

DM262i Service Manual



Version 1.0

Xerox Scanners

Contents

1.	INTRODUCTION	1-1
1.1	GENERAL NOTES FOR SERVICING	1-1
1.2	GENERAL DESCRIPTION	1-2
2.	SPECIFICATION	2-1
3.	UNPACKING, INSTALLATION, AND TRANSPORTATION	3-1
3.1	PRECAUTIONS OF INSTALLATION	3-1
3.2	UNPACKING PROCEDURE	3-1
3.3	INSTALLATION	3-3
3.3.1	Installing the ADF Paper Tray	3-3
3.3.2	Installing the ADF Output Paper Tray	3-4
3.3.3	Connecting the Cables	3-5
3.3.4	Turning on the Power	3-5
3.4	INSTALLING THE SOFTWARE	3-6
3.5	CONNECTING TO COMPUTER	3-6
3.6	PLACING THE ORIGINAL	3-7
4.	THEORY OF OPERATION	4-1
4.1	INTRODUCTION	4-1
4.2	MAIN CONTROL UNIT	4-2
4.2.1	System diagram	4-2
4.2.2	Main control circuit	4-3
4.2.3	Video circuit:	4-4
4.2.4	LED and Push Button Module Circuit	4-6
4.2.5	Sensor input	4-7
4.2.6	Sub power supply circuit	4-9
4.2.7	Power supply	4-10
5.	PROBLEM SOLVING	5-1
5.1	DIAGNOSTICS	5-1
5.1.1	Online diagnostics	5-1
5.1.2	Offline diagnostics	5-2
5.1.3	Diagnostic flowcharts	5-3
5.2	TROUBLESHOOTING	5-6
5.2.1	Flowcharts	5-6
5.2.2	Tables	5-9
6.	DISASSEMBLY	6-1
6.1	SERVICE TOOL	6-1
6.2	LUBRICANTS	6-2
6.2.1	Mechanical Unit Lubrication	6-2
6.3	PROCEDURE FOR DISASSEMBLY AND REASSEMBLY	6-4
6.3.1	Notes on disassembly	6-4
6.3.2	Removing the Upper Housing	6-5

- 6.3.3 Removing the Upper Optical Assembly6-7
- 6.3.4 Remove the Upper Optical Chassis.....6-9
- 6.3.5 Remove the Lamp in Upper Optical Assembly 6-10
- 6.3.6 Removing the ADF Pad 6-11
- 6.3.7 Removing the Main Control Board..... 6-12
- 6.3.8 Removing the Motor in Lower Optical Assembly 6-14
- 6.3.9 Removing the Inverter in the Lower Optical Assembly 6-15
- 6.3.10 Removing the Lower Optical Chassis 6-16
- 7. PARTS..... 7-1**
 - 7.1 SPARE PART DIAGRAM7-1

1. INTRODUCTION

- | |
|-------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">1.1 General Notes for Servicing1.2 General Description |
|-------------------------------------------------------------------------------------------------------------------------------|

This manual is intended to be used by the maintenance engineers. It describes areas to be maintained, the detailed installation, the disassembly of optional ADF, and the component replacement procedures as well as the main trouble shooting guides.

Please take your time to read this manual thoroughly to obtain comprehensive knowledge about DM262i before serving the unit.

1.1 General notes for servicing

- (1) Before trying to disassemble the DM262i, make sure the power supply cord of the DM262i is disconnected from the power outlet. Under any circumstance, do not remove or install the connectors on the DM262i with the power supply turned ON.
- (2) Use caution not to drop small parts or screws inside the unit when disassembling and reassembling. If left inside, they might cause the malfunction of the unit.
- (3) Do not pull the connector cable when disconnecting it. Hold the connector.
- (4) When carrying the scanning head unit, put it in an anti-static bag.
- (5) Keep the document table glass surface always clean. If contaminated, use a dry clean cloth for cleaning.
- (6) Use caution not to injure your fingers or hands when disassembling or reassembling the unit.

1.2 General Description

The DM262i which features small footprint and fast scan rate is the perfect companion at your desktop. The build-in automatic document feeder allows 50 sheets of documents to be scanned continuously at one time and achieves fast scan rate of 25 pages per minute in simplex mode and 50 images per minute in duplex mode.

2. SPECIFICATION

2.1 Basic Specifications

Product Name:	DM262i
Type:	Sheetfed scanner, duplex
Optical Resolution:	600 dpi
Color Depth:	48-bit Color (input) 24-bit Color (output) single pass color (R, G, B)
Image Type:	Grayscale Black & White Color
ADF Scan Speed: (NONE Channel at 200dpi B&W A4 size)	38 pages per minute (simplex mode) 76 images per minute (duplex mode)
Scan Area:	ADF: minimum: 3.5" x 2" (88 x 50 mm) ADF: maximum: 8.5"x 14" (215 x 355 mm)
Paper Size:	ADF Max.: 8.5" x 14" (Legal) ADF single page min.: 3.5" x 2" ADF duplex multipage min.: 3.5" x 3.0"
Paper Thickness:	16 – 28 lbs/0.002" ~ 0.006"
Paper Input (ADF):	up to 50 sheets
Physical Dimension: HxWxD	6.37 x 13,2 x 6.5 inches (without tray) (162.3 x 337.2 x 167.8 mm)
Weight:	4.3 kg
Interface:	USB 2.0
Power Source:	Input: 100~240V, AC, 50/60 Hz Output: 24V, DC, 2.0A
Power Consumption:	≤ 30 Watts

3. UNPACKING, INSTALLATION, AND TRANSPORTATION

- | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">3.1 Precautions of Installation3.2 Unpacking Procedure3.3 Installation3.4 Placing the Original3.5 Transportation |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

3.1 Precautions of Installation

Pay attention to the following matters before unpacking and installation.

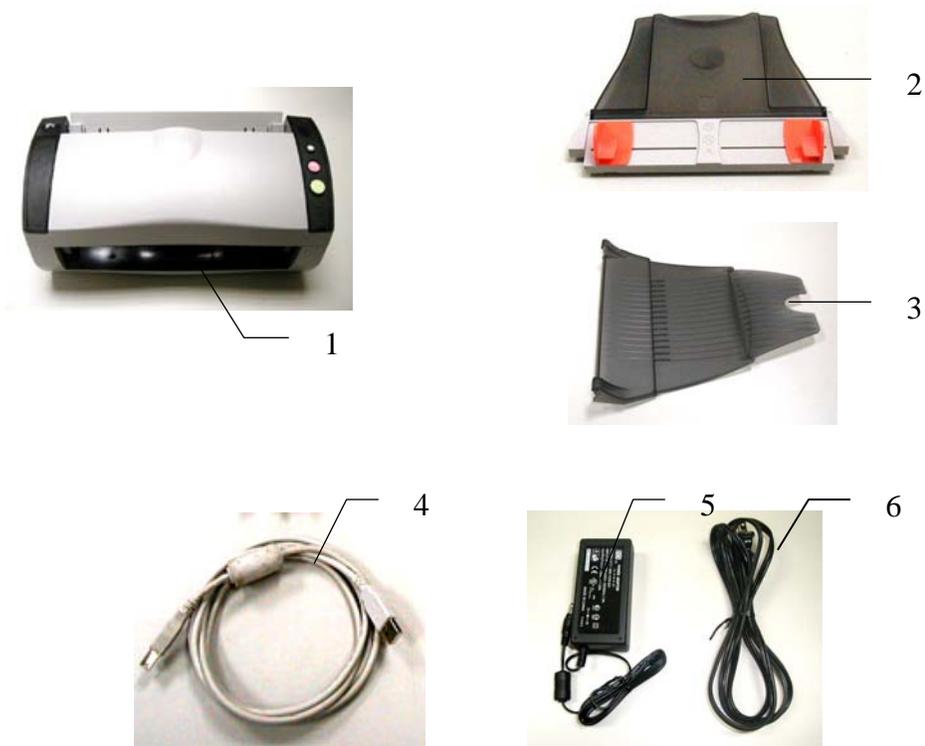
- Do not install in a place where vibration may occur.
- Keep the DM262i out of direct sunlight. Do not install near a heat source.
- Do not place the DM262i around materials which shut off the circulation of air.
- Do not install in a humid or dusty place.
- Use care not to scratch the glass surface of the DM262i or the document holding pad with a clip or staple.
- Do not use the wall socket with connecting devices which may generate noise, for example, air-conditioner, etc.
- Use a suitable AC power source.
- Place the DM262i on a level surface.

3.2 Unpacking Procedure

Unpack the DM262i according to the following procedure.

- Remove the packing material.
- Remove the DM262i from the shipping container.
- Remove the DM262i from the PVC bag.
- Check the items by referring to Figure 3.1.
- For any missing items, please contact your nearest dealer or distributor.

Note: Keep all the packing material in case you may need to return the DM262i.



