)/Certificate | No |
| Delete | - | No |
| Certificate Settings: CA Certificate List | | |
| Certificate Details | Version/Serial Number/Signature Algorithm/Issue Destination/Start Date of Validity/End Date of Validity/Issuer/ Public Key/Cert. Thumbprint/Certificate | No |
| Delete | - | No |
| Certificate Settings: Register Key and Certificate | | |
| Register | Key Name (24 characters maximum)<br>Password (24 characters maximum) | No |
| Delete | - | No |
| Certificate Settings: Register CA Certificate | | |
| Register | - | No |
| Delete | - | No |
| Display Status Before Authentication | On*, Off | No |
| Display Log | On*, Off | No |
| | Off<br>• Obtain Job Log From Management Software: Permit, Do Not Allow* | No |

T-10-22

## License/Other

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | Setting Description | Device Information Delivery Available |
|---|---|---|
| Register License | 24 characters maximum | No |
| MEAP Settings | | |
| Print System Information | Print | No |
| SSL Settings | On<br>• Use SSL:On, Off* | No |
| Remote UI | On*, Off | Yes |
| | On<br>• Use SSL:On, Off* | No |
| Use Reference Print | On, Off* | Yes |
| Delete Message Board Contents | Clear | No |

T-10-23

## Data Management

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is attached.

| Item | | Setting Description | Device Information Delivery Available |
|---|---|---|---|
| HDD Data Complete Deletion* | | | |
| | Timing of Deletion | During Job*, After Job | No |
| | Overwrite Method for Deletion Mode | 0 (Null) Data 1 Time*, Random Data 1 Time, Random Data 3 Times, DOD Standard | No |
| Initialize All Data/Settings | | Initialize | No |
| TPM Settings | | Use TPM: On, Off* | No |
| | | Backup TPM Key, Restore TPM Key | No |

T-10-24

# Backup Data

| Data | Location | Replace | | | | | | Delete | | | | | | | | | | | | Backup by User | | | Backup by Service | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | User function | | | | | | Service function | | | | | | | | | | | | |
| | | Replace the HDD / All format | Replace the Main PCB 1 | Replace the Main PCB 2 | DC Cont-roller PCB | Reader Cont-roller PCB | Replace the TPM PCB | Initialize All Data/ Settings | Settings/Registration > Function Settings: Copy > Change Default Settings > Initialize | Send > Common Settings > Change Default Settings > Initialize | Send > Fax Settings > Change Default Settings > Initialize | Printer Settings > Custom Settings > Initialize | Advanced Box Settings > Delete Personal/ Shared Space > Delete All | Function> CLEAR > MN-CONT | Function> CLEAR > MMI | Function> CLEAR > DC-CON | Function > CLEAR >R-CON | Function> CLEAR > ADRS-BK | Function> CLEAR > JV-CASHE | Yes/ No | Method | Location to be stored | Yes/No: Back-up | Yes/No: Re-store | Method | Location to be stored |
| Address List | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | Clear | - | - | - | Clear | - | Yes | Remote UI (block of Export/Import) | PC | No | Yes (*1) | USB memory | - |
| Forwarding Settings | HDD/ SRAM (MCON2) | Clear | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | PC | No | Yes (*1) | USB memory | - |
| Settings / Registration | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preferences | SRAM (MCON2) | - | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | Clear | Clear (*2) | - | - | - | Yes (*3) | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Adjustment/ Maintenance | SRAM (MCON2) | - | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Function Settings | SRAM (MCON2/ DCON) | - | - | Clear | Clear | - | - | Clear | Clear | Clear | Clear | - | - | Clear | Clear | Clear (*4) | Clear (*5) | - | - | Yes (*6) | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Set Destination | SRAM (MCON2) | - | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Management Settings | SRAM (MCON2) | - | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | Clear | - | - | - | - | Yes (*7) | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Printer Settings | SRAM (MCON2) | - | - | Clear | - | - | - | Clear | - | - | - | Clear | - | Clear | Clear | - | - | - | - | Yes | Remote UI (Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| Set Paper Information | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | Yes | Remote UI (block of Export/Import) | PC | No | No | - | - |
| Setting items for each menu in Main Menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Favorite Settings | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes (*8) | Remote UI (block of Export/Import) | PC | Yes | Yes (*9) | SST (Meapback) | PC |
| Default Settings | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes (*10) (*11) | SST (Meapback) | PC |
| Shortcut settings for “Options” | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes (*10) | SST (Meapback) | PC |
| Previous Settings | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes (*10) | SST (Meapback) | PC |
| Setting items for Quick Menu | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Button Size information | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) (*12) | SST (Meapback) | PC |
| Wallpaper Setting | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) (*12) | SST (Meapback) | PC |
| Button information in Quick Menu | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) (*12) | SST (Meapback) | PC |
| Restrict Quick Menu | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) (*12) | SST (Meapback) | PC |
| Setting items for Main Menu | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Button settings in Main Menu | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | - | Yes | Yes (*1) | USB memory | - |

