

# Installation Procedure

## **Finisher, Sorter, DeliveryTray Puncher Unit-N1**

**Canon**



## 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

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## Caution

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

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## Symbols Used

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This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
 Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
 REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	Provides a description of the nature of an error indication.

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."



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# Chapter 1 Installation Procedure

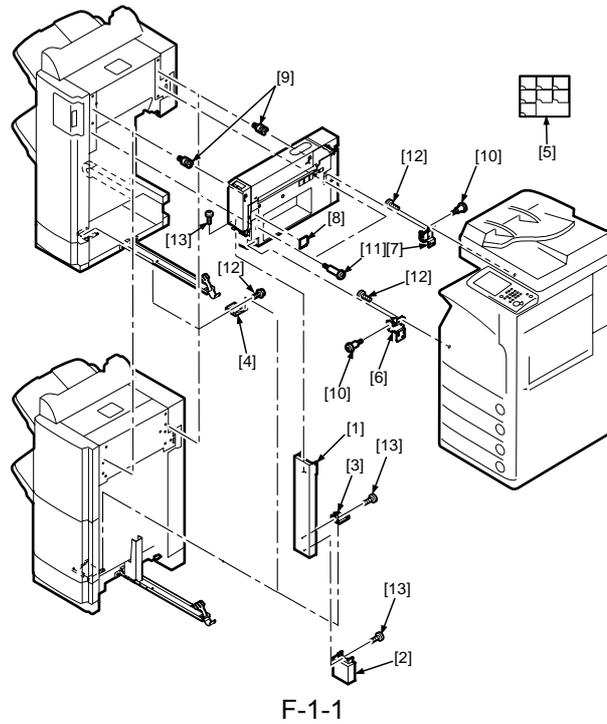
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# 1.1 Making Pre-Checks

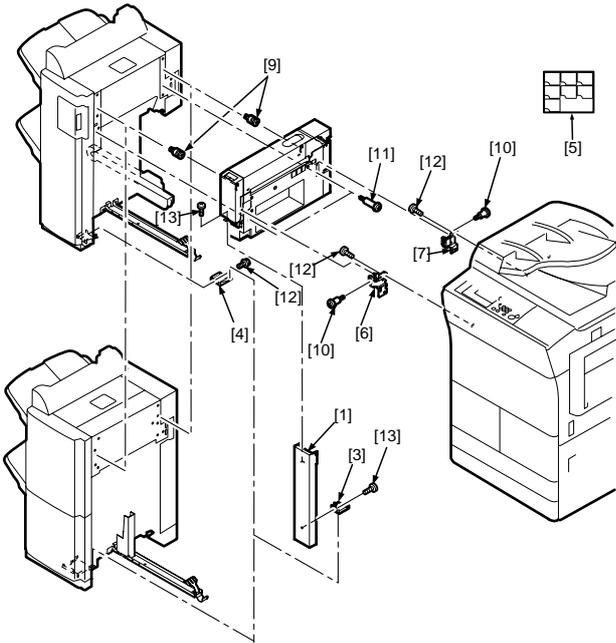
## 1.1.1 Checking the Contents

0003-0202

<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4>

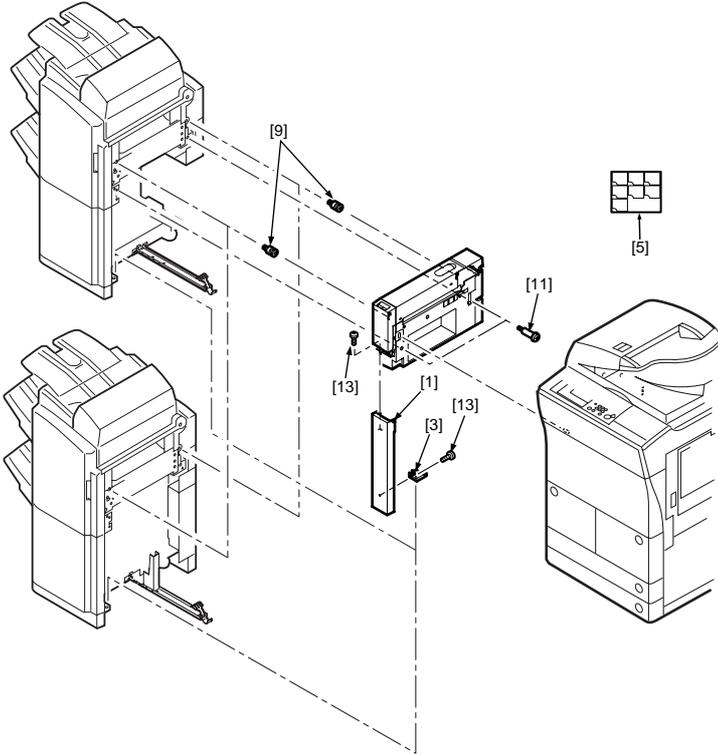


<Finisher-R1/Saddle Finisher-R2>



F-1-2

<Finisher-T1/Saddle Finisher-T2>



F-1-3

## T-1-1

[1] Punch front lower cover	1 pc.	[8] Surface cover	1 pc.*1
[2] Punch front lower extension cover	1 pc.*1	[9] Mounting stepped screw	2 pc.
[3] Punch front lower cover fixing plate 1	1 pc.	[10] Stepped screw (M4)	2 pc.
[4] Punch front lower cover fixing plate 2	1 pc.*2	[11] Stepped screw (M4x10)	2 pc.
[5] Punch Jam Removal label	1 pc.	[12] Screw (binding; M4x6)	5 pc.*3
[6] Punch fixing plate (FC5-4098)	1 pc.*5	[13] Screw (tapping; M4x2)	3 pc.*4
[7] Punch fixing plate (FC5-4076)	1 pc.*5		

\*1: Only for the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4.

\*2: Only for the Finisher-Q1/Finisher-Q3/Finisher-R1.

\*3: 4 pc. used if for the Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2.  
Only 1 screw is used for the Finisher-T1 and the Saddle finisher-T2.

\*4: 2 pc. used if for the Finisher-R1/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2.

\*5: It is not used for the Finisher-T1 or the Saddle finisher-T2. The special fixing plate included in the package of the finisher is used for them.

## 1.1.2 Installing the Accessories

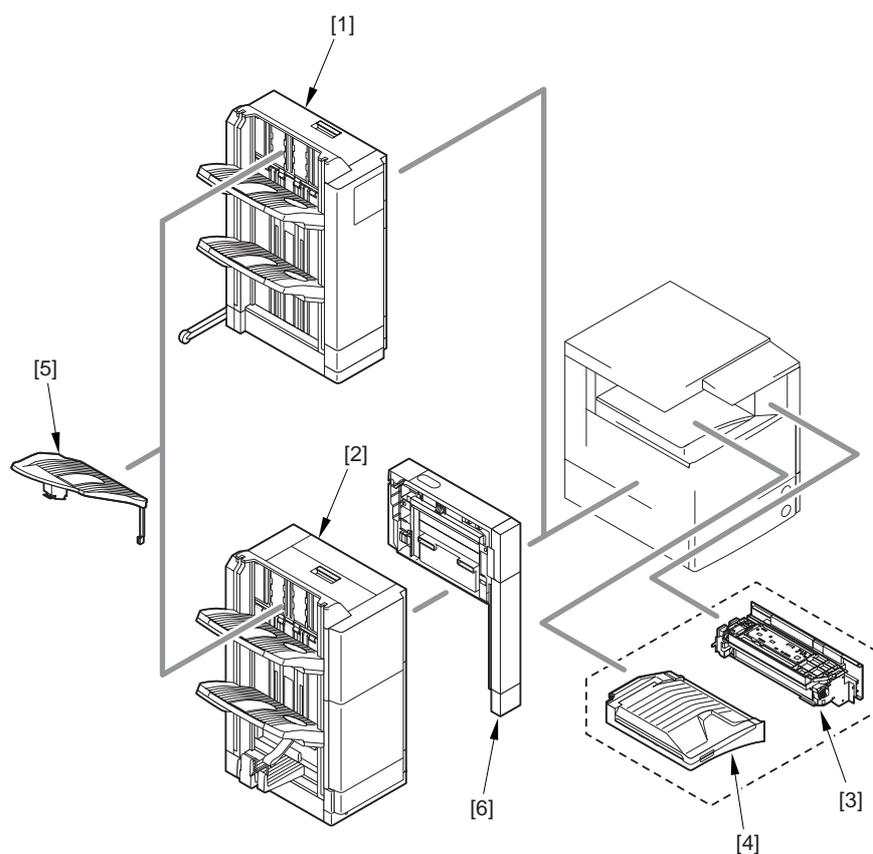
0003-0203

If you are installing the puncher unit at the same time as other accessories, be sure to install the host machine and then install the accessories in the following order:

**<When installing the Finisher-R1 or the Saddle finisher-R2 to the iRC 6800 series, or when installing the Finisher-Q1, Q3, the Saddle finisher-Q2, or Q4 to the iRC 3100 series>**

1. Side paper deck (See the Side Paper Deck Installation Procedure.)
2. Finisher [1], [2] (See "Preparing for the Installation of the Finisher" in the Finisher/Saddle Finisher Installation Procedure.)
3. Inner 2Way Tray-C1 [3] and buffer pass unit [4] (See "Installing the Inner 2Way Tray-C1 and the Buffer Pass Unit" in the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4 Installation Procedure.)
4. Additional finisher tray [5] (See the Additional finisher tray Installation Procedure.)
5. Puncher unit [6] (See the instructions herein.)
6. Connection to the host machine (See "Connecting to the Host Machine" and thereafter.)

In the case of the Finisher-R1/Saddle Finisher-R2, the Inner 2Way Tray-C1 [3] and the buffer pass unit [4] are not part of the configuration. The figure shows the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4.



F-1-4

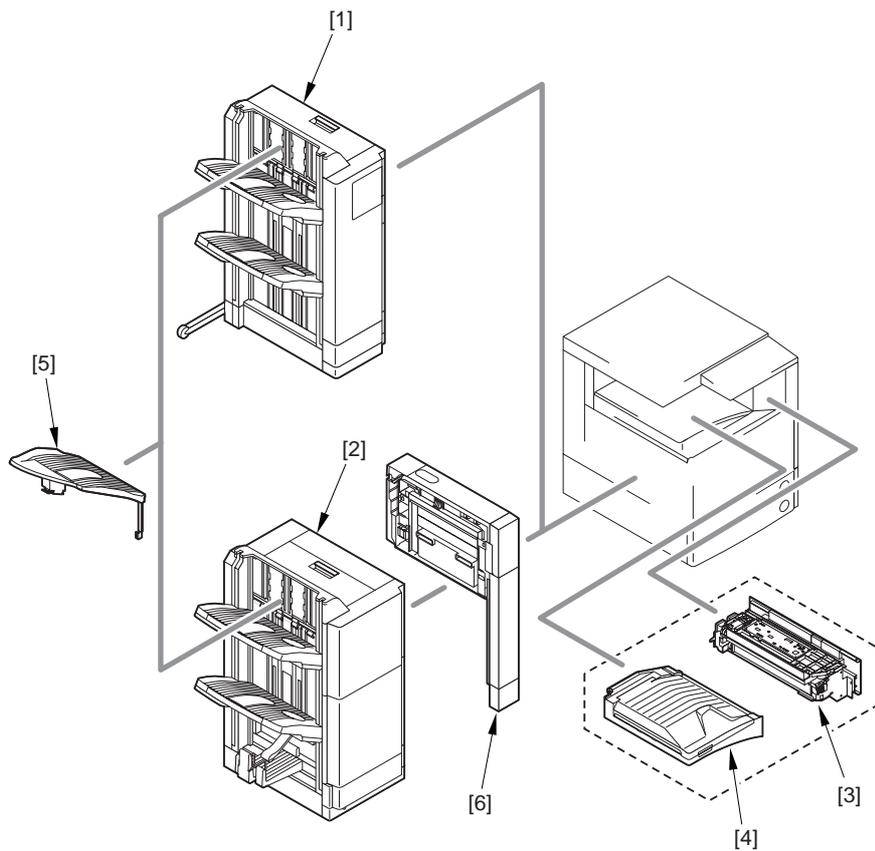


Before starting the work, be sure to go through the following on the host machine:

1. Turn off the control panel power switch.
2. Turn off the main power switch.
3. Disconnect the power cable (from the power outlet).

**<When Installing the Finisher-Q3/Saddle Finisher-Q4 to an iR4570/3570/2870/2270 Series Machine>**

1. Side Paper Deck (See the Side Paper Deck Installation Procedure.)
2. Finisher [1], [2] (See the descriptions up to "Preparing for the Host Machine.")
3. Installing the 3-Way Unit-A1 (See the 3-Way Unit-A1 Installation Procedure.)
4. Installing the Buffer Unit (See "Installing the Buffer Path Unit.")
5. Finisher extra tray [5] (See the Finisher Extra Tray Installation Procedure.)
6. Puncher unit [6] (See the Puncher Unit Installation Procedure.)
7. Connecting to the Host Machine (See "Connecting to the Host Machine" or the instructions under "Connecting to the Host Machine" in the Puncher Unit Installation Procedure.)



F-1-5

\* 3. Some models come with the 3 Way Unit-A1 as standard.

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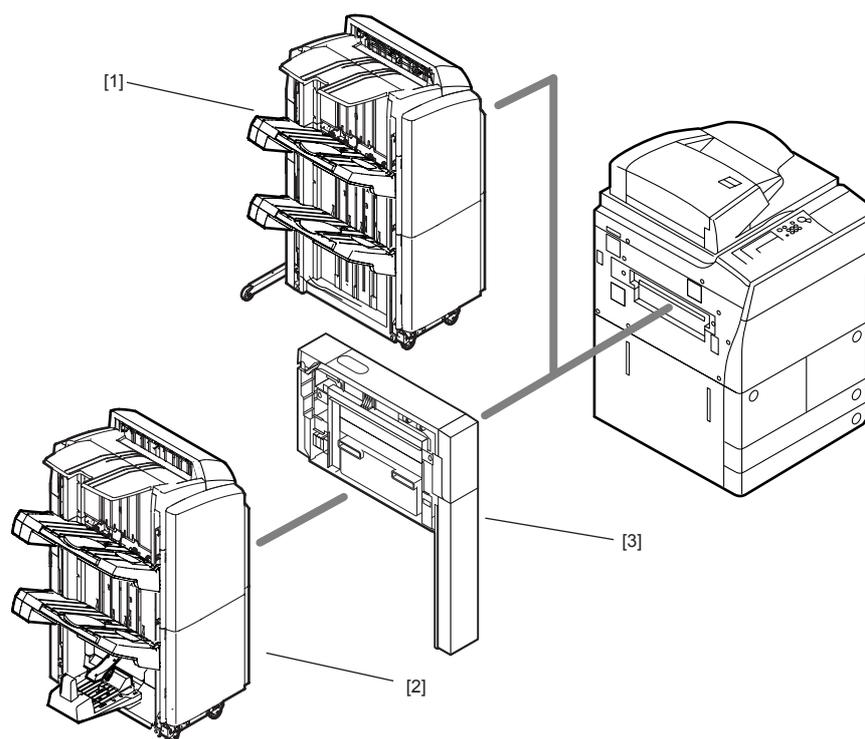


Be sure to go through the following steps on the host machine before starting the work

1. Hold down the control panel power switch for 3 sec or more.
  2. Go through the shutdown sequence as instructed on the screen so that you may turn off the main power switch.
  3. Turn off the main power switch.
  4. Disconnect the power cable (from the wall outlet).
- 

**< When installing the Finisher-T1 or the Saddle finisher-T2 to the iR 6570/5570 series >**

1. Side paper deck (Refer to “Installation Manual for Side paper deck”.)
2. Finisher [1], [2] (Refer to the part from the beginning to the “Preparation of the Finisher for installing” in this manual.)
3. Puncher unit [3] (Refer to “Installation Manual for Puncher unit”.)
4. Connecting to the host machine. (Refer to this manual or the part of “Connecting to the host machine” and the rest in the “Installation Manual for Puncher unit”.)