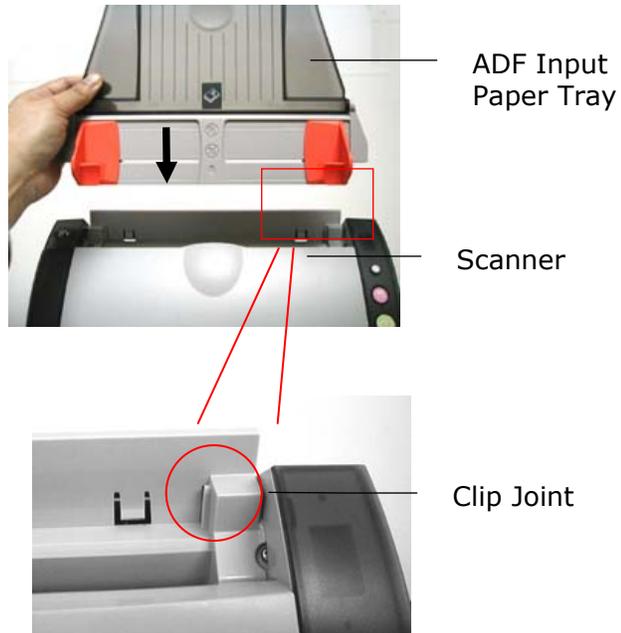
- 1. DM262i Main Unit
- 2. Input Paper Tray
- 3. Output Paper Tray
- 4. USB Cable
- 5. Power Adapter
- 6. Power Cord

Figure 3.1 Package Contents

3.3 Installation

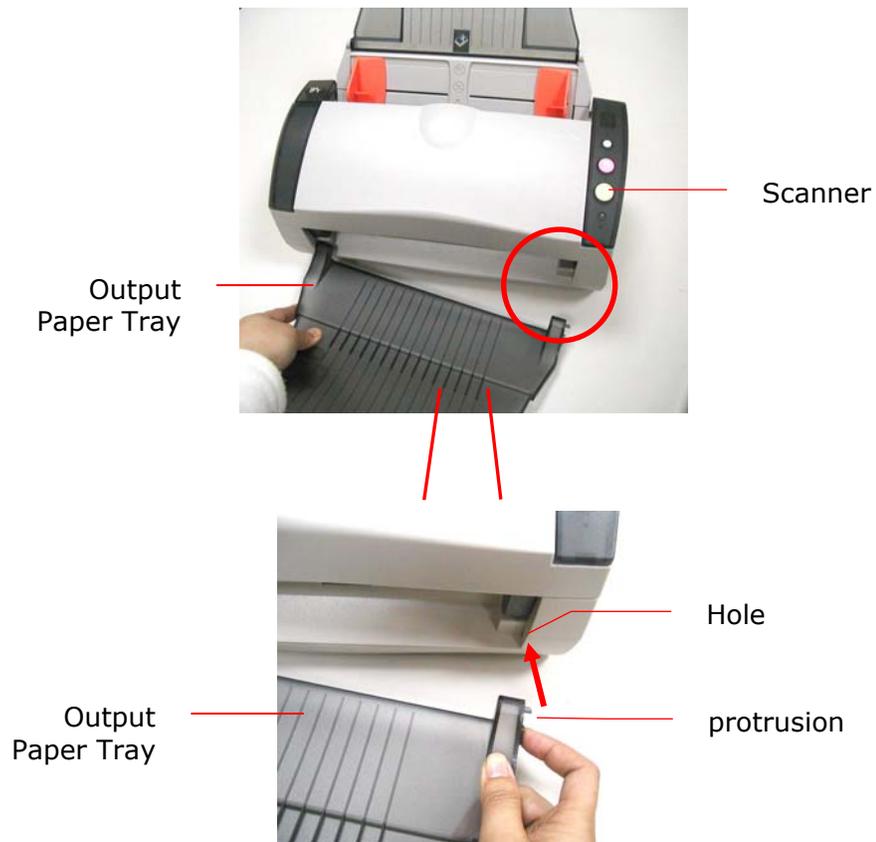
3.3.1 Installing the ADF Paper Tray

Attach the ADF Paper Tray to the clip joint of the scanner as indicated below. When properly insert, you will hear a snap-in sound.



3.3.2 Installing the ADF Output Paper Tray

1. Hold the Output paper tray some 30 degrees as shown in below.
2. Insert the right protrusion of the Output Paper Tray into the hole on the front of the scanner.
3. Insert the left protrusion of the Output Paper Tray slightly into the hole on the front of the scanner.

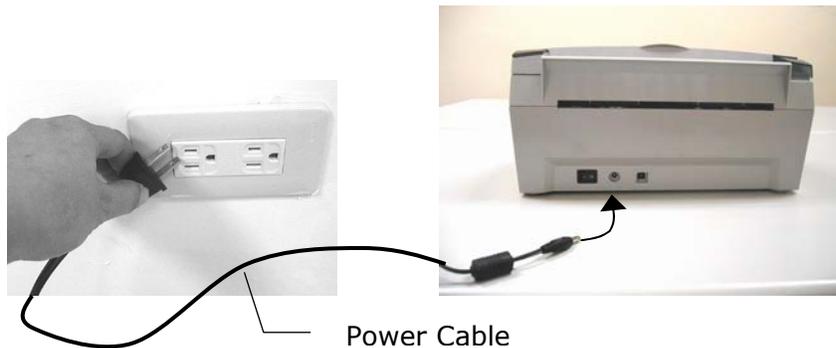


3.3.3 Connecting the Cables

Make sure the power of scanner is off.

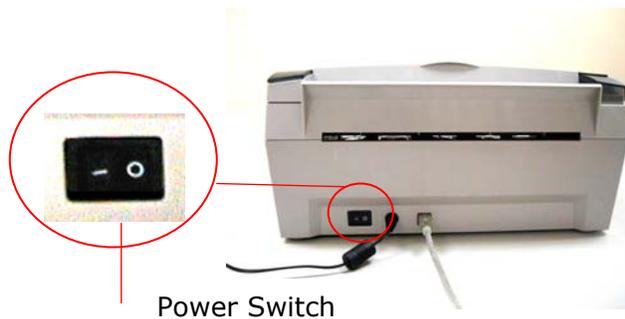
3.3.3.1 Connecting to Power

Plug the small end of the power adaptor into the power jack of your scanner. Insert the other end to an appropriate power outlet.



3.3.4 Turning on the Power

After the power cable and the USB cable have all connected, press the power switch to the "I" position to turn on the scanner. To turn off the scanner, please press the power switch to the "O" position.



3.4 Installing the Software

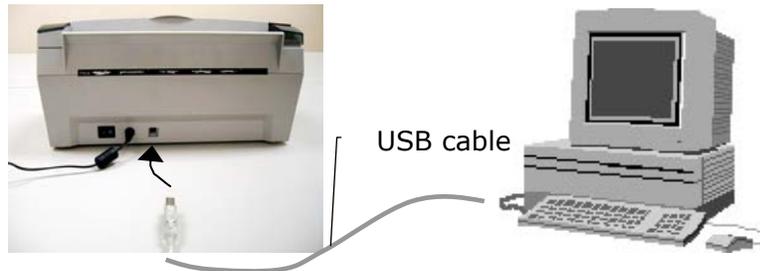
NOTE:

- 1). *The Windows system CD may be required when installing on some PC's.*
- 2). *To ensure your computer can identify the USB scanner, please install scanner driver first before connecting the scanner to your computer.*

1. Place the supplied CD-ROM onto your CD-ROM drive.
2. The software installation graphic appears. If not, run **"setup.exe"**.
3. Choose **Install TWAIN Driver** to install the scanner driver.

3.5 Connecting to Computer

1. Connect the **square end** of the USB cable to the USB port of your scanner. Connect the **rectangle end** to the USB port of your computer.



2. The computer should detect a new USB device and prompt a **"New Hardware Found"** message.



(Windows 9X/Windows ME)

3. In Windows 9X or Windows ME, confirm that the **"Search for a better driver."** is selected and click the **"Next"** button. In Windows XP, click the **Next** button to continue.
4. When the **Finish** dialog is prompted, click the **Finish** button.

Note:

To uninstall the scanner driver in Windows XP, be sure to keep your scanner connecting to your computer.

3.6 Placing the original

Document feeding

Place your document with the text face down on the ADF Input Paper Tray. Align the two sides of the document with the slide guides. Please note that the ADF Input Paper Tray can hold up to 50-page document at a time.



Figure 3.4 Placing the original

4. THEORY OF OPERATION

- 4.1 Introduction
- 4.2 Main Control Unit

4.1 Introduction

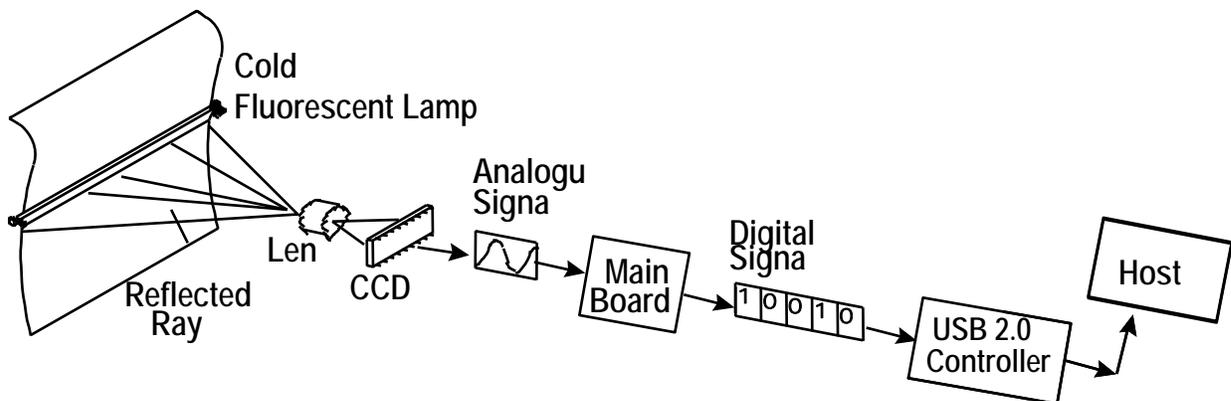


Figure 4.1 Theory of Operation

The reflected rays of your original as shown in the above Figure 4.1 pass through the lens and create an image on the CCD (Charged Coupled Device). Then, according to the different light intensity perceived by the CCD, the CCD will transfer these data into a series of analog signals to the main board, where the signals are turned into digital signals. These digital signals flow to the USB 2.0 Controller to transfer to a host computer.