| Data | Location | Replace | | | | | | Delete | | | | | | | | | | | | Backup by User | | | Backup by Service | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | User function | | | | | | Service function | | | | | | | | | | | | |
| | | Replace the HDD / All format | Replace the Main PCB 1 | Replace the Main PCB 2 | DC Cont-roller PCB | Reader Cont-roller PCB | Replace the TPM PCB | Initialize All Data/ Settings | Settings/Registration > Function Settings | | | | Advanced Box Settings > Delete Personal/ Shared Space > Delete All | Function> CLEAR > MN-CONT | Function> CLEAR > MMI | Function> CLEAR > DC-CON | Function > CLEAR >R-CON | Function> CLEAR > ADRS-BK | Function> CLEAR > JV-CASHE | Yes/ No | Method | Location to be stored | Yes/No | | Method | Location to be stored |
| | | | | | | | | | Copy > Change Default Settings > Initialize | Send > Common Settings > Change Default Settings > Initialize | Send > Fax Settings > Change Default Settings > Initialize | Printer Settings > Custom Settings > Initialize | | | | | | | | | | | Back-up | Re-store | | |
| Button settings on the top of the screen | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | - | Yes | Yes (*1) | USB memory | - |
| Wallpaper Setting for Main Menu | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | - | Yes | Yes (*1) | USB memory | - |
| Other settings for Main Menu | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | Clear | - | - | - | - | Yes | Remote UI (block of Export/Import) | - | Yes | Yes (*1) | USB memory | - |
| Box settings | | | | | | | | | | | | | | | | | | | | | | | | | | |
| User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver) | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | Clear | - | - | - | - | - | Yes (*13) | Remote UI (Bacup/ Restore) | PC/USB-HDD | No | Yes (*1) | USB memory | - |
| Image data of User Box, Confidential Fax Box, and System Box Image Data | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - (*29) | - | - | - | - | - | Yes (*13) | Remote UI (Bacup/ Restore) | PC/USB-HDD | No | Yes (*1) | USB memory | - |
| Data File of Advanced Box | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | Clear | - | - | - | - | - | - | Yes (*14) | Remote UI (Bacup/ Restore) | PC/USB-HDD (*15) | No | Yes | USB memory | - |
| Advanced box settings | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced box account | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes (*16) | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) (*17) | SST (Meapback), USB memory | PC |
| Network place setting information | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | Yes | Remote UI (block of Export/Import) | PC | No | Yes (*1) | USB memory | - |
| Box settings | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Image forms stored in the Form Composition mode | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | Yes (*13) | Remote UI (Bacup/ Restore) | PC | No | No | - | - |
| Web browser settings | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Web Access setting information | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | Yes (*18) | Remote UI (block of Export/Import) | PC | Yes | Yes (*1) | SST, Download Menu(HDD/USB) | PC |
| MEAP settings | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MEAP application | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes | SST (Meapback) | PC |
| License files for MEAP applications | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | SMS | PC | Yes | Yes | SST (Meapback) | PC |
| User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H) | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes | SSO-H | PC | Yes | Yes | SST (Meapback) | PC |
| Data saved using MEAP applications | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | Yes (*19) | - | - | Yes | Yes | SST (Meapback) | PC |
| SMS (Service Management Service) password of MEAP | HDD | Clear | - | - | - | - | - | Clear (*20) | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes | SST (Meapback) | PC |
| Universal data settings | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Data | Location | Replace | | | | | | Delete | | | | | | | | | | | | Backup by User | | | Backup by Service | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | User function | | | | | | Service function | | | | | | | | | | | | |
| | | Replace the HDD / All format | Replace the Main PCB 1 | Replace the Main PCB 2 | DC Cont-roller PCB | Reader Cont-roller PCB | Replace the TPM PCB | Initialize All Data/ Settings | Settings/Registration > Function Settings | | | | Advanced Box Settings > Delete Personal/ Shared Space > Delete All | Function> CLEAR > MN-CONT | Function> CLEAR > MMI | Function> CLEAR > DC-CON | Function > CLEAR >R-CON | Function> CLEAR > ADRS-BK | Function> CLEAR > JV-CASHE | Yes/ No | Method | Location to be stored | Yes/No | | Method | Location to be stored |
| | | | | | | | | | Copy > Change Default Settings > Initialize | Send > Common Settings > Change Default Settings > Initialize | Send > Fax Settings > Change Default Settings > Initialize | Printer Settings > Custom Settings > Initialize | | | | | | | | | | | Back-up | Re-store | | |
| Unsent documents (documents waiting to be sent with the Delayed Send mode) | SRAM (MCON2) HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | Clear | Clear | - | - | - | - | No | - | - | No | No | - | - |
| Job logs | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | No | - | - | No | No | - | - |
| Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen) | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | No | - | - | No | No | - | - |
| Auto Adjust Gradation setting values | HDD (SRAM (MCON2)) | - | - | Clear | - | - | - | Clear | - | - | - | - | - | Clear | - | - | - | - | - | No | - | - | Yes | Yes | SST, Download Menu(HDD/USB) | PC |
| PS font | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | - | No | - | - | No | No | - | - |
| Key information to be used for encryption when TPM is OFF | SRAM (MCON2) | Clear (*21) | - | Clear (*22) | - | - | - | Clear | - | - | - | - | - | Clear (*22) | - | - | Clear (*22) | - | - | No (*23) | - | - | No | No | - | - |
| Key and settings information to be used for encryption when TPM is ON | SRAM (MCON2) HDD TPM Board | Clear (*24) | - | Clear (*25) | - | - | Clear | Clear (*26) | - | - | - | - | - | Clear (*25) | - | - | Clear (*25) | - | - | Yes (*27) | Settings/ Registration Management Settings > Data Managemnet > TPM Settings | USB memory | No | No | - | - |
| Service Mode | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Service mode setting values (MN-CON) | SRAM (MCON2) | - | - | Clear | - | - | - | - | - | - | - | - | - | Clear | Clear | - | - | - | - | Yes | Remote UI (block of Export/ Import) COPIER> OPTION> USER> SMD-EXPT> ON Only (*28) | PC | Yes | Yes | SST, Download Menu(HDD/USB) | HDD/ USB |
| Service mode setting values (DC-CON) | SRAM (DC-CON) | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | - | - | - | Yes | | PC | Yes | Yes | COPIER> FUNCTION> SYSTEM> DSRAMBUP | HDD |
| Service mode setting values (R-CON) | EEPROM (R-CON) | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | - | - | Yes | | PC | Yes | Yes | COPIER> FUNCTION> SYSTEM> RSRAMBUP | HDD |
| Audit Log | HDD | Clear | - | - | - | - | - | Clear | - | - | - | - | - | - | - | - | - | - | Clear | No | - | - | Yes | Yes | SST (Meapback) | PC |

T-10-25

| | |
|---|---|
| *1 | If there are the backup data which exported in USB memory, Restore is possible in Download Menu (USB). |
| *2 | The following items are Deleted.<br>Preferences > Paper Settings > Register Envelope Drawer<br>Preferences > Paper Settings > B5/EXEC Paper Selection<br>Preferences > Paper Settings > A5R/STMTR Paper Selection |
| *3 | An exclusion item:<br>Preferences > Timer/Energy Settings > [Adjust Time]/[Date/Time Settings] |
| *4 | The following items are Deleted.<br>Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off<br>Function Settings > Common > Paper Feed Settings > Feed Method Switch |