F-1-6



#### Turning Off the Main Power

When turning off the main power, be sure to go through the following steps to avoid damage to the machine's hard disk:

1. Hold down on the control panel power switch for 3 sec or more.
2. Operate on the touch panel as instructed on the screen for shut-down sequence so that the machine's main power switch may be turned off.
3. Turn off the main power switch.
4. Disconnect the power cable (for the power outlet).

## 1.2 Unpacking and Checking the Components

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### 1.2.1 Unpacking

0003-0205

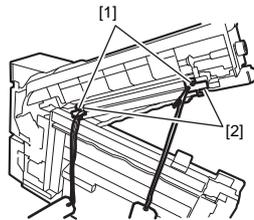
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**MEMO:**

The machine is fitted with tape and cushioning material to protect against vibration and shock during transit. Be sure to remove all of it as instructed before the installation work. It is a good idea to store away the removed tape and cushioning material for possible future relocation and shipment for repairs.

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- 1) Remove the attachments and the puncher unit from the shipping box.
- 2) Remove the tape from the outside of the puncher unit.
- 3) Open the punch upper cover.
- 4) Remove the 2 fixing screws [1] each, and detach the front and rear punch fixing plates [2].



F-1-7

## 1.3 Installation Procedure

### 1.3.1 Disconnecting the Finisher from its Host Machine

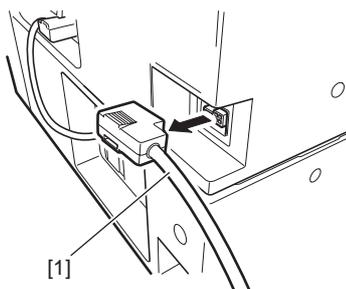
0003-0206



If a finisher has been installed, you will have to disconnect it from its host machine before installing the puncher unit. If you are installing the finisher and the puncher unit at the same time, on the other hand, install the finisher as instructed in "Preparing for the Installation of the Finisher"; and then, go through the steps under "Connecting to the Finisher" herein.

- 1) Turn off the host machine, and disconnect the power plug (from the power outlet).
- 2) Disconnect the interface cable [1] of the finisher from the host machine.

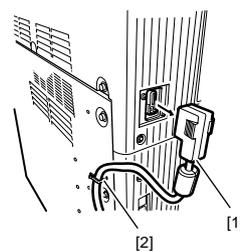
**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/  
Saddle Finisher-Q4/Finisher-T1/Saddle Finisher-T2>**



F-1-8

**<Finisher-R1/Saddle Finisher-R2>**

Free the interface cable [1] from the cable clamp [2].

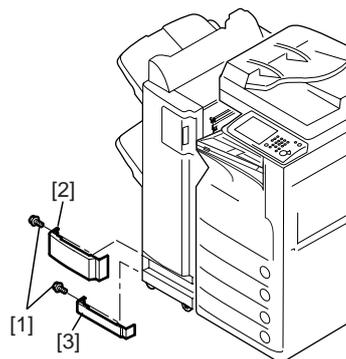


F-1-9

- 3) In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1, remove the foot cover and the extension cover (if Finisher-Q1/Finisher-Q3). (For the Finisher-T1, it is not necessary to remove them.)

**<Finisher-Q1/Finisher-Q3>**

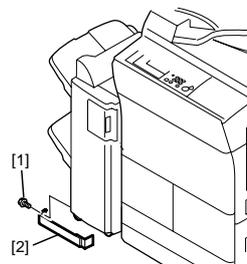
Remove the screw [1], and detach the lower front extension cover [2]. Remove the screw [1], and detach the front foot cover [3].



F-1-10

**<Finisher-R1>**

Remove the screw [1], and detach the front foot cover [2].

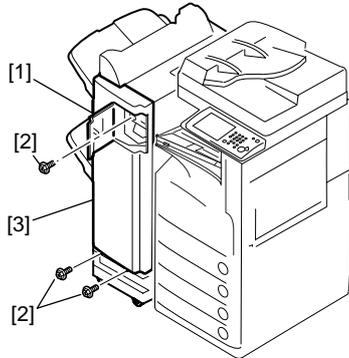


F-1-11

- 4) Remove the front cover.

**<Finisher-Q1/Finisher-Q3/Finisher-R1>**

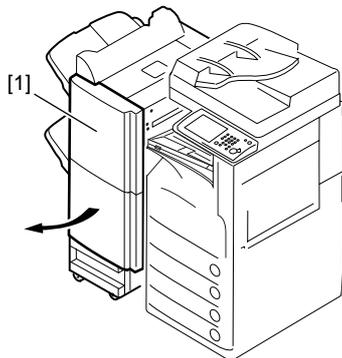
Open the front door [1], and remove the 3 screws [2]; then, detach the front cover [3]. (The figure shows the Finisher-Q1/Finisher-Q3.)



F-1-12

**<Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2>**

Open the front cover. (The figure shows the Saddle Finisher-Q2/Saddle Finisher-Q4.)

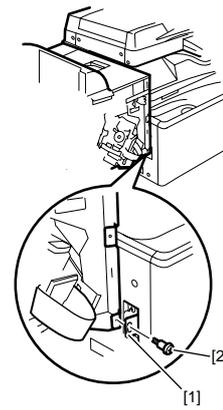


F-1-13

5) Disconnect the finisher at the front from its host machine.

**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4>**

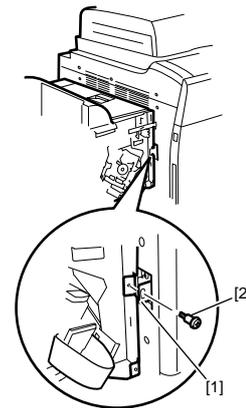
Remove the stepped screw [2], and detach the fixing plate [1] (front) of the host machine; then, disconnect the finisher (front) from its host machine. (The figure shows the Finisher-Q1/Finisher-Q3.)



F-1-14

**<Finisher-R1/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2>**

Remove the stepped screw [2], and detach the fixing plate [1] (front) of the host machine; then, disconnect the finisher (front) from its host machine. (The figure shows the Finisher-R1.)

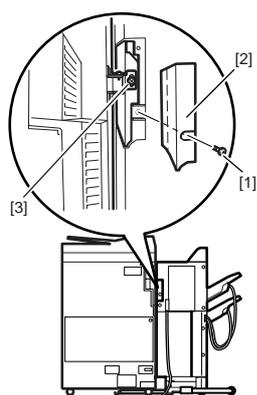


F-1-15

6) Remove the screw [1], and detach the upper rear (small) cover [2] of the finisher; then, remove the stepped screw [3], and disconnect the finisher at the rear from its host machine.

**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4>**

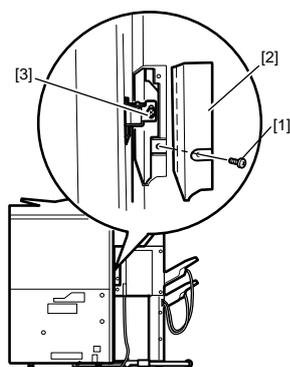
(The figure shows the Finisher-Q1/Finisher-Q3.)



F-1-16

**<Finisher-R1/Saddle Finisher-R2/Finisher-T1/  
Saddle Finisher-T2>**

(The figure shows the Finisher-R1.)



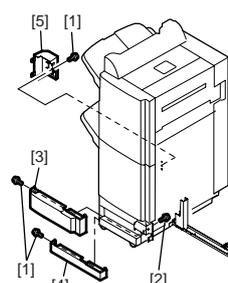
F-1-17

7) In the case of the Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2, close the front cover. In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1, mount the front cover using 3 screws.

8) In the case of the Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2, remove the foot cover and the extension cover (if Saddle Finisher-Q2/Saddle Finisher-Q4).(For the Finisher-T1, it is not necessary to remove them.)