4.2 Main control unit

4.2.1 System diagram

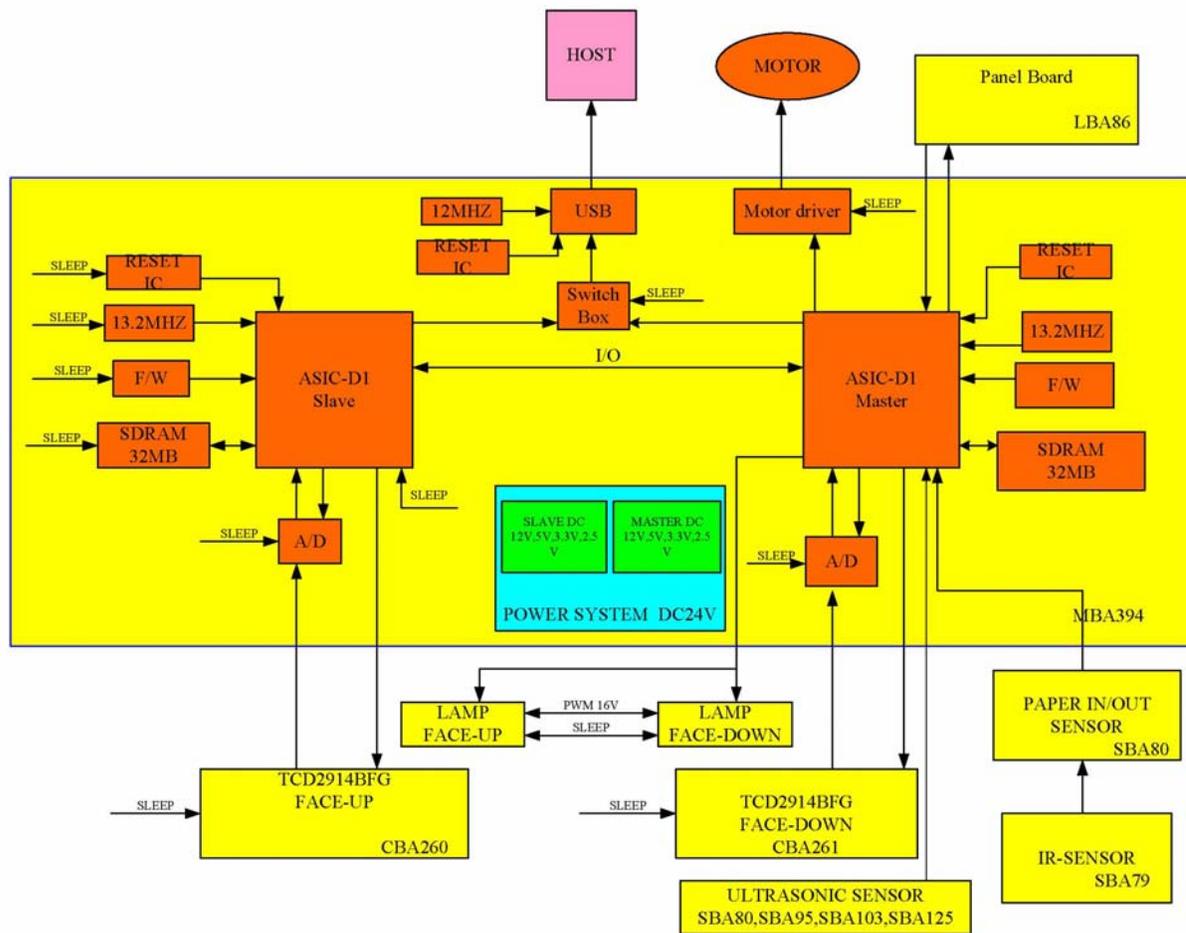


Figure 4.2 DM262i System block diagram

4.2.2 Main control circuit

This scanner is controlled by two tensilica 32-bits CPUs. Each CPU is configured with a 512-KB external ROM program area, a 32-MB external SDRAM work area, 2 timer / counters, 3 external interrupts.

Address Maps:

- ROM program area:

0000	512KB Program
7FFFF	

- External SDRAM working area:

00	32MB Internal Registers
1FFFFFF	

4.2.3 Video circuit:

The video circuit of this DM262i includes: 1. CCD driving circuit, 2. CCD signal processing circuit.

1. CCD Driving Circuit

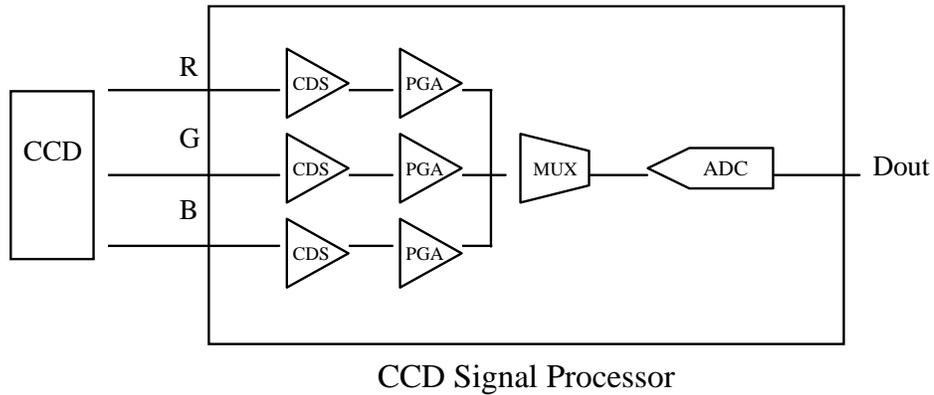
The CCD driving circuit is used to generate correct signals to the CCD, so that the CCD may generate the correct image data.

Signals for CCD:

Pin Assignment for CCD cable

Pin No.	Name	Function
1	CCD 5V	Digital 5V Power Supply
2	DGND	Digital Ground
3	CCD 5V	Digital 5V Power Supply
4	SH	CCD RGB Channel Shift Gate
5	PHI1	CCD Clock Phase
6	PHI2	CCD Clock Phase
7	CP	Clamp Gate
8	RS	CCD Reset Gate
9	SW 1	Changeover Switch (color and B/W)
10	AGND	Analog Ground
11	VINR	CCD Red Channel Output Signal
12	AGND	Analog Ground
13	VING	CCD Green Channel Output Signal
14	AGND	Analog Ground
15	VINB	CCD Blue Channel Output Signal
16	AGND	Analog Ground
17	CCD 12V	CCD Power Supply
18	AGND	Analog Ground

2. CCD signal processing circuit



The CCD signal processor includes all the necessary circuitry to perform three-channel conditioning and sampling. The signal chain consists of three-channel correlated double sampling (CDS) and programmable gain adjustment of the CCD output (PGA) is a 16 bit analog to digital converter (ADC) quantizes the analog signal.

4.2.4 LED and Push Button Module Circuit

The circuit for the LED and Push Button modules show the function of the entire scanner including the Error LED (Red), the Ready LED (Green) and the Push Button.

Pin assignment of LED module

Pin No.	Name	Function
1	Ground	Ground
2	Ground	Ground
3	Button	Scan
4	Button	Cancel
5	Button	Function select
6	LED G	Ready status indicator
7	LED R	Seven segment display
8	Seven 1	Seven segment display
9	Seven 2	Seven segment display
10	Seven 3	Seven segment display
11	Seven 4	Seven segment display
12	Seven 5	Seven segment display
13	Seven 6	Seven segment display
14	Seven 7	Seven segment display
15	Seven 8	Seven segment display

4.2.5 Sensor input

A. Photo_Sensor

The sensor input includes paper in/out sensor.

Paper In/Out sensor

The paper position is detected by photo sensor. The photo transistor transmits signals to the photo sensor receiver and the circuit is shown below.

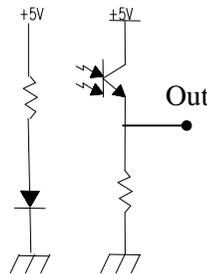


Figure 4.3 Paper in/out sensor

The paper in/out sensor is detected when the paper passes between the LED and the photo transistor.

B. IR-Sensor

The paper position is detected by IR sensor. The transistor transmits signals to the IR sensor receiver and the circuit is shown below.