| | |
|---|---|
| *5 | The following items are Deleted.<br>Function Settings > Common > Scan Settings > Scanner Noise Settings<br>Function Settings > Common > Scan Settings > Timing to Raise Feeder Tray<br>Function Settings > Common > Scan Settings > Streak Prevention |
| *6 | The following data are impossible of backup<br>Function Settings > Common > Print Settings > Register Form<br>Function Settings > Receive/Forward > Common Settings > Set Fax/I-Fax Inbox |
| *7 | The following data are impossible of backup<br>Management Settings > User Management > Department ID Management > Page Totals |
| *8 | Backup is available only "Favorite Settings" in "Scan to Send" |
| *9 | :If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data. |
| *10 | :If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data. |
| *11 | If there are the backup data which exported in USB memory except a history, Restore is possible in Download Menu (USB). |
| *12 | :If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data. |
| *13 | Login System Administrator and do backup. |
| *14 | IIt is possible only when logging in as an administrator user.<br>When ON is selected for the authentication management of Advanced Box, Advanced Box account needs to be exported in advance and imported at restoration. |
| *15 | When the optional high-capacity HDD is installed, backup can be done only to USB-HDD. |
| *16 | When ON is selected for the authentication management of Advanced Box, Advanced Box account needs to be exported in advance and imported at restoration. |
| *17 | :If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data. |
| *18 | Only "favorites of web browser" can be backed improves when You perform individual export of RUI. |
| *19 | Only when MEAP applications have a backup function |
| *20 | Since the password is TPM-encrypted and saved, password backed up after all data/settings have been initialized cannot be restored. When all data/settings have been initialized, initialize the password using a switch license for password initialization.<br>[Reference] Since TPM encryption key is updated when all data/settings are initialized, the password which was backed up cannot be read. |
| *21 | If the backup key information in the HDD is missing, it is automatically recovered from the key in the SRAM (MCON2). |
| *22 | If the key information in the SRAM (MCON2) is missing, it is automatically recovered from the backup key in the HDD. |
| *21,22 | When You change Main PCB 2 and HDD at the same time, the automatic restoration of the key information is not performed. |
| *23 | No means is available to back up externally. |
| *24 | An error code is displayed when the TPM setting is “ON”. After all data/settings are initialized after restart, select "ON" for the TPM setting to enable the TPM setting. |
| *25 | If the TPM key information in the SRAM of the HDD or the Main Controller PCB 2 becomes missing, the key information in the SRAM is automatically recovered from the backup of the common key in the HDD. Then the internal state of TPM setting changes to "ON". Note that the TPM setting needs to be manually changed to "ON" since "OFF" is displayed for UI. |
| *26 | TPM settings becomes "OFF" when all data/settings are initialized. |
| *27 | Backup only against TPM PCB failure is possible. In addition, restoration cannot be done to other machines whose TPM setting is set to "ON". |
| *28 | Backup is possible in SramImg, DSRAMBUP, RSRAMBUP.<br>When You set it in COPIER>OPTION>USER>SMD-EXPT>ON, a backup/restore is possible in Service Mode Settings from the Remote UI.<br>There is a backup button on the TOP page of the service mode.<br>HDD and USB memory can back up Service Mode Settings by backup button.<br>The contents of Settings/Registration become the object of the collective backup.<br>The exclusion item refers to "a list of DCM backup exclusion items". |
| *29 | Because clearing MN-CONT changes the memory reception setting to "OFF", the image data saved in the Memory RX Inbox is automatically printed after restart. After a print, it is deleted from a system box. |

T-10-26

Appendix > Backup Data

| DCM backup exclusion items | | | |
|---|---|---|---|
| Preferences | Paper Settings | Paper Type Management Settings | Custom Type > Details/Edit > Change |
| | | Register Envelope Drawer | |
| | | Register Multi-Purpose Tray Defaults | |
| | Display Settings | Erasing the Remaining Toner Error Message | |
| | Timer/Energy Settings | Current Time Adjustment | |
| | Network | Output Report | |
| | | TCP/IP Settings | IP Address Settings (IPv4) |
| | | | IP Address Settings (IPv6) |
| | | | IPP Print Settings |
| | | | SSL Settings |
| | | | Confirm Dept. ID PIN |
| | | IPSec settings | |
| | | IEEE802.1X Settings | |
| | | Firewall Settings | IP Address Block Log |
| | Accessibility | Voice Navigation Settings | Tune Microphone |
| Adjustment/ Maintenance | Adjust Image Quality | Auto Adjust Gradation | |
| | | Conect Shading | |
| | | Auto Correct Color Mismatch | |
| | Adjust Action | Saddle Stitcher Staple Repositioning | |
| | | Change Fold/Stitch Position | |
| | Maintenance | | |
| Function Settings | Common | Paper Feed Settings | Paper Drawer Auto Selection On/Off |
| | | Print Settings | Local Print Default Settings |
| | | | Form for Superimpose Image |
| | | | Secure Watermark Settings > Adust Background/ Character Contrast |
| | Printer | | |
| | Send | Output Report | TX/RX User Data List |
| | | | Fax User Data List |
| | | E-Mail/I-Fax Settings | Communication Settings |
| | Receive/Forward | Output Report | |
| | | Common Settings | Forwarding Settings |
| | Store/Access Files | Mail Box Settings | Settings for All Mail Boxes |
| | | Advanced Box Settings | Delete All Personal Spaces |
| | | Network Settings | |
| Set Destination | Address Lists | | |
| | Register Destinations | | |
| | Register LDAP Server | | |
| | Auto Serarch when using LDAP Server | | |
| Management Settings | User Management | Department ID Management | Page Totals |
| | | | Print List |
| | Device Management | Device Information Delivery Settings | Manual Delivery |
| | | | Resor Data |
| | | | Communication Log |
| | | | Register Destination > Auto Serch/Registor |
| | | Restrict Receiving Device Information | |
| | | Limit Function when Security key is off | |
| | | Certificate Settings | |
| | License/Other | Register License | |
| | | MEAP Settings | Print System Information |
| | | | Remote UI On/Off |
| | | | Delete Massage Board Contents |
| | Data Management | Back Up | |
| | | Restore | |
| | | Back Up/Restore Log | |
| | | Initialize All Data/Settings | |
| | | TPM Settings | |

T-10-27

# Soft Counter List

## Soft counter specifications

000 to 099: Remote copy
100 to 199: Total
200 to 299: Copy
300 to 399: Print
400 to 499: Copy and print
500 to 599: Scan
600 to 699: Box
700 to 799: Reception print
800 to 899: Report print
900 to 999: Transmission