**<Saddle Finisher-Q2/Saddle Finisher-Q4>**

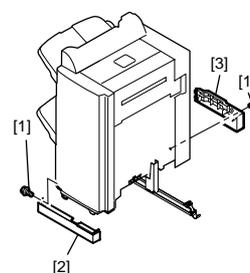
Remove the 2 screws [1] and [2], and detach the lower front extension cover [3]. Remove the screw [1], and detach the front foot cover [4]. Remove the screw [1], and detach the rear foot cover [5].



F-1-18

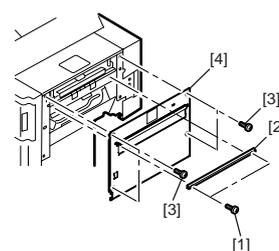
**<Saddle Finisher-R2>**

Remove the screw [1], and detach the front foot cover [2]. Remove the screw [1], and detach the rear foot cover [3].



F-1-19

9) In the case of the Finisher-Q1/Finisher-Q3, remove the 2 screws [1], and detach the inlet guide [2]; then, remove the 4 screws [3], and detach the right cover [4].



F-1-20

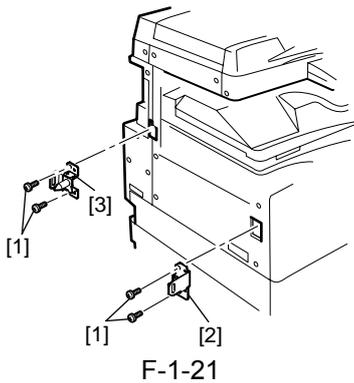


If the finisher is a Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4 and, moreover, a rubber sheet that comes with the buffer pass unit is attached to the pickup surface of the finisher, leave the

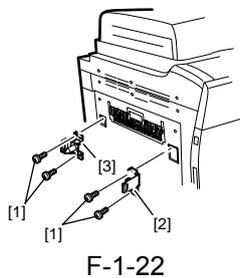
rubber sheet as it is. Be sure that the rubber sheet you may be attaching to the pickup surface of the puncher unit is a new one.

10) Remove the 2 screws [1], and detach the 2 fixing plates [2] and [3] of the host machine. (For the Finisher-T1 or the Saddle finisher-T2, it is not necessary to remove them.)

<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4>



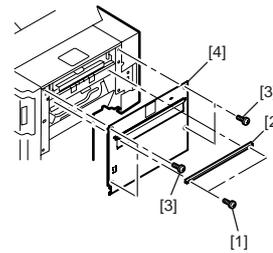
<Finisher-R1/Saddle Finisher-R2>



### 1.3.2 Connecting to the Finisher

0003-0207

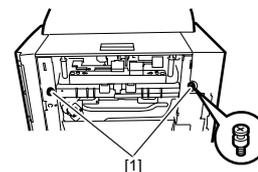
1) In the case of the Finisher-Q1/Finisher-Q3, remove the 2 screws [1], and detach the inlet guide [2]; then, remove the 4 screws [3], and detach the right cover [4]. (Skip this step if it has already been removed.)



F-1-23

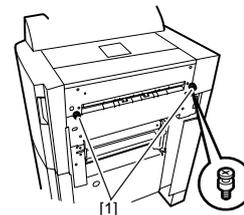
2) Fit the 2 mounting stepped screws [1] to the pickup assembly of the finisher.

<Finisher-Q1/Finisher-Q3/Finisher-R1>



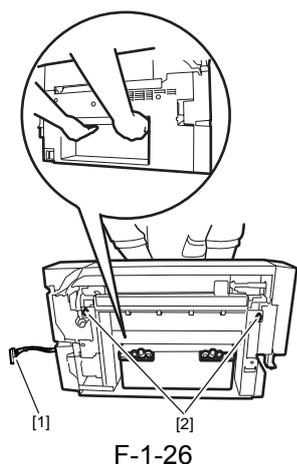
F-1-24

<Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2>

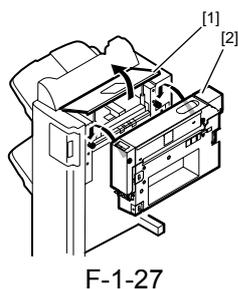


F-1-25

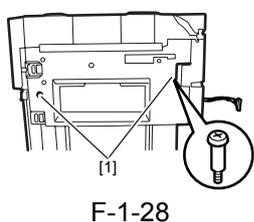
3) Route the connector cable [1] of the puncher unit to the rear; hold it as shown, and hook the hole [2] of the joint assembly on the 2 mounting stepped screws.



In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1, the joint assembly may interfere. Keep the upper cover [1] of the finisher open when hooking it on the puncher unit [2].



4) Secure the puncher unit to the finisher using 2 stepped screws [1] (M4x10).

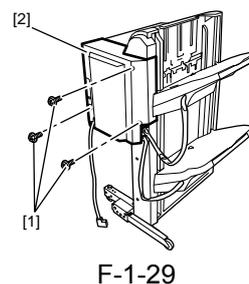


5) Remove the rear cover from the finisher.

<Finisher-Q1/Finisher-Q3/Finisher-R1>

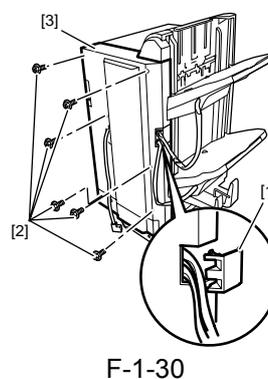
Remove the 3 screws [1], and detach the rear cover

[2].



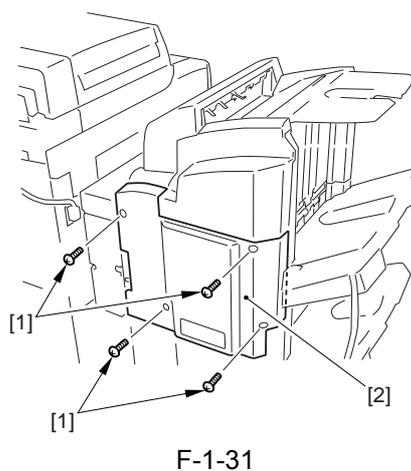
<Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2>

Detach the cable cover [1], and remove the 6 screws [2]; then, detach the rear cover [3].



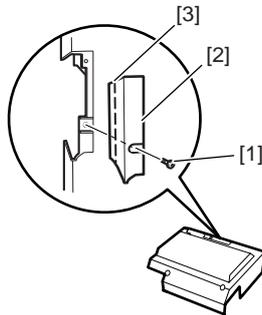
<Finisher-T1/Saddle Finisher-T2>

Unscrew 4 screws [1] and detach the upper rear cover [2].



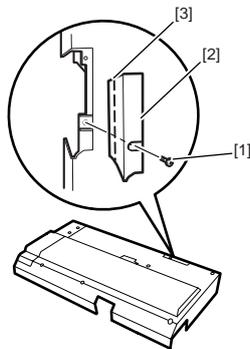
6) Cut off the surface cover [3] using nippers.

**<Finisher-Q1/Finisher-Q3/Finisher-R1/Finisher-T1/Saddle Finisher-T2>**



F-1-32

**<Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2>**



F-1-33

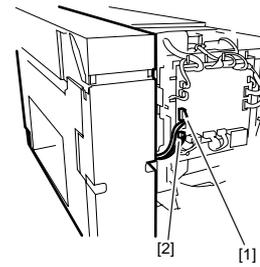
7) Connect the connector of the puncher unit to the connector of the finisher PCB securely.



Check to make sure that the connector is fully in contact. If the puncher unit happens to malfunction after installation, try disconnecting and then connecting the connector to see the fault has been corrected.

**<Finisher-Q1/Finisher-Q3/Finisher-R1>**

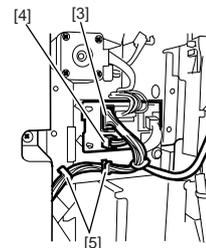
Connect to the connectors J705 [1] and J706 [2] of the finisher controller PCB.