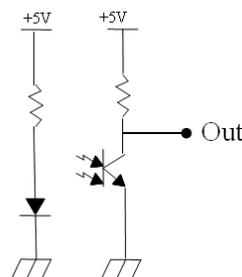
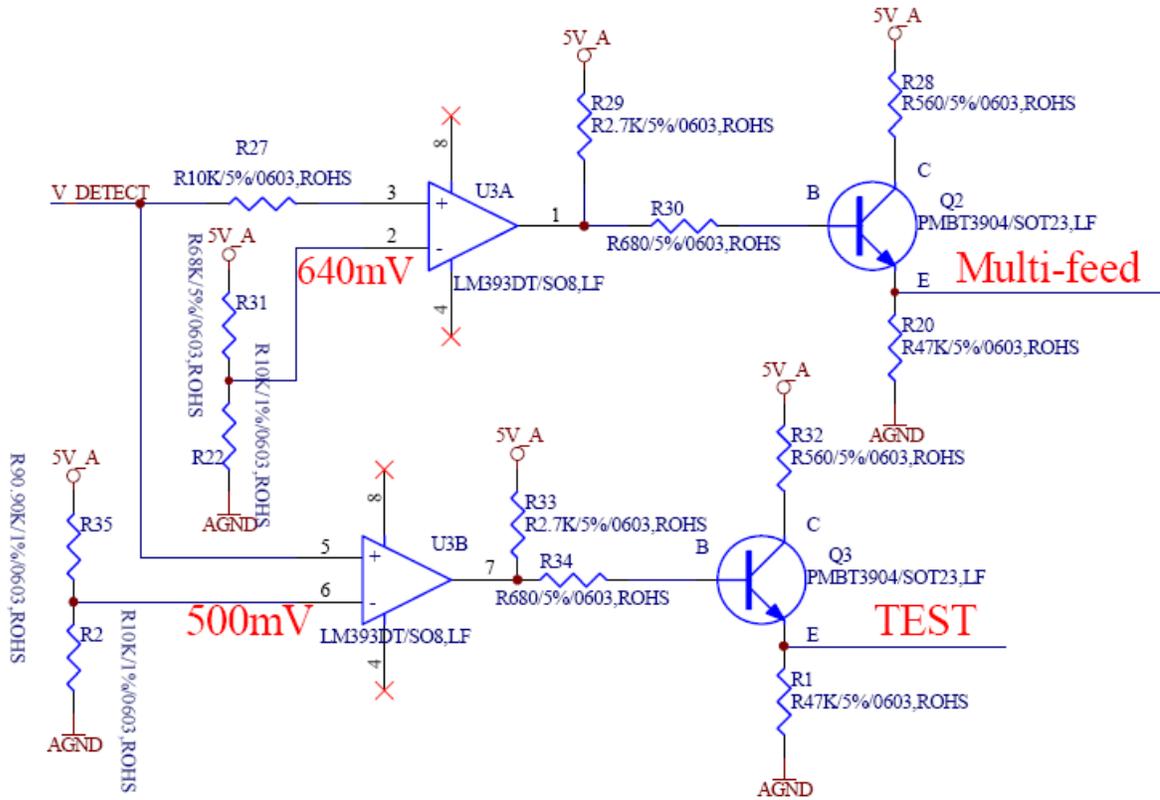


Figure 4.4 IR_Sensor

The IR sensor is detected when the paper passed between the LED and the photo transistor.

C. Ultrasonic Sensor

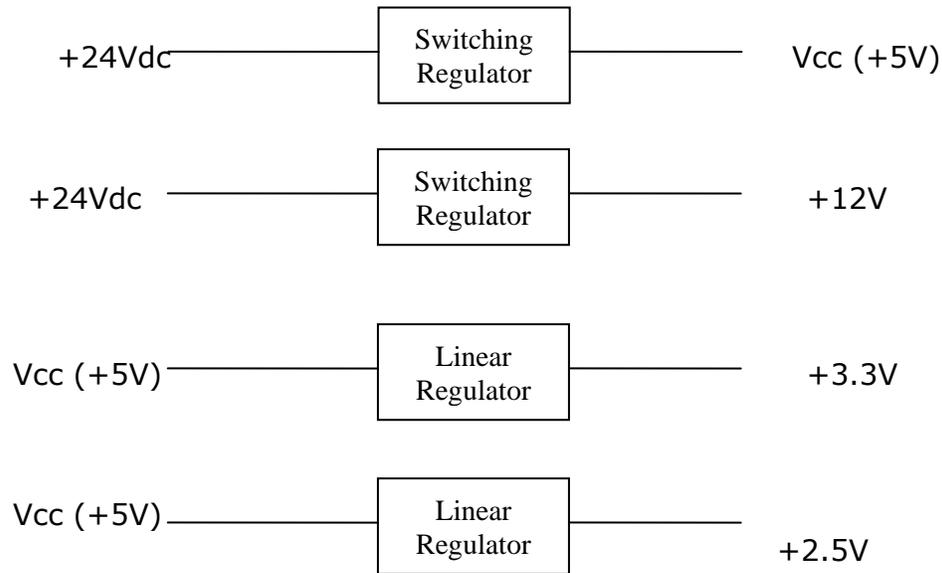
The ultrasonic sensor detects multiple sheets fed into paper path and transmits signals to the ultrasonic receiver. The circuit is shown below:



The ultrasonic sensor is detected when the paper passed between the LED and the photo transistor.

4.2.6 Sub power supply circuit

The sub power supply circuit is provided for the internal analog circuit. Input is 24V and output is Vcc and +5Va. The circuit configuration is shown below:



The sub power supply is used for: A/D, and logic circuits.

4.2.7 Power supply

In this system, there is only one type of power supply. Please see Table 4.1 for details.

Table 4.1 Power Adapter

Type \ Characteristic	Wall-mount
Input voltage range	100-240V
Input current (at the rated input/output)	2A type or less
Input frequency	50-60Hz
Max. in-rush current (@full load, cold start)	45A
Output voltage	+24Vdc
Min. load current	0.0A
Max. load current	2A
Total power (at full load)	48W

5. PROBLEM SOLVING

5.1 Diagnostics 5.2 Troubleshooting

This chapter supplies two paths for dealing with operational problems. The first relies on the DM262i's internal diagnostics. The second uses troubleshooting flowcharts and tables to isolate the problem. In many cases, the internal diagnostics will help you to locate the source of the problem quickly. Use these diagnostics first. If the diagnostics do not locate the source of the problem, refer to Section 5.2 **Troubleshooting**.

5.1 Diagnostics

The DM262i has internal diagnostics to help you determine the cause of operational problems. Some of the diagnostics function with the scanner online, while others are part of a separate offline diagnostics feature.

5.1.1 Online diagnostics

Determine operational problems by observing the display panel Error, Ready, and Check LEDs. With the scanner online and operating normally, the Ready LED is on and the Error LED is off. Any other Error LED indicates a problem, as shown in the following table.

Ready LED	Green LED On
Check LED	Green LED Blinking
Error LED Indication	RED LED Blinking (Group Error)

Table 3.1 Online diagnostics

If the ADF cover is open, close it. For the group errors, see the flowcharts later in this section.

5.1.2 Offline diagnostics

To run the offline diagnostics, and turn the power back on. When you first turn the scanner back on, the READY light will blink, indicating that the diagnostics are in progress. Observe the front panel Error LED closely. In a short time, the Error LED indicates the results of the offline diagnostics as explained in the table below.

Ready LED (Green)	Error LED (RED)	Error Indication
ON (No blinking)	OFF	OK (Ready)
OFF	1	Internal test
OFF	2	Internal test
OFF	3	Internal test
OFF	4	Internal test
OFF	5	USB test fails
OFF	6	Cover open error
OFF	7	Face down light check failure
OFF	8	Face up light check failure
OFF	9	Paper jam
OFF	0	USB disconnect

Table 3.2 Offline diagnostics results

For SRAM & DRAM error, refer to Main Control PCBA Replacement in Chapter 4. For the Group 2 error, see the flowchart in the following section.

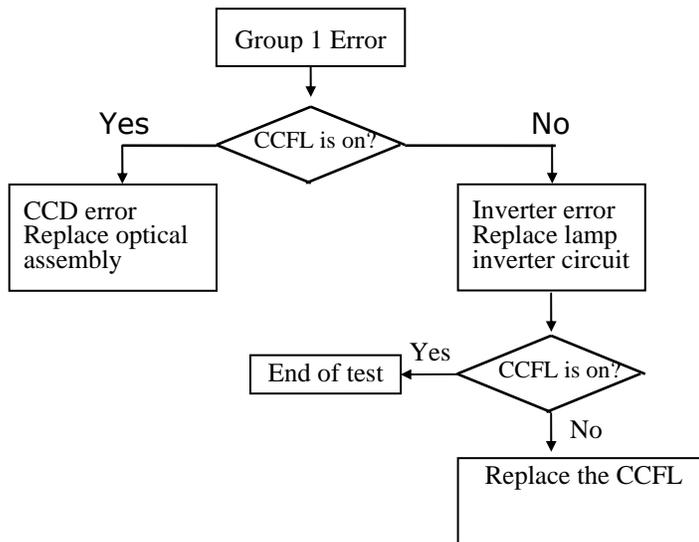
To return the scanner to online operation, turn off the scanner, turn the scanner back on.

5.1.3 Diagnostic flowcharts

Use the flowcharts that follow to determine the exact problem when either the online or offline diagnostics indicate a group error. Refer to Chapter 4 for parts replacement.