- Explanation of symbols shown in the table -

- yes: Valid counter for this machine
- 4C: Full color
- Mono: Mono color (Y, M, C / R, G, B / retro monochrome)
- Bk: Single black color
- L: Large size (larger than B4 size)
- S: Small size (smaller than B4 size)
- Numbers 1, 2 indicated under "Counter Details": Number of counts for large size paper
- It can be changed by the service mode (COPIER > OPTION > USER > B4_L_CNT) so that the paper larger than B4 size can be counted as large size paper.
- Copy: Local copy + remote copy
- Copy A: Local copy + remote copy + box print
- Print: PDL print + report print + box print
- Print A: PDL print + report print
- Scan: Black and white scan + color scan

## Soft Counter List

### 000 to 099

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 002 | Remote copy (full color 1) |
| no | 003 | Remote copy (full color 2) |
| no | 004 | Remote copy (mono color 1) |
| no | 005 | Remote copy (mono color 2) |
| yes | 006 | Remote copy (black and white 1) |
| yes | 007 | Remote copy (black and white 2) |
| no | 008 | Remote copy (full color / large) |
| no | 009 | Remote copy (full color / small) |
| no | 010 | Remote copy (mono color / large) |
| no | 011 | Remote copy (mono color / small) |
| yes | 012 | Remote copy (black and white / large) |
| yes | 013 | Remote copy (black and white / small) |
| no | 014 | Remote copy (full color + mono color / large) |
| no | 015 | Remote copy (full color + mono color / small) |
| no | 016 | Remote copy (full color + mono color 2) |
| no | 017 | Remote copy (full color + mono color 1) |
| no | 018 | Remote copy (full color / large / double sided) |
| no | 019 | Remote copy (full color / small / double sided) |
| no | 020 | Remote copy (mono color / large / double sided) |
| no | 021 | Remote copy (mono color / small / double sided) |
| yes | 022 | Remote copy (black and white / large / double sided) |
| yes | 023 | Remote copy (black and white / small / double sided) |
| no | 071 | Toner bottle black |
| no | 072 | Toner bottle yellow |
| no | 073 | Toner bottle magenta |
| no | 074 | Toner bottle cyan |
| no | 075 | Toner bottle clear |
| no | 081 | Toner bottle + Halfway replacement black |
| no | 082 | Toner bottle + Halfway replacement yellow |
| no | 083 | Toner bottle + Halfway replacement magenta |
| no | 084 | Toner bottle + Halfway replacement cyan |
| no | 091 | 1/10 Toner bottle black |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 092 | 1/10 Toner bottle yellow |
| no | 093 | 1/10 Toner bottle magenta |
| no | 094 | 1/10 Toner bottle cyan |
| no | 095 | 1/10 Toner bottle clear |

T-10-30

## 100 to 199

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 101 | Total 1 |
| yes | 102 | Total 2 |
| yes | 103 | Total (large) |
| yes | 104 | Total (small) |
| no | 105 | Total (full color 1) |
| no | 106 | Total (full color 2) |
| yes | 108 | Total (black and white 1) |
| yes | 109 | Total (black and white 2) |
| no | 110 | Total (mono color / large) |
| no | 111 | Total (mono color / small) |
| yes | 112 | Total (black and white / large) |
| yes | 113 | Total (black and white / small) |
| yes | 114 | Total 1 (double sided) |
| yes | 115 | Total 2 (double sided) |
| yes | 116 | large (double sided) |
| yes | 117 | small (double sided) |
| no | 118 | Total (mono color 1) |
| no | 119 | Total (mono color 2) |
| no | 120 | Total (full color / large) |
| no | 121 | Total (full color / small) |
| no | 122 | Total (full color + mono color / large) |
| no | 123 | Total (full color + mono color / small) |
| no | 124 | Total (full color + mono color 2) |
| no | 125 | Total (full color + mono color 1) |
| yes | 126 | Total A1 |
| yes | 127 | Total A2 |
| yes | 128 | Total A (large) |
| yes | 129 | Total A (small) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 130 | Total A (full color 1) |
| no | 131 | Total A (full color 2) |
| yes | 132 | Total A (black and white 1) |
| yes | 133 | Total A (black and white 2) |
| no | 134 | Total A (mono color / large) |
| no | 135 | Total A (mono color / small) |
| yes | 136 | Total A (black and white / large) |
| yes | 137 | Total A (black and white / small) |
| yes | 138 | Total A 1 (double sided) |
| yes | 139 | Total A 2 (double sided) |
| yes | 140 | large A (double sided) |
| yes | 141 | small A (double sided) |
| no | 142 | Total A (mono color 1) |
| no | 143 | Total A (mono color 2) |
| no | 144 | Total A (full color / large) |
| no | 145 | Total A (full color / small) |
| no | 146 | Total A (full color + mono color / large) |
| no | 147 | Total A (full color + mono color / small) |
| no | 148 | Total A (full color + mono color 2) |
| no | 149 | Total A (full color + mono color 1) |
| yes | 150 | Total B1 |
| yes | 151 | Total B2 |
| yes | 152 | Total B (large) |
| yes | 153 | Total B (small) |
| no | 154 | Total B (full color 1) |
| no | 155 | Total B (full color 2) |
| yes | 156 | Total B (black and white 1) |
| yes | 157 | Total B (black and white 2) |
| no | 158 | Total B (mono color / large) |
| no | 159 | Total B (mono color / small) |
| yes | 160 | Total B (black and white / large) |
| yes | 161 | Total B (black and white / small) |
| yes | 162 | Total B1 (double sided) |
| yes | 163 | Total B2 (double sided) |
| yes | 164 | large B (double sided) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 165 | small B (double sided) |
| no | 166 | Total B (mono color 1) |
| no | 167 | Total B (mono color 2) |
| no | 168 | Total B (full color / large) |
| no | 169 | Total B (full color / small) |
| no | 170 | Total B (full color + mono color / large) |
| no | 171 | Total B (full color + mono color / small) |
| no | 172 | Total B (full color + mono color 2) |
| no | 173 | Total B (full color + mono color 1) |
| no | 191 | Toner replacement / yellow |
| no | 192 | Toner replacement / magenta |
| no | 193 | Toner replacement / cyan |
| no | 194 | Toner replacement / black |
| no | 195 | Toner replacement / clear |
| no | 196 | Toner replacement / expansion |