F-1-34

**<Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2>**

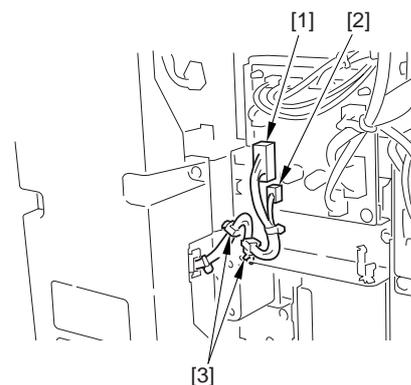
Connect to the connectors J804 [3] and J805 [4] of the saddle drive PCB, and secure the connector cable with two cable clamps [5].



F-1-35

**<Finisher-T1/Saddle Finisher-T2>**

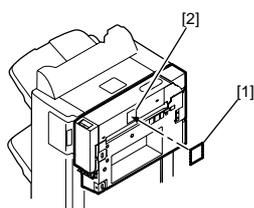
Plug the connector cables into the connectors on the saddle driver PCB, J884 [1] and J885 [2], and run the cables through the cable clamps [3] at 2 points to fix.



F-1-36

8) In the case of the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4, attach the rubber sheet [1] that comes with the Buffer Pass Unit-E1 to

the puncher unit along the marking [2] found on the right side of the unit.



F-1-37

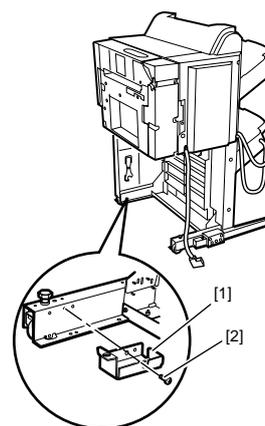
- 9) In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1, mount the rear cover of the finisher using 3 screws. In the case of the Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2, mount the rear cover of the finisher using 6 screws; then, attach the cable cover. For the Finisher-T1 or the Saddle finisher-T2, attach the upper rear cover using 4 screws.
- 10) Mount the upper rear (small) cover of the finisher using a screw.
- 11) In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1, mount the punch lower front cover fixing plate 2 [1] to the finisher using a screw [2] (binding; M4x6). (The figure shows the Finisher-R1.)

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#### MEMO:

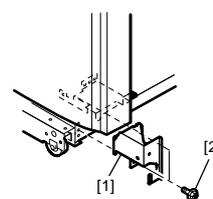
In the case of the Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2/Finisher-T1/Saddle Finisher-T2, the punch lower front cover fixing plate 2 is mounted at time of shipment from the factory. (It is shaped differently from the punch lower front fixing plate 2 of the Finisher-Q1/Finisher-Q3/Finisher-R1.)

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F-1-38

- 12) In the case of the Saddle Finisher-Q2/Saddle Finisher-Q4, mount the lower front extension stay [1] using 2 screws [2] (binding; M4x6). (Skip this step if it has already been mounted.)



F-1-39

### 1.3.3 Preparing the Host

#### Machine for Installation 0003-0208

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Before connecting the finisher to its host machine, mount the fixing plate that comes with the puncher unit to the host machine. If the host machine has already been installed and the finisher has been disconnected from it as instructed in "Disconnecting the Finisher from the Host Machine," go to step 3).

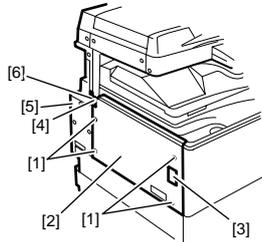
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- 1) Cut out the face plate from the host machine.

**<When Installing the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4 to an iRC3100 Series Machine>**

- 1-1) Remove the 4 screws [1], and detach the host

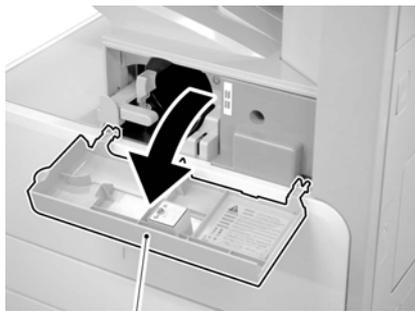
machine's left cover [2]; then, cut the 2 locations [3] [4] of the face plate. Cut the point [6] indicated on the face plate [6] of the rear left cover. Mount the left cover and the rear left over.



F-1-40

**<When Connecting the Finisher-Q3/Saddle Finisher-Q4 to an iR4570/3570/2870/2270 Series Machine>**

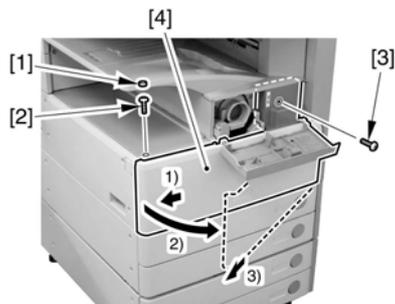
1-1) Open the upper front cover [1].



[1]

F-1-41

- 1-2) Remove the face rubber member [1].
- 1-3) Remove the binding screw [2].
- 1-4) Remove the RS tightening screw [3].
- 1-5) Detach the front cover unit [4] as indicated by the arrow in the figure.



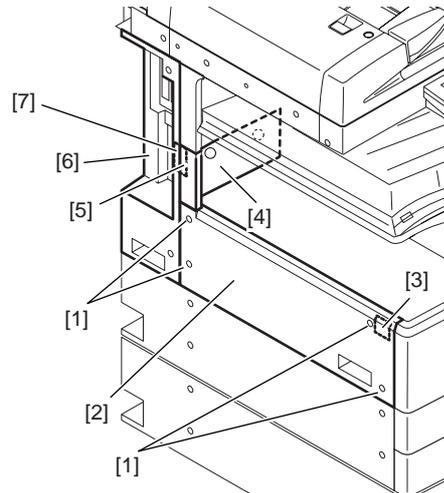
F-1-42

1-6) Remove the 4 screws [1], and detach the left cover [2] of the host machine.

1-7) Cut the face plate [3] of the left cover.

1-8) Cut the face plate [5] of the inside rear cover (lower) [4].

1-9) Cut the face plate [7] of the rear left cover [6].



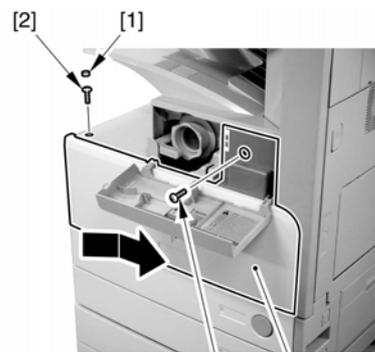
F-1-43

1-10) Mount the left cover.

1-11) Mount the front cover [3] using 2 screws [2]; then, fit the rubber piece.

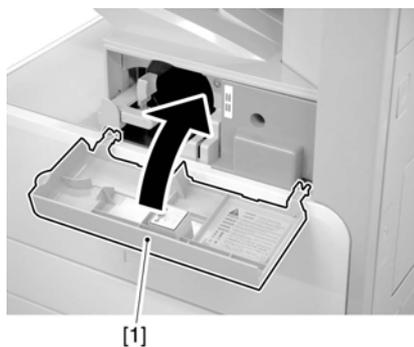


At this time, be sure to slide the front cover to the right so that its claws will match the host machine.



F-1-44

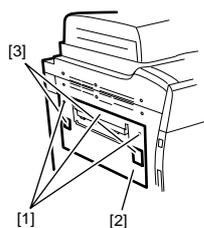
1-12) Close the upper front cover [1].



F-1-45

#### <Finisher-R1/Saddle Finisher-R2>

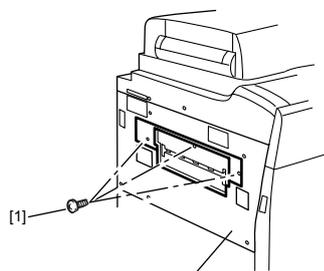
1-1) Remove the 3 screws [1], and detach the left cover [2] of the host machine. Cut off the 2 surface covers [3] from the left cover; then, mount the left cover to the machine.