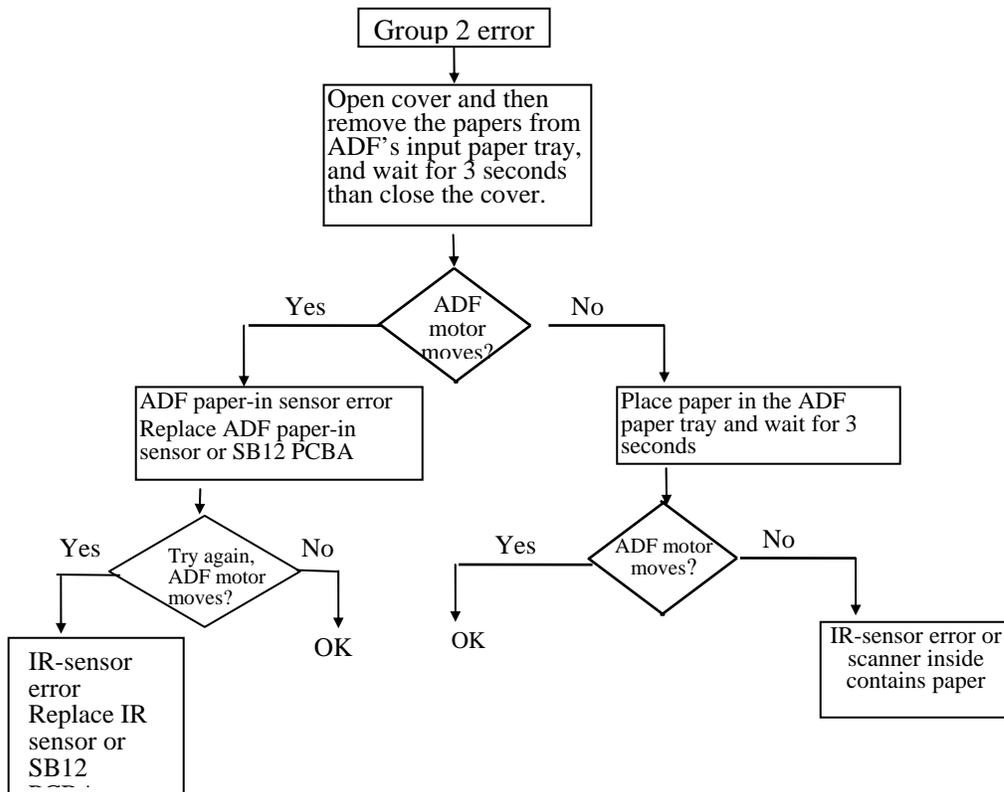
5.1.3.1 Group 1 error flowchart (CCFL assembly)

This flowchart applies when the Error LED shows number 7 and 8.



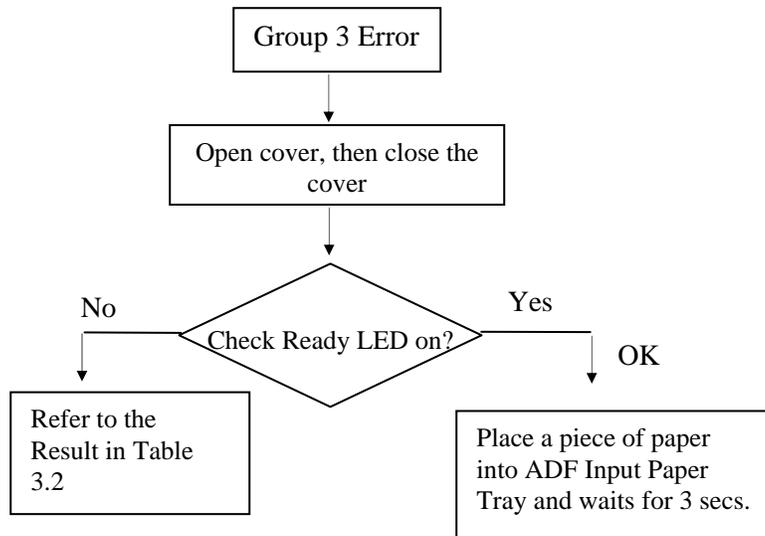
5.1.3.2 Group 2 error flowchart (paper in ADF paper tray)

This flowchart applies when the Ready LED is off and Error LED shows number 9 with the scanner online, and there is paper in the ADF paper tray.



5.1.3.3 Group 3 error flowchart (no paper in ADF paper tray)

This flowchart applies when the Ready LED is off and Error LED shows number 6 with the scanner online, and there is no paper in the ADF paper tray.



5.2 Troubleshooting

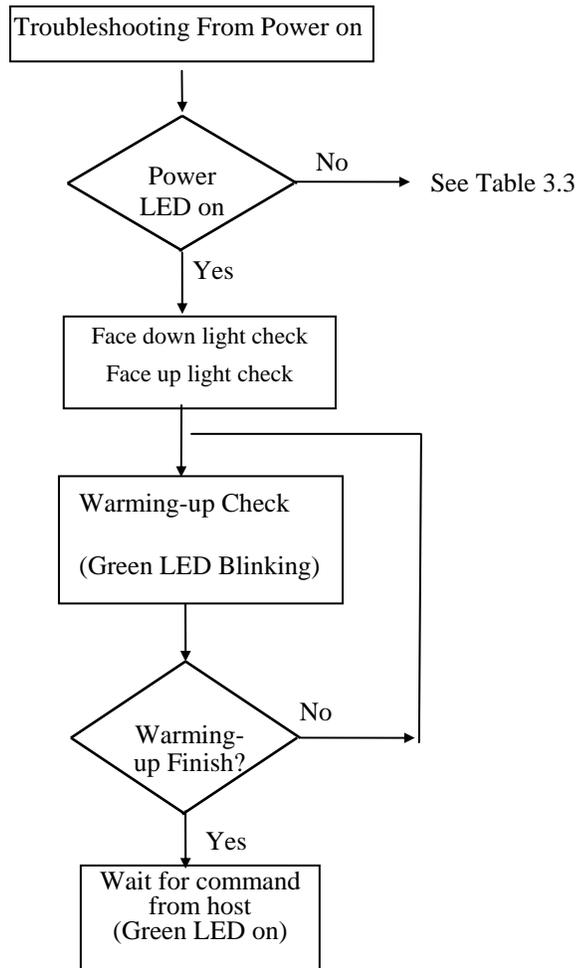
Refer first to the applicable troubleshooting flowchart in the following three sections. The flowcharts refer you to the appropriate table for detailed troubleshooting.

5.2.1 Flowcharts

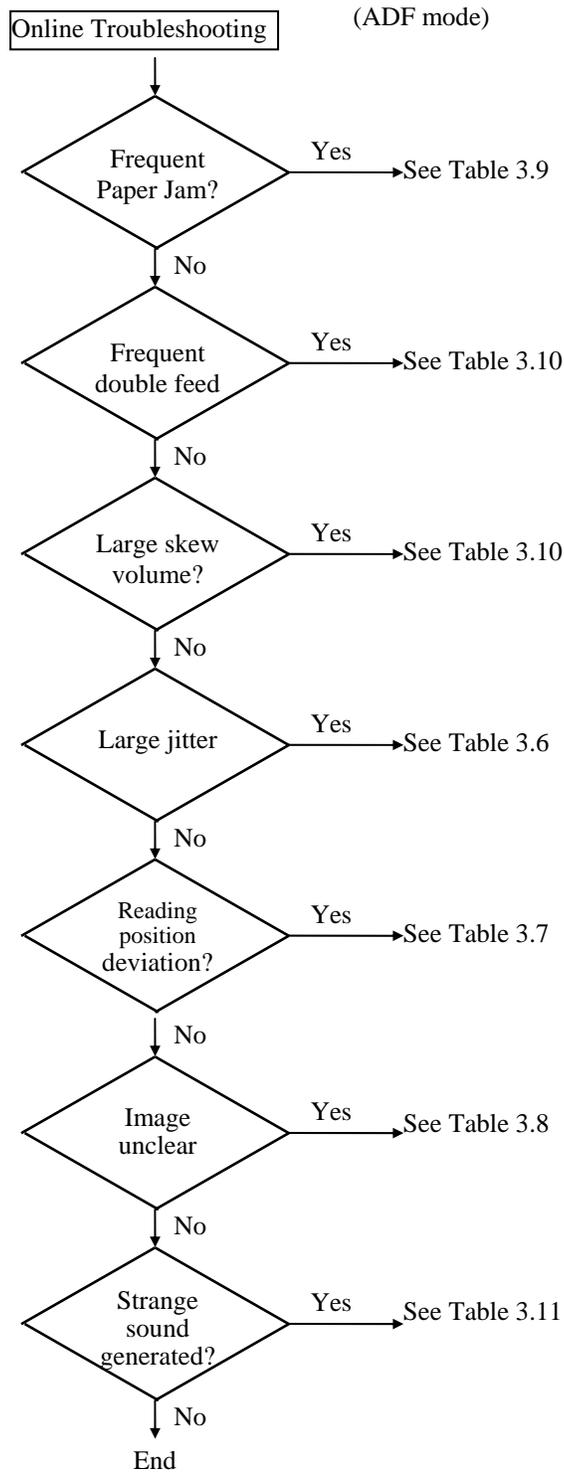
This section provides the following troubleshooting flowcharts:

- Troubleshooting from power on to scanner ready
- Online troubleshooting (ADF operation)

5.2.1.1 Troubleshooting flowchart: power on to scanner ready.



5.2.1.2 Troubleshooting flowchart: online ADF operation



5.2.2 Tables

The tables in this section provide detailed troubleshooting information.