T-10-31

## 200 to 299

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 201 | Copy (Total 1) |
| yes | 202 | Copy (Total 2) |
| yes | 203 | Copy (large) |
| yes | 204 | Copy (small) |
| yes | 205 | Copy A (Total 1) |
| yes | 206 | Copy A (Total 2) |
| yes | 207 | Copy A (large) |
| yes | 208 | Copy A (small) |
| yes | 209 | Local copy (Total 1) |
| yes | 210 | Local copy (Total 2) |
| yes | 211 | Local copy (large) |
| yes | 212 | Local copy (small) |
| yes | 213 | Remote copy (Total 1) |
| yes | 214 | Remote copy (Total 2) |
| yes | 215 | Remote copy (large) |
| yes | 216 | Remote copy (small) |
| no | 217 | Copy (full color 1) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 218 | Copy (full color 2) |
| no | 219 | Copy (mono color 1) |
| no | 220 | Copy (mono color 2) |
| yes | 221 | Copy (black and white 1) |
| yes | 222 | Copy (black and white 2) |
| no | 223 | Copy (full color / large) |
| no | 224 | Copy (full color / small) |
| no | 225 | Copy (mono color / large) |
| no | 226 | Copy (mono color / small) |
| yes | 227 | Copy (black and white / large) |
| yes | 228 | Copy (black and white / small) |
| no | 229 | Copy (full color + mono color / large) |
| no | 230 | Copy (full color + mono color / small) |
| no | 231 | Copy (full color + mono color / 2) |
| no | 232 | Copy (full color + mono color / 1) |
| no | 233 | Copy (full color / large / double sided) |
| no | 234 | Copy (full color / small / double sided) |
| no | 235 | Copy (mono color / large / double sided) |
| no | 236 | Copy (mono color / small / double sided) |
| yes | 237 | Copy (black and white / large / double sided) |
| yes | 238 | Copy (black and white / small / double sided) |
| no | 245 | Copy A (full color 1) |
| no | 246 | Copy A (full color 2) |
| no | 247 | Copy A (mono color 1) |
| no | 248 | Copy A (mono color 2) |
| yes | 249 | Copy A (black and white 1) |
| yes | 250 | Copy A (black and white 2) |
| no | 251 | Copy A (full color / large) |
| no | 252 | Copy A (full color / small) |
| no | 253 | Copy A (mono color / large) |
| no | 254 | Copy A (mono color / small) |
| yes | 255 | Copy A (black and white / large) |
| yes | 256 | Copy A (black and white / small) |
| no | 257 | Copy A (full color +mono color / large) |
| no | 258 | Copy A (full color +mono color / small) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 259 | Copy A (full color +mono color 2) |
| no | 260 | Copy A (full color +mono color 1) |
| no | 261 | Copy A (full color / large / double sided) |
| no | 262 | Copy A (full color / small / double sided) |
| no | 263 | Copy A (mono color / large / double sided) |
| no | 264 | Copy A (mono color / small / double sided) |
| yes | 265 | Copy A (black and white / large / double sided) |
| yes | 266 | Copy A (black and white / small / double sided) |
| no | 273 | Local copy (full color 1) |
| no | 274 | Local copy (full color 2) |
| no | 275 | Local copy (mono color 1) |
| no | 276 | Local copy (mono color 2) |
| yes | 277 | Local copy (black and white 1) |
| yes | 278 | Local copy (black and white 2) |
| no | 279 | Local copy (full color / large) |
| no | 280 | Local copy (full color / small) |
| no | 281 | Local copy (mono color / large) |
| no | 282 | Local copy (mono color / small) |
| yes | 283 | Local copy (black and white / large) |
| yes | 284 | Local copy (black and white / small) |
| no | 285 | Local copy (full color + mono color / large) |
| no | 286 | Local copy (full color + mono color / small) |
| no | 287 | Local copy (full color + mono color 2) |
| no | 288 | Local copy (full color + mono color 1) |
| no | 289 | Local copy (full color / large / double sided) |
| no | 290 | Local copy (full color / small / double sided) |
| no | 291 | Local copy (mono color / large / double sided) |
| no | 292 | Local copy (mono color / small / double sided) |
| yes | 293 | Local copy (black and white / large / double sided) |
| yes | 294 | Local copy (black and white / small / double sided) |

T-10-32

## 300 to 399

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 301 | Print (Total 1) |
| yes | 302 | Print (Total 2) |
| yes | 303 | Print (large) |
| yes | 304 | Print (small) |
| yes | 305 | Print A (Total 1) |
| yes | 306 | Print A (Total 2) |
| yes | 307 | Print A (large ) |
| yes | 308 | Print A (small) |
| no | 309 | Print (full color 1) |
| no | 310 | Print (full color 2) |
| no | 311 | Print (mono color 1) |
| no | 312 | Print (mono color 2) |
| yes | 313 | Print (black and white 1) |
| yes | 314 | Print (black and white 2) |
| no | 315 | Print (full color / large) |
| no | 316 | Print (full color / small) |
| no | 317 | Print (mono color / large) |
| no | 318 | Print (mono color / small) |
| yes | 319 | Print (black and white / large) |
| yes | 320 | Print (black and white / small) |
| no | 321 | Print (full color +mono color / large) |
| no | 322 | Print (full color +mono color / small) |
| no | 323 | Print (full color +mono color / 2) |
| no | 324 | Print (full color +mono color / 1) |
| no | 325 | Print (full color / large / double sided) |
| no | 326 | Print (full color / small / double sided) |
| no | 327 | Print (mono color / large / double sided) |
| no | 328 | Print (mono color / small / double sided) |
| yes | 329 | Print (black and white / large / double sided) |
| yes | 330 | Print (black and white / small / double sided) |
| yes | 331 | PDLPrint (Total 1) |
| yes | 332 | PDLPrint (Total 2) |
| yes | 333 | PDLPrint (large) |
| yes | 334 | PDLPrint (small) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 335 | PDLPrint (full color 1) |
| no | 336 | PDLPrint (full color 2) |
| yes | 339 | PDLPrint (black and white 1) |
| yes | 340 | PDLPrint (black and white 2) |
| no | 341 | PDLPrint (full color / large) |
| no | 342 | PDLPrint (full color / small) |
| yes | 345 | PDLPrint (black and white / large) |
| yes | 346 | PDLPrint (black and white / small) |
| no | 351 | PDLPrint (full color / large / double sided) |
| no | 352 | PDLPrint (full color / small / double sided) |
| yes | 355 | PDLPrint (black and white / large / double sided) |
| yes | 356 | PDLPrint (black and white / small / double sided) |