F-1-46

#### <Finisher-T1/Saddle Finisher-T2>

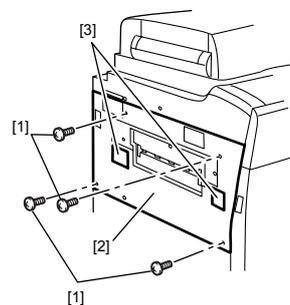
1-1) Detach the copy tray if it is mounted on the delivery assembly of the host machine.  
1-2) Unscrew 3 screws [1] and detach the delivery cover [2] of the host machine.



F-1-47

1-3) Unscrew 4 screws [1] and detach the left cover [2] of the host machine. Cut away 2 blanking

covers [3] on the left cover using nippers and attach the left cover and the delivery cover to the host machine.

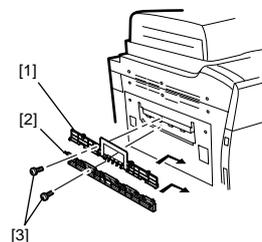


F-1-48

2) For the Finisher-R1 or the Saddle finisher-R2, mount the upper/lower inlet guide.  
For the Finisher-T1 or the Saddle finisher-T2, mount the delivery guide.

#### <Finisher-R1/Saddle Finisher-R2>

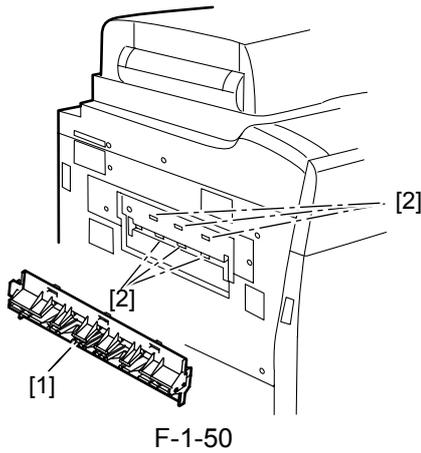
Slide the inlet guides upper [1] and lower [2] along the delivery assembly of the host machine, and fix them in place using screws [3] (1 pc. each; tapping; M4x12).



F-1-49

#### <Finisher-T1/Saddle Finisher-T2>

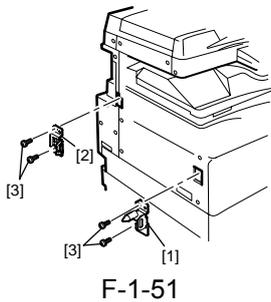
Fit 6 claws of the delivery guide [1] into the slots on the delivery assembly [2] of the host machine.



3) Mount the front fixing plate [1] and the rear fixing plate [2] in place using 2 screws [3] each (binding; M4x6).

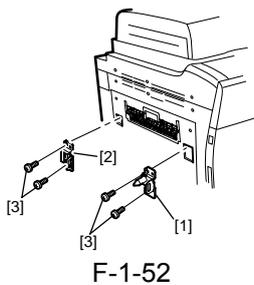
**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/ Saddle Finisher-Q4>**

Use the fixing plate [1] FC5-4098 and [2] FC5-4076. (They are included in the package of the puncher unit.)



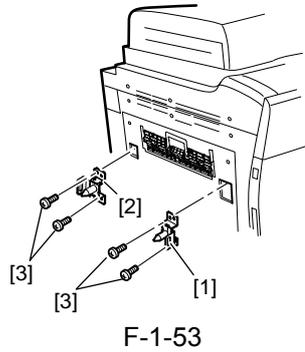
**<Finisher-R1/Saddle Finisher-R2>**

Use the fixing plate [1] FC5-4098 and [2] FC5-4076. (They are included in the package of the puncher unit.)



**<Finisher-T1/Saddle Finisher-T2>**

Use the fixing plate [1] 4A3-1923 and [2] 4A3-1922. (They are included in the package of the finisher.)



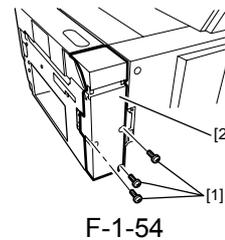
**1.3.4 Connecting to the Host Machine**

0003-0209



Check to make sure that the host machine is off and its power plug is disconnected from the power outlet.

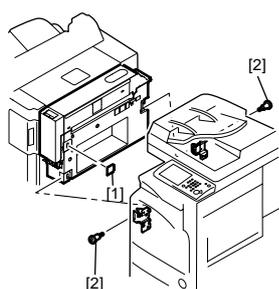
1) Remove the 3 screws [1], and detach the rear cover [2] of the puncher unit.



2) In the case of the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4, mount the included surface cover [1].

3) Connect the puncher unit to its host machine, and secure the fixing plates (front and rear) using a screw [2] (1 pc. each; stepped; M4).

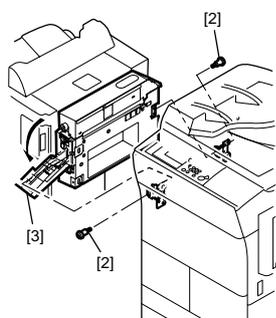
**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/ Saddle Finisher-Q4>**



F-1-55

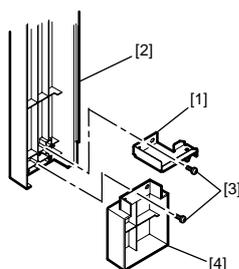
#### <Finisher-R1/Saddle Finisher-R2/Finisher-T1 and Saddle finisher-T2>

Secure the front fixing plate in place using a stepped screw after opening the punch front cover [3].



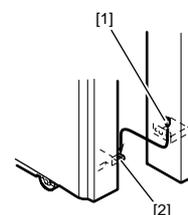
F-1-56

- 4) Mount the rear cover of the puncher unit using 3 screws.
- 5) Mount the punch lower front cover fixing plate 1 [1] to the punch lower front cover [2] using a screw [3] (tapping; M4x12).
- 6) In the case of the Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/Saddle Finisher-Q4, mount the punch front lower extension cover [4] to the punch lower front cover using a screw [3] (tapping; M4x12).



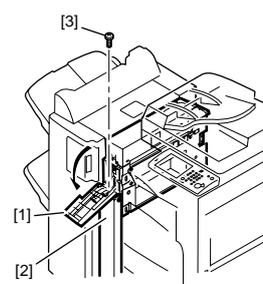
F-1-57

- 7) Fit the positioning pin [1] into the hole of the punch lower front cover fixing plate 2 [2] to mount the punch lower front cover. (The figure shows the Finisher-R1.)



F-1-58

- 8) Open the punch upper front cover [1], and secure the punch lower front cover [2] from above using a screw [3] (tapping; M4x12). (The figure shows the Finisher-Q1/Finisher-Q3.)



F-1-59

### 1.3.5 Checking the Height/ Tilt

0003-0210



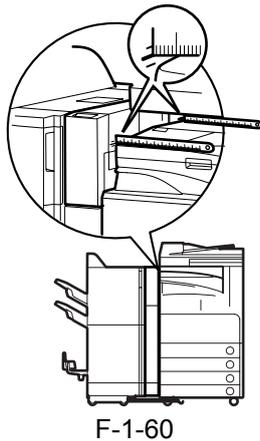
A finisher may already exist and the height/tilt may have been adjusted in relation to the host machine. You may still have to adjust the height/tilt newly to make up for changes that may have occurred because of the installation of the puncher unit. If the height/tilt is not correct, jams can occur frequently in the puncher unit pickup assembly. When you have installed the puncher unit, be sure to go through the following steps to check and adjust the height/tilt.

- 1) Check the height of the puncher unit and its host

machine.

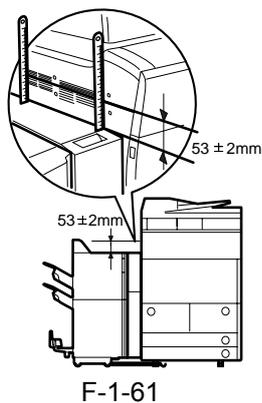
**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/ Saddle Finisher-Q4>**

Place a ruler on the buffer pass unit as shown and check to see if it is as indicated on the right side of the puncher unit (falling between the top and bottom index lines). Check the height at both front and rear by referring to the 2 sets of index lines; be sure that the discrepancy in height is 1.5 mm or less.