5.2.2.1 The Power LED does not go on

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Unplugged from outlet	None	Visual check	Insert the AC plug into the outlet.	None
AC power unplugged at unit	None	Visual check	Insert the AC cable into unit.	None
Power switch is OFF	None	Visual check	Turn the power switch on.	None
AC voltage failure	None	AC outlet voltage check	None	None
Power unit AC input connector disconnected	None	Visual check	Connect the connector.	None
Power switch connector disconnected	None	Visual check	Connect the connector.	None
Power unit-main PCBA connection failure	None	Visual check	Connect the connector.	None
Power unit output voltage failure	Power unit	Output voltage (+24V) check *	Replace the power unit	None
PCBA Failure	-main control PCBA -LED board	Tester check (+24V, GND) *	Remove the cause or replace the PCBA.	None
LED board-main PCBA connection failure	None	Visual check	Connect the connector	None

Table 3.3

*: Check method explains how to check the failed item.

The visual check can be made by physically observing the part or observing the offline test display on the front panel. The tester check is made by checking the voltage levels of the relevant units.

5.2.2.2 Reading is not performed

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
ADF cover open	ADF cover	Visual check	Close the ADF cover.	None

Table 3.4

5.2.2.3 Image does not appear

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
ADF cover open	ADF cover	Visual check	Close the ADF cover	None
Power supply-main control board connection failure	None	Visual check	Connect the connector.	None
Power supply fails.	Power supply	Tester check (+24V, GND) *	Replace the power supply.	None
Lamp failure	Lamp	Visual check	Replace the lamp.	None
Inverter failure	Inverter	Visual check	Replace the inverter.	None
CCD board-main control board connection failure	None	Visual check	Connect the connector.	None
CCD board fails.	CCD Board	Visual check	Replace the optical unit.	None

Table 3.5

5.2.2.4 Large jitter

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Power supply-main control board connection failure	None	Visual check	Connect the connector.	None
Power supply fails	Power supply	Tester check (+24V, GND) *	Replace the power supply.	None
Motor-main control PCBA connection failure	None	Visual check	Connect the connector.	None
Motor failure	Motor	Visual check	Replace the motor.	None

Table 3.6

5.2.2.5 Reading position deviation

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Power supply-main control board connection failure	None	Visual check	Connect the connector.	None
Power supply fails	Power supply	Tester check (+24V, GND) *	Replace the power supply.	None
Motor- main control PCBA connection failure	None	Visual check	Connect the connector.	None
Motor failure	Motor	Visual check	Replace the motor	None
IR sensor board-main control PCBA cable failure	None	Visual check	Connect the connector	None
IR sensor board-main control PCBA cable failure	Sensor board-main control PCBA cable	Tester or visual check	Replace the IR sensor cable	None
IR sensor board (SB21) failure	Sensor board	Tester check	Replace the PCBA.	None

Table 3.7

5.2.2.6 Image unclear

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Lamp too dark	Lamp	Visual check	Replace with a new lamp.	None
Dirt on calibration reference plate	Calibration reference plate	Visual check	Clean the glass with isopropyl alcohol.	None
Dirt on calibration reference plate	Calibration reference plate	Visual check	Clean the calibration reference plate with isopropyl alcohol.	None
Dirt on the mirrors	Mirrors	Visual check	Clean the mirrors with isopropyl alcohol.	None
Dirt on the lens	Lens	Visual check	Clean the lens with isopropyl alcohol.	None

Table 3.8

5.2.2.7 Frequent paper jam

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Paper setting failure	Operation error	Is the paper correctly set in the paper chute?	Teach users to properly position the paper.	None
Paper failure	operation error	Is the specified paper used?	None	None
Pad assembly failure	Pad assembly	Check the pad assembly for wear and tear	Replace the pad assembly/ touch spring unit.	None

Table 3.9

5.2.2.8 Frequent double feed and skew

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Paper setting failure	Operation error	Is the paper correctly set in the paper chute?	Teach users to properly position the paper	None
Paper failure	Operation error	Is the specified paper used	None	None
Pad assembly failure	Pad assembly	Check the pad assembly for wear and tear.	Replace the pad assembly/ touch spring unit.	None

Table 3.10

5.2.2.9 Strange sound generated (ADF)

Cause	Relevant Unit	Check Method	Maintenance Method	Remark
Paper setting failure	Operation error	Is the paper correctly set in the paper chute?	Teach users to properly position the paper	None
paper failure	Operation error	Is the specified paper used?	None	None

Table 3.11

6. DISASSEMBLY

- 6.1 Service Tools**
- 6.2 Lubricants**
- 6.3 Procedure for Disassembly and Reassembly**

6.1 Service Tool

Table 6.1 describes the maintenance tools necessary for the maintenance of this equipment.

No	Name	Description
1	Minus screwdriver	Idler pulley module screw
2	Philips screwdriver (magnetic)	Nominal No.2 M3, M4
3	Oil	Shell "Terrace Oil 46"
4	Grease	Shell "Alvania Grease No.2"
5	Alcohol (Isopropyl 91% >)	Cleaning
6	Digital voltmeter	With 0.01 V range
7	Oscilloscope	100 MHz or more with external sweep
8	Blower	Cleaning

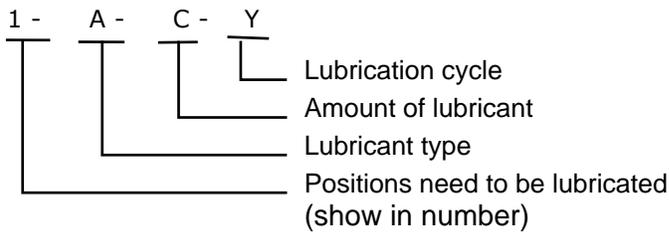
Table 6.1 Maintenance tools

6.2 Lubricants

This section describes the items to check and the places to lubricate when maintenance parts are replaced.

6.2.1 Mechanical Unit Lubrication

This lubrication method:



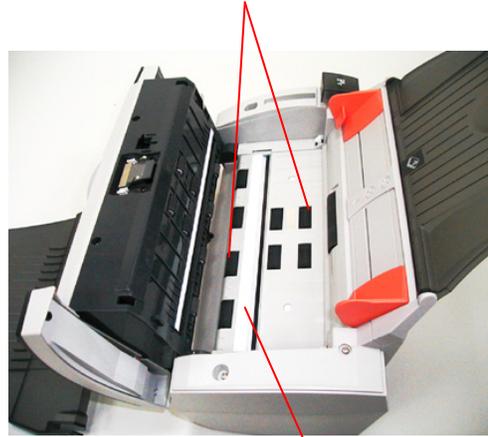
1. Positions need to be lubricated:
The positions need to be lubricated is indicated in numbers.
2. Lubricant type:
A: Shell Alvania Grease No. 2
B: Shell Terrace Oil 46
3. Amount of lubricant:
C: Coat thinly uniformly
4. Lubrication cycle:
Y: Every year

Table 6.2 below shows the position to be lubricated.

Lubrication Position	Lubricant Type	Lubricant Amount	Lubrication Cycle	Lubrication Position
1	B	C	Y	Feeding Roller
2	A	C	Y	Glass

Table 6.2

1 Feeding Roller



2 Glass

Figure 6.1 Lubricated Position

6.3 Procedure for disassembly and reassembly

6.3.1 Notes on disassembly

- (1) Clean the disassembly and assembly location.
- (2) Disconnect the power cable and remove the AC plug from the outlet before disassembly and assembly.
- (3) Follow the disassembly and assembly procedures. Never loosen the screws of parts that must not be disassembled.
- (4) Store the disassembled parts in a clean place to avoid loss.
- (5) After replacement, check the contacts and spare part mounting.
- (6) Assemble the parts in reverse order of disassembly procedure.

6.3.2 Removing the Upper Housing

1. Hold the Output Paper Tray and push your finger inwardly to remove the Output Paper Tray.
2. Hold the Input Paper Tray and lift the Tray to remove it.
3. Press the ADF release button to open the cover.
4. Remove 2 fixing screws.
5. Unscrew the 4 fixing screws on the upper housing.
6. Remove the Upper Housing.



Press inwardly to remove the Output Paper Tray



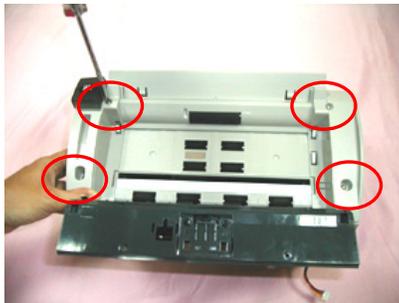
Remove Input Paper Tray



Press the ADF release button



Remove 2 fixing screws



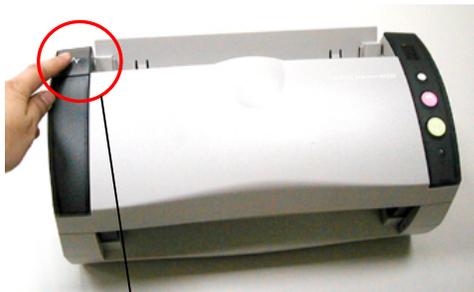
Remove 4 fixing screws



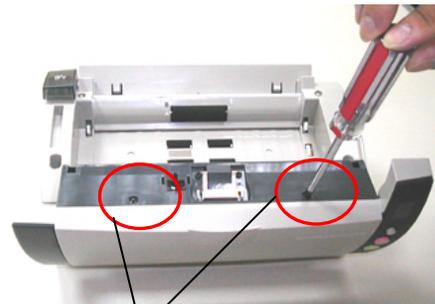
Remove the upper housing

6.3.3 Removing the Upper Optical Assembly

1. Press the Paper Jam Release Button to open the cover.
2. Loosen 2 fixing screws on the upper case.
3. Remove the fixing sponge.
4. Loosen 2 fixing screws on the left side.
5. Loosen 1 fixing screw on the right side.