T-10-33

## 400 to 499

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 401 | Copy + print (full color / large) |
| no | 402 | Copy + print (full color / small) |
| yes | 403 | Copy + print (black and white / large) |
| yes | 404 | Copy + print (black and white / small) |
| yes | 405 | Copy + print (black and white 2) |
| yes | 406 | Copy + print (black and white 1) |
| no | 407 | Copy + print (full color + mono color / large) |
| no | 408 | Copy + print (full color + mono color / small) |
| no | 409 | Copy + print (full color + mono color / 2) |
| no | 410 | Copy + print (full color + mono color / 1) |
| yes | 411 | Copy + print (large) |
| yes | 412 | Copy + print (small) |
| yes | 413 | Copy + print (2) |
| yes | 414 | Copy + print (1) |
| no | 415 | Copy + print (mono color / large) |
| no | 416 | Copy + print (mono color / small) |
| no | 417 | Copy + print (full color / large / double sided) |
| no | 418 | Copy + print (full color / small / double sided) |
| no | 419 | Copy + print (mono color / large / double sided) |
| no | 420 | Copy + print (mono color / small / double sided) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 421 | Copy + print (black and white / large / double sided) |
| yes | 422 | Copy + print (black and white / small / double sided) |
| no | 431 | Clear mixed + mono-clear (total 1) |
| no | 432 | Clear mixed + mono-clear (total 2) |
| no | 433 | Clear mixed + mono-clear (full-page 1) |
| no | 434 | Clear mixed + mono-clear (full-page 2) |
| no | 435 | Clear mixed + mono-clear (partial 1) |
| no | 436 | Clear mixed + mono-clear (partial 2) |
| no | 437 | Clear mixed + mono-clear (full-page / large) |
| no | 438 | Clear mixed + mono-clear (full-page / small) |
| no | 439 | Clear mixed + mono-clear (partial / large) |
| no | 440 | Clear mixed + mono-clear (partial / small) |
| no | 441 | Clear mixed (total 1) |
| no | 442 | Clear mixed (total 2) |
| no | 443 | Clear mixed (full-page 1) |
| no | 444 | Clear mixed (full-page 2) |
| no | 445 | Clear mixed (partial 1) |
| no | 446 | Clear mixed (partial 2) |
| no | 447 | Clear mixed (full-page / large) |
| no | 448 | Clear mixed (full-page / small) |
| no | 449 | Clear mixed (partial / large) |
| no | 450 | Clear mixed (partial / small) |
| no | 451 | Mono-clear (total 1) |
| no | 452 | Mono-clear (total 2) |
| no | 453 | Mono-clear (full-page 1) |
| no | 454 | Mono-clear (full-page 2) |
| no | 455 | Mono-clear (partial 1) |
| no | 456 | Mono-clear (partial 2) |
| no | 457 | Mono-clear (full-page / large) |
| no | 458 | Mono-clear (full-page / small) |
| no | 459 | Mono-clear (partial / large) |
| no | 460 | Mono-clear (partial / small) |

T-10-34

## 500 to 599

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 501 | Scan (Total 1) |
| yes | 502 | Scan (Total 2) |
| yes | 503 | Scan (large) |
| yes | 504 | Scan (small) |
| yes | 505 | Black and white Scan (Total 1) |
| yes | 506 | Black and white Scan (Total 2) |
| yes | 507 | Black and white Scan (large) |
| yes | 508 | Black and white Scan (small) |
| yes | 509 | Color scan (Total 1) |
| yes | 510 | Color scan (Total 2) |
| yes | 511 | Color scan (large) |
| yes | 512 | Color scan (small) |

T-10-35

## 600 to 699

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 601 | Box print (Total 1) |
| yes | 602 | Box print (Total 2) |
| yes | 603 | Box print (large) |
| yes | 604 | Box print (small) |
| no | 605 | Box print (full color 1) |
| no | 606 | Box print (full color 2) |
| no | 607 | Box print (mono color 1) |
| no | 608 | Box print (mono color 2) |
| yes | 609 | Box print (black and white 1) |
| yes | 610 | Box print (black and white 2) |
| no | 611 | Box print (full color / large) |
| no | 612 | Box print (full color / small) |
| no | 613 | Box print (mono color / large) |
| no | 614 | Box print (mono color / small) |
| yes | 615 | Box print (black and white / large) |
| yes | 616 | Box print (black and white / small) |
| no | 617 | Box print (full color + mono color / large) |
| no | 618 | Box print (full color + mono color / small) |
| no | 619 | Box print (full color + mono color 2) |
| no | 620 | Box print (full color + mono color 1) |
| no | 621 | Box print (full color / large / double sided) |
| no | 622 | Box print (full color / small / double sided) |
| no | 623 | Box print (mono color / large / double sided) |
| no | 624 | Box print (mono color / small / double sided) |
| yes | 625 | Box print (black and white / large / double sided) |
| yes | 626 | Box print (black and white / small / double sided) |
| yes | 631 | Memory media print (Total 1) |
| yes | 632 | Memory media print (Total 2) |
| yes | 633 | Memory media print (large) |
| yes | 634 | Memory media print (small) |
| yes | 639 | Memory media print (black and white 1) |
| yes | 640 | Memory media print (black and white 2) |
| yes | 645 | Memory media print (black and white / large) |
| yes | 646 | Memory media print (black and white / small) |
| yes | 655 | Memory media print (black and white / large / double sided) |
| yes | 656 | Memory media print (black and white / small / double sided) |