**<Finisher-R1/Saddle Finisher-R2>**

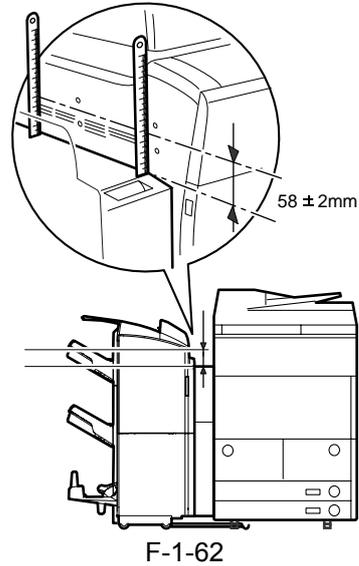
Check to see if the difference in height between the top cover of the puncher unit and the top edge of the delivery cover of the host machine is  $53 \pm 2$  mm. Take measurements at 2 locations at both front and rear; then, see if the difference in height between the front and the rear is 1.5 mm or less.



**<Finisher-T1 and Saddle finisher-T2>**

Check if the distance between the upper cover of the

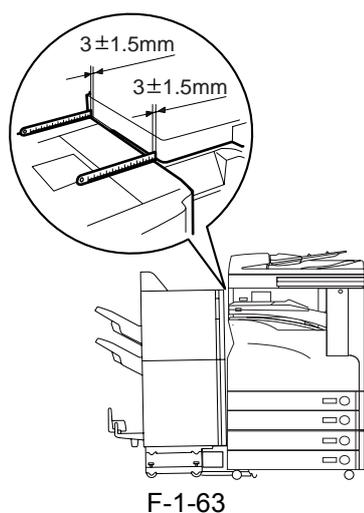
puncher unit and the upper edge of the delivery cover on the host machine is within  $58 \pm 2$  mm. Measure the distance at 2 points of the front/rear, and check if the difference between the front and rear is 1.5 mm or less.



2) Check the tilt of the puncher unit and the host machine.

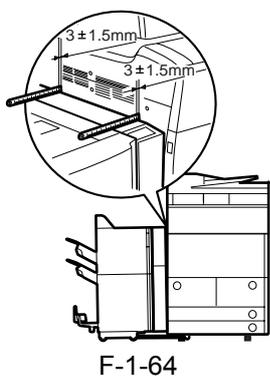
**<Finisher-Q1/Finisher-Q3/Saddle Finisher-Q2/ Saddle Finisher-Q4>**

Check to see if the gap between the top cover of the puncher unit and the delivery cover of the host machine is  $3 \pm 1.5$  mm. Take measurements at 2 locations (front and rear); then, check to see that the difference in the gap between the front and the rear is 1.5 mm or less. Moreover, check to see that the gap running from top to bottom between the finisher and the host machine is parallel when viewed from the front.



#### <Finisher-R1/Saddle Finisher-R2>

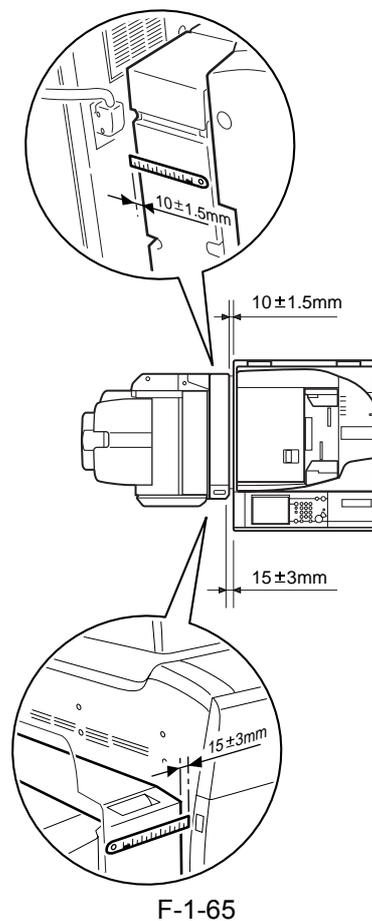
Check to see that the gap between the upper cover of the puncher unit and the delivery cover of the host machine is  $3 \pm 1.5$  mm or less. Take measurements at 2 locations (front and rear); then, check to be sure that the difference in the gap between the front and the rear is 1.5 mm or less. Moreover, check to be sure that the gap running from top to bottom between the finisher and host machine is parallel when viewed from the front.



#### <Finisher-T1 and Saddle finisher-T2>

Check if the clearance between the front/rear cover of the puncher unit and the delivery cover of the host machine is within  $15 \pm 3$  mm and  $10 \pm 1.5$  mm respectively. Before checking, measure the clearance at 2 points of the front and rear. Also check if the clearance between the finisher and the host machine is

parallel from top to bottom when viewed from the front.



- 3) If the height/tilt is correct, end the installation work as instructed in "Work After Making Checks/Adjustments." Otherwise, make adjustments as instructed in "Adjusting the Height/Tilt."

---

## 1.4 Making Adjustments

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### 1.4.1 Adjusting the Height/Tilt

0003-0211

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If the difference in height between the puncher unit and the host machine or the tilt is not as indicated, make adjustments as follows; be sure to adjust the height before adjusting the tilt:

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#### A. Preparing for Adjustment

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In the case of the Finisher-Q1/Finisher-Q3/Finisher-R1/Finisher-T1, you may need to remove the auxiliary ring and the rear foot cover of the finisher before adjusting the height; be sure to remove the auxiliary ring without disconnecting the finisher from its host machine to prevent the finisher from tumbling over.

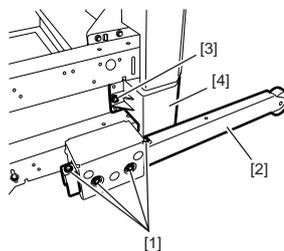
---

#### <Finisher-Q1/Finisher-Q3/Finisher-R1/Finisher-T1>

1) If the height at the rear must be corrected, remove the auxiliary ring and the left rear foot cover.

#### <Finisher-Q1/Finisher-Q3>

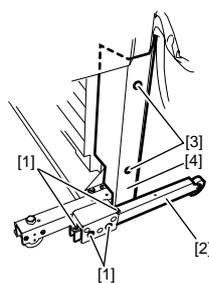
Remove the 4 screws [1], and detach the auxiliary ring [2]. Remove the screw [3], and detach the left rear foot cover [4].



F-1-66

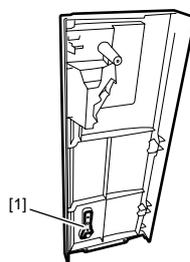
#### <Finisher-R1/Finisher-T1>

Remove the 4 screws [1], and detach the auxiliary ring [2]. Remove the 2 screws [3], and detach the left rear foot cover [4].



F-1-67

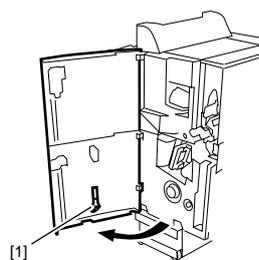
- 2) Remove the 3 screws, and detach the front cover. (Skip this step if it has already been removed.)
- 3) From the back of the front cover, remove the fixing screw, and detach the spanners [1]. (The figure shows the Finisher-R1.)



F-1-68

#### <Saddle Finisher-Q2/Saddle Finisher-Q4/Saddle Finisher-R2/Saddle Finisher-T2>

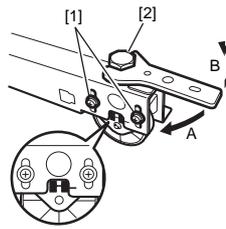
- 1) Open the front cover; then, from the back of the front cover, remove the fixing screw, and detach the spanners [1]. (The figure shows the Saddle Finisher-Q2/Saddle Finisher-Q4.)