Paper Jam Released Button



Fixing Screw x 2



Sponge



Fixing screws x 2

6. Disconnect the inverter cable with red and black colors.
7. Disconnect the lamp inverter cable (in white color) to remove the inverter.



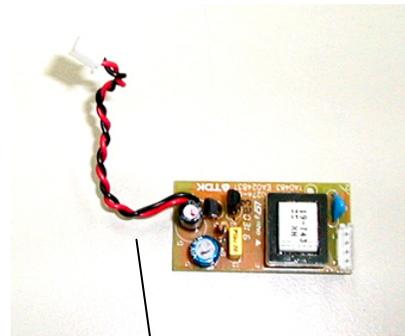
Fixing Screw x 1



Inverter Cable



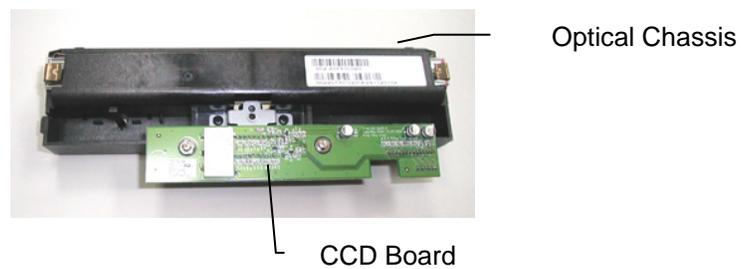
Power cable



Inverter

6.3.4 Remove the Upper Optical Chassis

1. Remove the inverter in the upper optical assembly. (See subsection 6.3.3)
2. Disconnect two cables on the optical chassis.

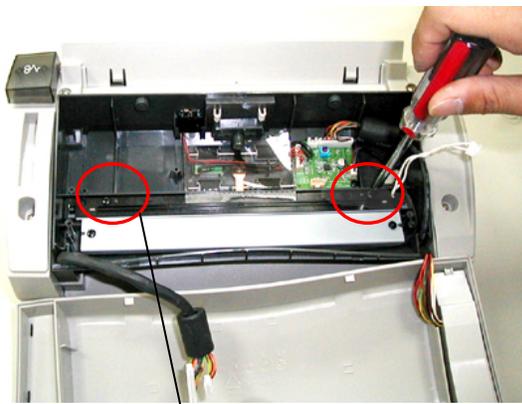


Note:

During assembling or disassembling procedure, please pay special attention not to touch the CCD board on the optical chassis. Otherwise, the scanning quality may be affected.

6.3.5 Remove the Lamp in Upper Optical Assembly

1. Remove the upper optical chassis. (See subsection 6.3.4)
2. Loosen two fixing screws on the lamp cover.
3. Use a flat screwdriver to loosen the lamp assembly.
4. Gently remove the lamp assembly.



Fixing Screw x 2



Flat screwdriver



Lamp assembly

6.3.6 Removing the ADF Pad

Use your fingers to press two sides of the ADF pad and lift the pad on the upper optical assembly to remove it.

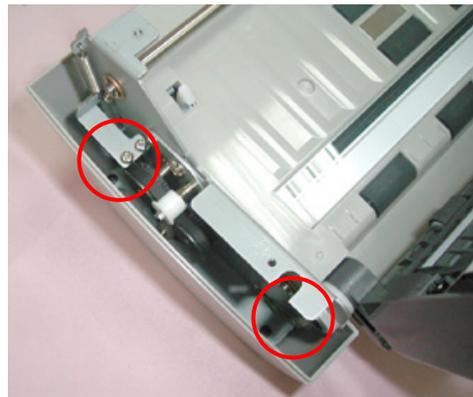


6.3.7 Removing the Main Control Board

1. Unscrew 1 fixing screw on the right side.
2. Unscrew 2 fixing screws on the left side and close the cover.
3. Raise the main unit and disconnect the motor cable and flat cable.
4. Unscrew all fixing screw.
5. Disconnect all cables.
6. Remove 4 fixing screws on the main board.



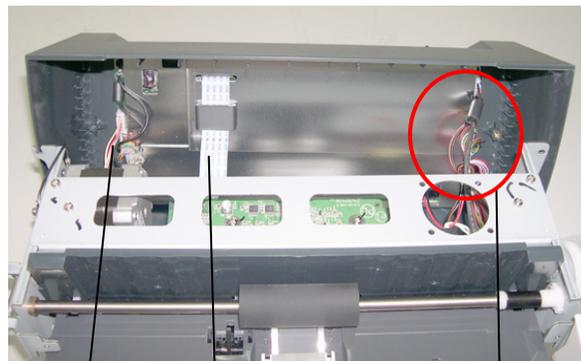
Remove one fixing screw on the right side



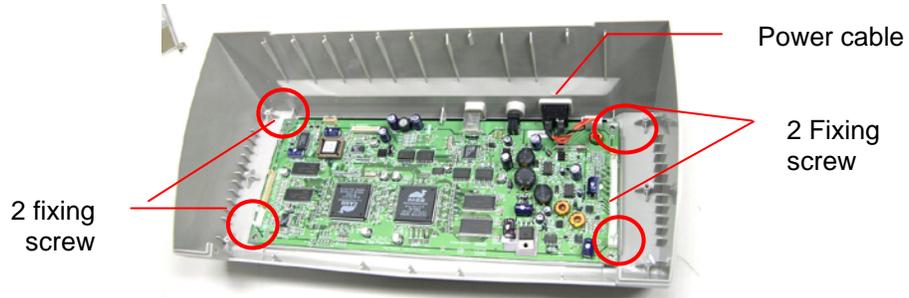
Removing two fixing screws on the left side



Raise the main unit a bit



Disconnect motor cable
Disconnect flat cable
Disconnect cables



Remove 4 fixing screw and disconnect the power cable



The main board

6.3.8 Removing the Motor in Lower Optical Assembly

1. Turn the scanner over.
2. Remove 2 fixing screws on the external side of the metal plate.
3. Remove the motor.



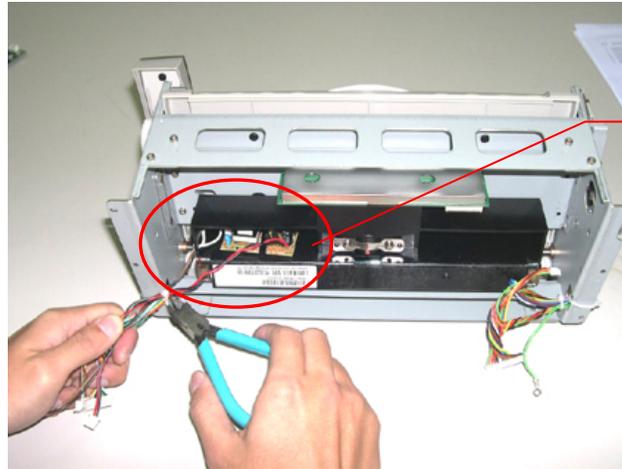
Remove 2 fixing screws



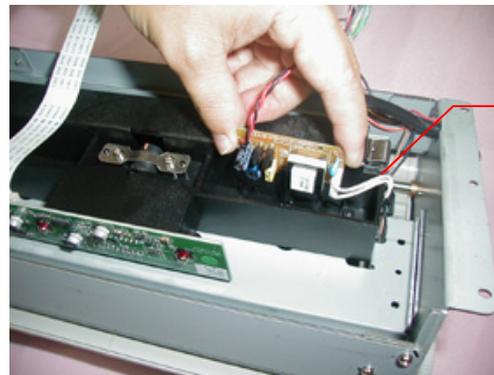
The motor

6.3.9 Removing the Inverter in the Lower Optical Assembly

1. Cut the cable bondage.
2. Remove the inverter from the plastic fixing plate.
3. Disconnect the inverter cable.

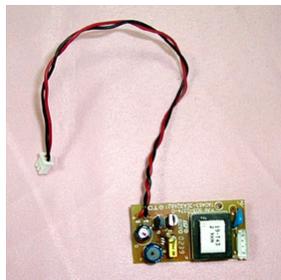


Inverter



The inverter cable

Release the inverter from the plastic plate and disconnect the inverter cable



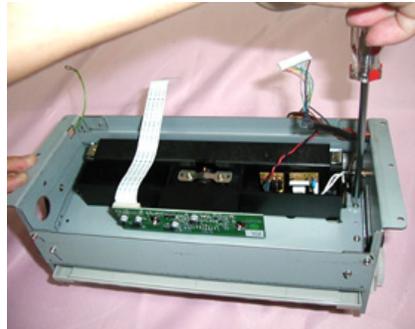
The inverter

6.3.10 Removing the Lower Optical Chassis

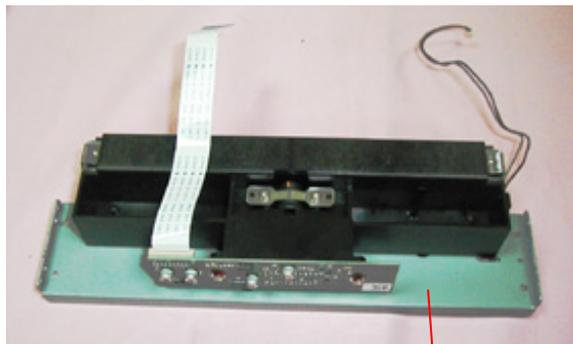
1. Remove 2 fixing screws on the left and external side of the metal plate.
2. Remove 2 fixing screws on the right and internal side of the metal plate.
3. Remove the Optical Chassis.