T-10-36

## 700 to 799

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 701 | Reception print (Total 1) |
| yes | 702 | Reception print (Total 2) |
| yes | 703 | Reception print (large) |
| yes | 704 | Reception print (small) |
| no | 705 | Reception print (full color 1) |
| no | 706 | Reception print (full color 2) |
| no | 707 | Reception print (Gray scale 1) |
| no | 708 | Reception print (Gray scale 2) |
| yes | 709 | Reception print (black and white 1) |
| yes | 710 | Reception print (black and white 2) |
| no | 711 | Reception print (full color / large) |
| no | 712 | Reception print (full color / small) |
| no | 713 | Reception print (Gray scale / large) |
| no | 714 | Reception print (Gray scale / small) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 715 | Reception print (black and white / large) |
| yes | 716 | Reception print (black and white / small) |
| no | 717 | Reception print (full color + Gray scale / large) |
| no | 718 | Reception print (full color + Gray scale / small) |
| no | 719 | Reception print (full color + Gray scale 2) |
| no | 720 | Reception print (full color + Gray scale 1) |
| no | 721 | Reception print (full color / large / double sided) |
| no | 722 | Reception print (full color / small / double sided) |
| no | 723 | Reception print (Gray scale / large / double sided) |
| no | 724 | Reception print (Gray scale / small / double sided) |
| yes | 725 | Reception print (black and white / large / double sided) |
| yes | 726 | Reception print (black and white / small / double sided) |
| yes | 727 | Advance box print (Total 1) |
| yes | 728 | Advance box print (Total 2) |
| yes | 729 | Advance box print (large) |
| yes | 730 | Advance box print (small) |
| no | 731 | Advance box print (full color 1) |
| no | 732 | Advance box print (full color 2) |
| yes | 733 | Advance box print (black and white 1) |
| yes | 734 | Advance box print (black and white 2) |
| no | 735 | Advance box print (full color / large) |
| no | 736 | Advance box print (full color / small) |
| yes | 737 | Advance box print (black and white / large) |
| yes | 738 | Advance box print (black and white / small) |
| no | 739 | Advance box print (full color / large / double sided) |
| no | 740 | Advance box print (full color / small / double sided) |
| yes | 741 | Advance box print (black and white / large / double sided) |
| yes | 742 | Advance box print (black and white / small / double sided) |
| yes | 743 | Network print (Total 1) |
| yes | 744 | Network print (Total 2) |
| yes | 745 | Network print (large) |
| yes | 746 | Network print (small) |
| no | 747 | Network print (full color 1) |
| no | 748 | Network print (full color 2) |
| yes | 749 | Network print (black and white 1) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 750 | Network print (black and white 2) |
| no | 751 | Network print (full color / large) |
| no | 752 | Network print (full color / small) |
| yes | 753 | Network print (black and white / large) |
| yes | 754 | Network print (black and white / small) |
| no | 755 | Network print (full color / large / double sided) |
| no | 756 | Network print (full color / small / double sided) |
| yes | 757 | Network print (black and white / large / double sided) |
| yes | 758 | Network print (black and white / small / double sided) |
| yes | 759 | Mobile print (Total 1) |
| yes | 760 | Mobile print (Total 2) |
| yes | 761 | Mobile print (large) |
| yes | 762 | Mobile print (small) |
| no | 763 | Mobile print (full color 1) |
| no | 764 | Mobile print (full color 2) |
| yes | 765 | Mobile print (black and white 1) |
| yes | 766 | Mobile print (black and white 2) |
| no | 767 | Mobile print (full color / large) |
| no | 768 | Mobile print (full color / small) |
| yes | 769 | Mobile print (black and white / large) |
| yes | 770 | Mobile print (black and white / small) |
| no | 771 | Mobile print (full color / large / double sided) |
| no | 772 | Mobile print (full color / small / double sided) |
| yes | 773 | Mobile print (black and white / large / double sided) |
| yes | 774 | Mobile print (black and white / small / double sided) |

T-10-37

## 800 to 899

| Valid or invalid | Number | Counter Details |
|---|---|---|
| yes | 801 | Report print (Total 1) |
| yes | 802 | Report print (Total 2) |
| yes | 803 | Report print (large) |
| yes | 804 | Report print (small) |
| no | 805 | Report print (full color 1) |
| no | 806 | Report print (full color 2) |
| no | 807 | Report print (Gray scale 1) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 808 | Report print (Gray scale 2) |
| yes | 809 | Report print (black and white 1) |
| yes | 810 | Report print (black and white 2) |
| no | 811 | Report print (full color / large) |
| no | 812 | Report print (full color / small) |
| no | 813 | Report print (Gray scale / large) |
| no | 814 | Report print (Gray scale / small) |
| yes | 815 | Report print (black and white / large) |
| yes | 816 | Report print (black and white / small) |
| no | 817 | Report print (full color + Gray scale / large) |
| no | 818 | Report print (full color + Gray scale / small) |
| no | 819 | Report print (full color + Gray scale 2) |
| no | 820 | Report print (full color + Gray scale 1) |
| no | 821 | Report print (full color / large / double sided) |
| no | 822 | Report print (full color / small / double sided) |
| no | 823 | Report print (Gray scale / large / double sided) |
| no | 824 | Report print (Gray scale / small / double sided) |
| yes | 825 | Report print (black and white / large / double sided) |
| yes | 826 | Report print (black and white / small / double sided) |

T-10-38

## 900 to 999

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 901 | Copy scan total 1 (color) |
| no | 902 | Copy scan total 1 (black and white) |
| no | 903 | Copy scan total 2 (color) |
| no | 904 | Copy scan total 2 (black and white) |
| no | 905 | Copy scan total 3 (color) |
| no | 906 | Copy scan total 3 (black and white) |
| no | 907 | Copy scan total 4 (color) |
| no | 908 | Copy scan total 4 (black and white) |
| no | 909 | Local copy scan (color) |
| no | 910 | Local copy scan (black and white) |
| no | 911 | Remote copy scan (color) |
| no | 912 | Remote copy scan (black and white) |
| no | 913 | Transmission scan total 1 (color) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 914 | Transmission scan total 1 (black and white) |
| yes | 915 | Transmission scan total 2 (color) |
| yes | 916 | Transmission scan total 2 (black and white) |
| yes | 917 | Transmission scan total 3 (color) |
| yes | 918 | Transmission scan total 3 (black and white) |
| no | 919 | Transmission scan total 4 (color) |
| no | 920 | Transmission scan total 4 (black and white) |
| yes | 921 | Transmission scan total 5 (color) |
| yes | 922 | Transmission scan total 5 (black and white) |
| yes | 929 | Transmission scan total 6 (color) |
| yes | 930 | Transmission scan total 6 (black and white) |
| no | 931 | Transmission scan total 7 (color) |
| no | 932 | Transmission scan total 7 (black and white) |
| no | 933 | Transmission scan total 8 (color) |
| no | 934 | Transmission scan total 8 (black and white) |
| no | 935 | Universal transmission scan total (color) |
| no | 936 | Universal transmission scan total (black and white) |
| yes | 937 | Box scan (color) |
| yes | 938 | Box scan (black and white) |
| yes | 939 | Remote scan (color) |
| yes | 940 | Remote scan (black and white) |
| no | 941 | Transmission scan / Fax (color) |
| no | 942 | Transmission scan / Fax (black and white) |
| no | 943 | Transmission scan / I Fax (color ) |
| no | 944 | Transmission scan / I Fax (black and white) |
| yes | 945 | Transmission scan / E-mail (color) |
| yes | 946 | Transmission scan / E-mail (black and white) |
| no | 947 | Transmission scan / FTP (color) |
| no | 948 | Transmission scan / FTP (black and white) |
| no | 949 | Transmission scan / SMB (color) |
| no | 950 | Transmission scan / SMB (black and white) |
| no | 951 | Transmission scan / IPX (color) |
| no | 952 | Transmission scan / IPX (black and white) |
| no | 953 | Transmission scan / Database (color) |
| no | 954 | Transmission scan / Database (black and white) |