F-1-69

#### B. Adjusting the Height

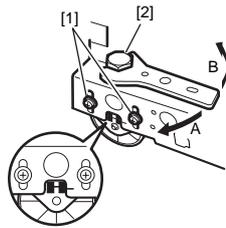
- 1) Loosen the 2 fixing screws [1] each on the front and rear casters on the pickup side of the finisher.
- 2) To increase the height of the finisher and the puncher unit, turn the adjusting bolt [2] in the direction of the arrow A (A full turn of the adjusting bolt will increase the height of the finisher by 1.75 mm.). Refer to the index while turning the bolt, and perform this for both front and rear casters.
- 3) To decrease the height of the finisher and the puncher unit, turn the adjusting bolt [2] in the direction of the arrow B (A full turn of the adjusting bolt will decrease the height of the finisher by 1.75 mm.). Refer to the index while turning the bolt, and perform this for both front and rear casters.



F-1-70

### C. Adjusting the Tilt

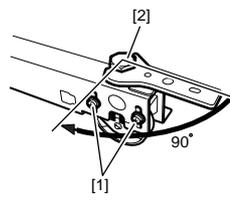
- 1) Loosen the 2 fixing screws [1] each on the front and rear casters on the delivery side of the finisher.
- 2) To decrease the gap between the punch unit and the host machine, turn the adjusting bolt [2] in the direction of the arrow A (A full turn of the adjusting bolt will increase the height of the finisher by 1.75 mm.). Refer to the index on the caster while turning the bolt, and perform this for both front and rear casters.
- 3) To increase the gap between the puncher unit and the host machine, turn the adjusting bolt [2] in the direction of the arrow B (A full turn of the adjusting bolt will decrease the height of the finisher by 1.75 mm.). Refer to the index on the caster while turning the bolt, and perform this for both front and rear casters.



F-1-71

### D. Making Checks After Adjustment

- 1) Check to see once again that the difference in height between the finisher and the puncher unit and the tilt are as indicated; otherwise, make adjustments once again.
- 2) When done, tighten the 2 fixing screws [1] each on the casters.
- 3) To prevent the adjusting bolts from becoming loose during transit for possible relocation after installation, tighten the bolts [2] 90 deg in the direction of the arrow. Take care, however; excess tightening will affect the height/tilt.



F-1-72

- 4) Attach the spanners to the back of the front cover using a screw.

5) End the installation work as instructed in "Work After Making Checks/Adjustments."

## 1.4.2 Work After Making Checks/Adjustments

0003-0212

### <Finisher-Q1/Finisher-Q3/Finisher-R1/Finisher-T1>

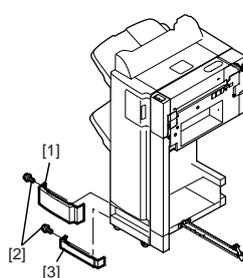
1) If you removed the auxiliary ring, fit the left rear foot cover, adjust the length of the auxiliary rail to suit the needs of the user, and mount it using 4 screws.

2) Mount the front cover to the finisher using 3 screws.

3) Mount the covers.

### <Finisher-Q1/Finisher-Q3>

Mount the lower front extension cover [1] using a screw [2] (RS tightening; M3x8). Mount the front foot cover [3] using a screw [2] (RS tightening; M3x8).

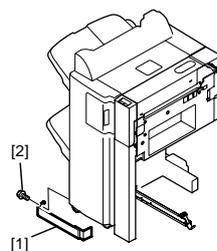


F-1-73

### <Finisher-R1/Finisher-T1>

For the Finisher-T1, open the front cover.

Mount the front foot cover [1] using a screw [2] (RS tightening; M3x8). (The figure shows the Finisher-R1.)



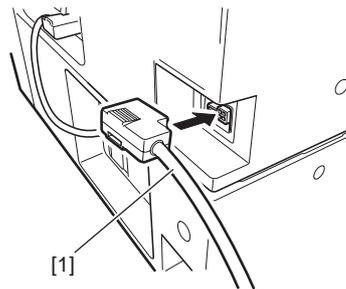
F-1-74

4) Connect the finisher and the host machine using the interface cable [1].



When connecting the interface cable, be sure to turn off the host machine and disconnect its power plug from the power outlet. Otherwise, you can suffer an electric shock.

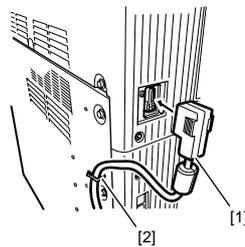
### <Finisher-Q1/Finisher-Q3/Finisher-T1>



F-1-75

**<Finisher-R1>**

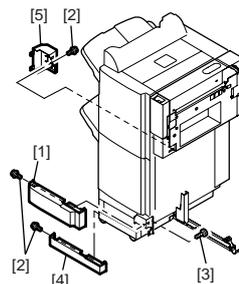
Fit the cable clamp [2] to the host machine, and route the interface cable [1] through it.



F-1-76

**<Saddle Finisher-Q2/Saddle Finisher-Q4>**

- 1) Detach the puncher lower front cover once; then, remove the front and rear stepped screws (1 pc. each), and separate the puncher unit and the host machine.
- 2) Mount the lower front extension cover [1] using a screw [2] (RS tightening; M3x8) and another screw [3] (tapping; M4x12).
- 3) Mount the front foot cover [4] using a screw [2] (RS tightening; M3x8).
- 4) Mount the rear foot cover [5] using a screw [2] (RS tightening; M3x8).

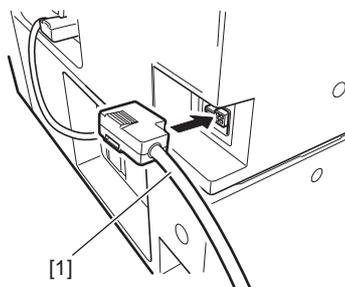


F-1-77

- 5) Connect the puncher unit and the host machine; then, secure them at the front and the rear using stepped screws (1 pc. each).
- 6) Mount the punch lower front cover.
- 7) Connect the finisher and the host machine with the interface cable [1].



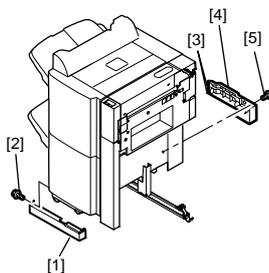
When connecting the interface cable, be sure to turn off the host machine and disconnect its power plug from the power outlet. Otherwise, you can suffer an electric shock.



F-1-78

#### <Saddle Finisher-R2/Saddle Finisher-T2>

- 1) Mount the front foot cover [1] using a screw [2] (RS tightening; M3x8).
- 2) Align the rear foot cover claw [3] with the rear cover and mount the rear foot cover [4] with a screw (tapping; M4x12) [5]. (The figure shows the Saddle Finisher-R2.)



F-1-79

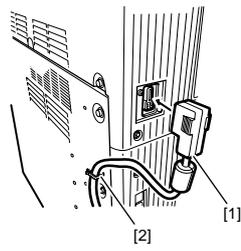
- 3) Connect the finisher and the host machine with the interface cable.



When connecting the interface cable, be sure to turn off the host machine and disconnect its power plug. Otherwise, you may suffer an electric shock.

#### <Saddle Finisher-R2>

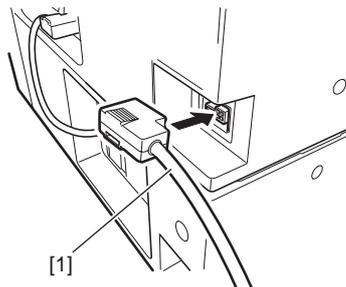
Connect the finisher and the host machine with the interface cable [1]. Fit the cable clamp [2] to the host machine, and route the interface cable [1] through it.



F-1-80

**<Saddle Finisher-T2>**

Connect the finisher and the host machine with the interface cable [1].



F-1-81

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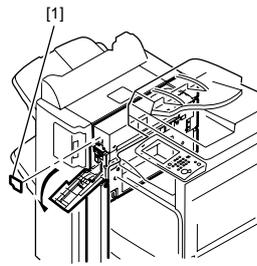
## 1.5 Attaching the Labels etc.

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### 1.5.1 Attaching the Label

0003-0213

1) Open the front cover of the puncher unit, and attach the Jam Removal label [1] of the appropriate language where indicated. (The figure shows the Finisher-Q1/Finisher-Q3.)



F-1-82



Feb 21 2005