| Valid or invalid | Number | Counter Details |
|---|---|---|
| no | 955 | Transmission scan / Local print (color ) |
| no | 956 | Transmission scan / Local print (black and white) |
| no | 957 | Transmission scan / Box (color) |
| no | 958 | Transmission scan / Box (black and white) |
| yes | 959 | Media scan (color) |
| yes | 960 | Media scan (black and white) |
| yes | 961 | Application scan (Total 1) |
| yes | 962 | Application black and white scan (Total 1) |
| yes | 963 | Application color scan (Total 1) |
| yes | 964 | Super Box Local scan (color) |
| yes | 965 | Super Box Local scan (black and white) |

T-10-39

# Removal

## Removal

### Overview

- User data kept by the machine contains address books and inbox documents that users can recognize.
- By using the copy, print, or send function, there is also information left on the HDD of MFPs that is generally not recognizable but can be recovered as documents. (Refer to the illustration on the next page.)
- For security, the user mode is provided to delete data on SRAM and perform overwrite deletion to render user data on HDD unrecoverable.

### User data delete

- To delete user data, execute Settings/Registration > System Management > Initialize All Data/Settings in user mode. Performing Initialize All Data/Settings returns user mode setting values to their factory defaults.
- Usually, one overwrite is enough. Note that increasing the number of overwrite increases the time required for the deletion operation.

Note:
- When you perform Initialize All Data/Settings, license and data of MEAP application are initialized to the state same as when the HDD is replaced. If MEAP application may be used by other users after the machine is removed, disable the MEAP application and uninstall it in advance.
- Performing Initialize All Data/Settings does not delete the license of the system option.

### Deletion of Service Mode Settings

The user mode setting values may have been changed at the user's request. In that case, the service mode setting values should be changed back to the default values before removing the machine.

### Work Procedure

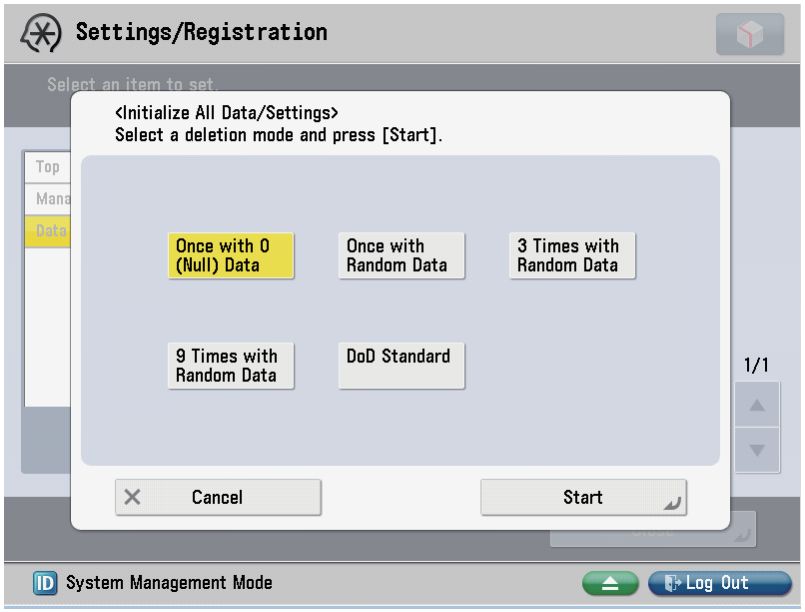
If the user uses MEAP applications, ask the user to uninstall the MEAP applications if necessary.

### User data delete procedure

Settings/Registration > System Management > Initialize

Select a deletion mode

If the user has not given any instruction on which item in the deletion mode should be used, select the default "Once with 0 (Null) Data".

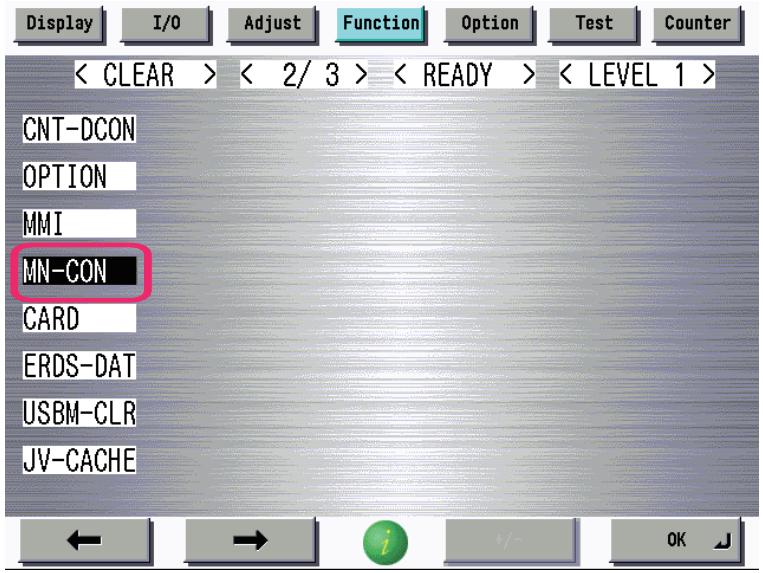



F-10-29

Note:
- When all the data are initialized, the user data on the HDD and the user data on the SRAM of the Main Controller PCB 2 are deleted. For the items to be deleted, refer to the backup list.
- Performing "Initialize All Data" turns auto gradation adjustment values and TPM settings to OFF. Therefore, to enable normal operation the next time, the operation performed at installation is necessary.
- Performing Initialize All Data/Settings does not delete the license of the system option.

## Deletion of Service Mode Setting Values

Service Mode Lev1 > Function> CLEAR > MN-CONT




F-10-30

Note:
When MN-CON clear is executed, the address book on the HDD is not deleted. As for the user data, initialize all the data.