Remove 2 fixing screws on the left external side



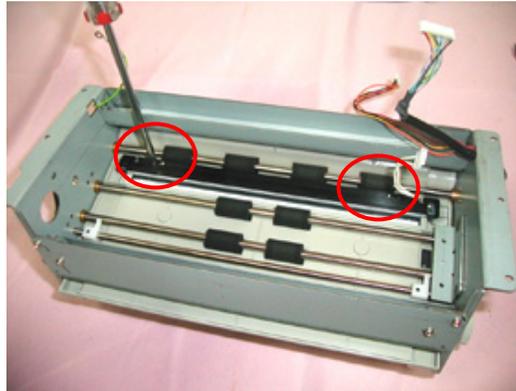
Remove 2 fixing screws on the right internal side



Optical Chassis

6.3.11 Removing the Lamp in the Lower Optical Assembly

1. Remove 2 fixing screws on the lamp assembly.
2. Remove the lamp.



Remove 2 fixing screws on the lamp assembly

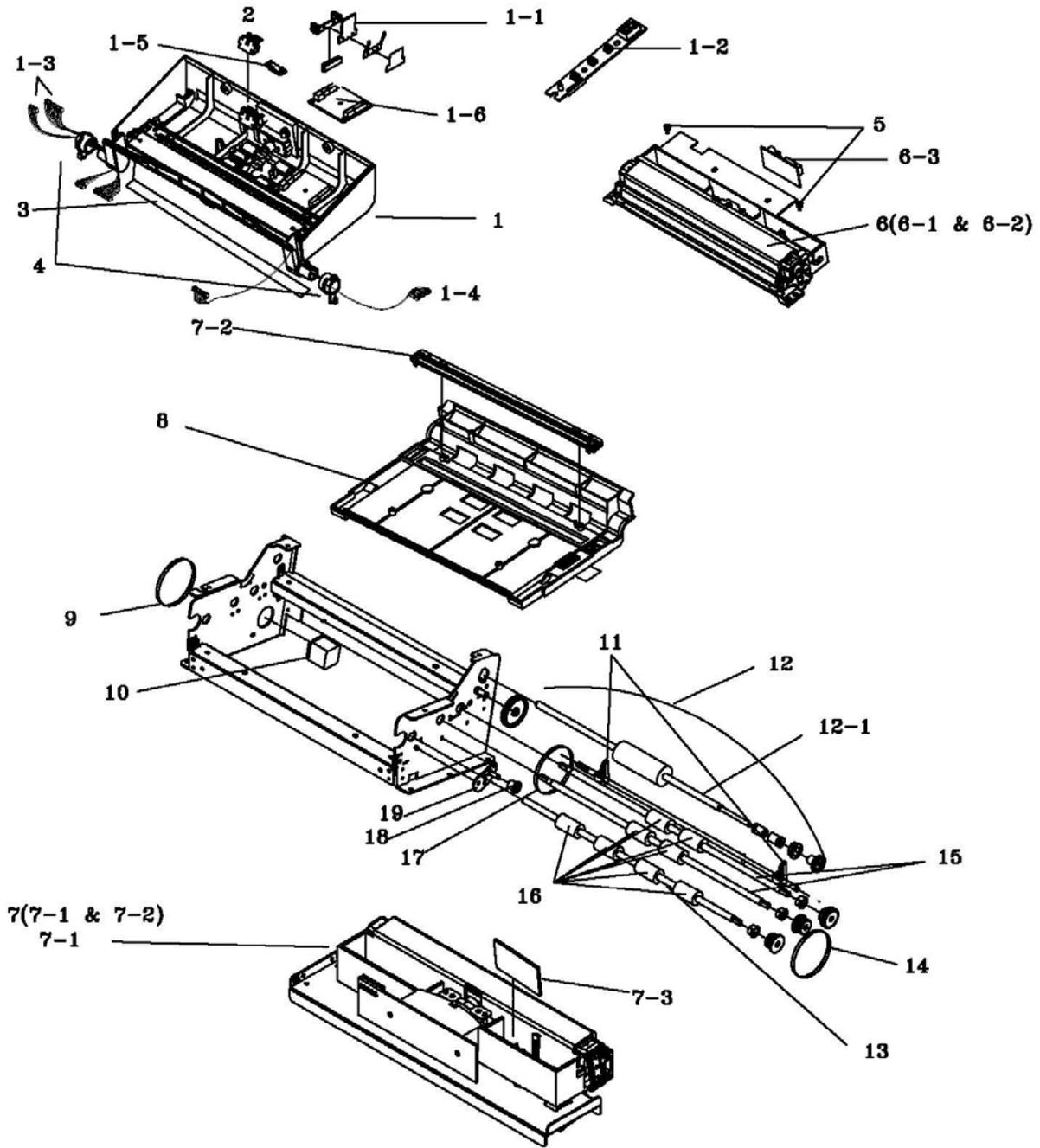


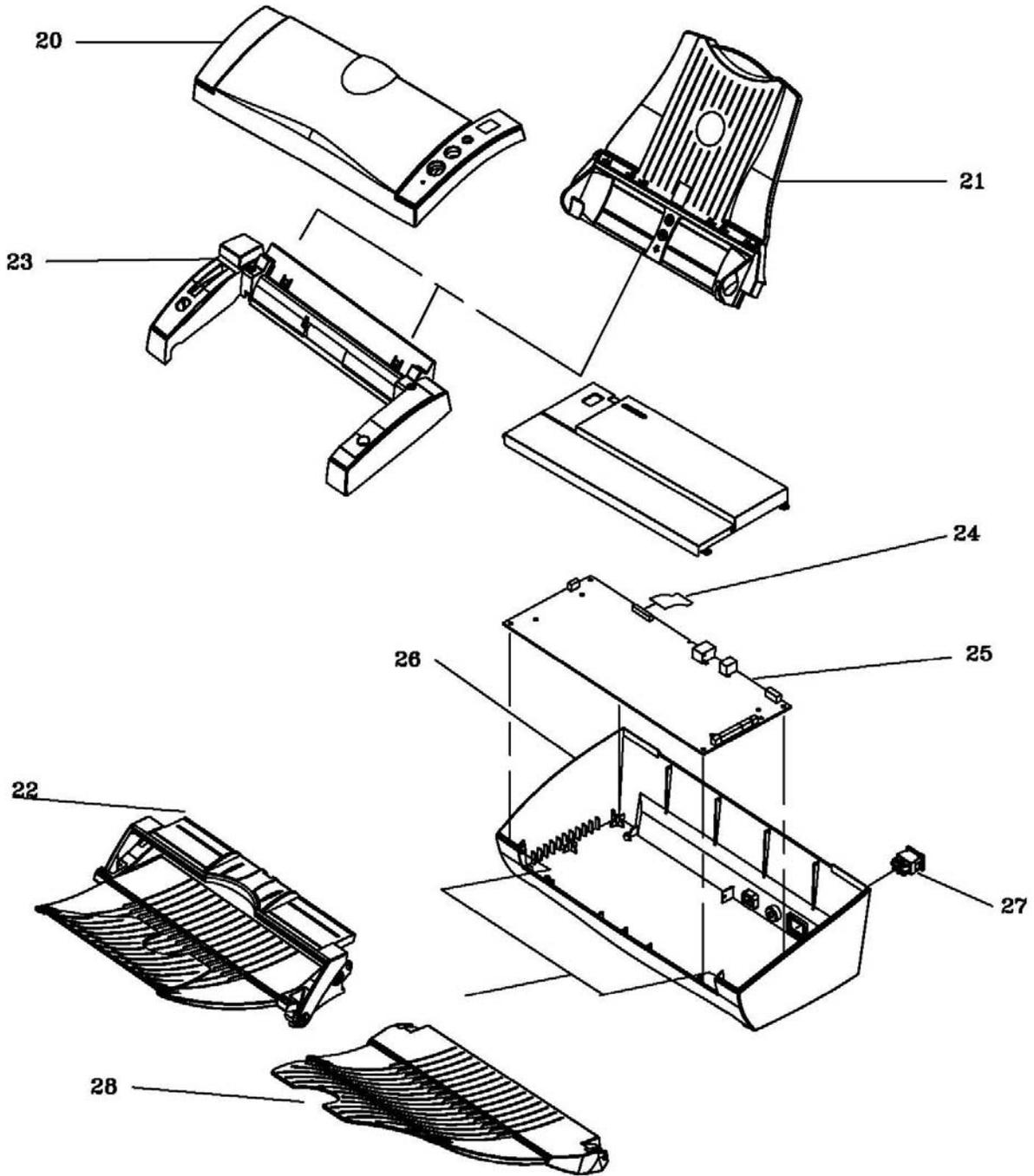
The lamp assembly

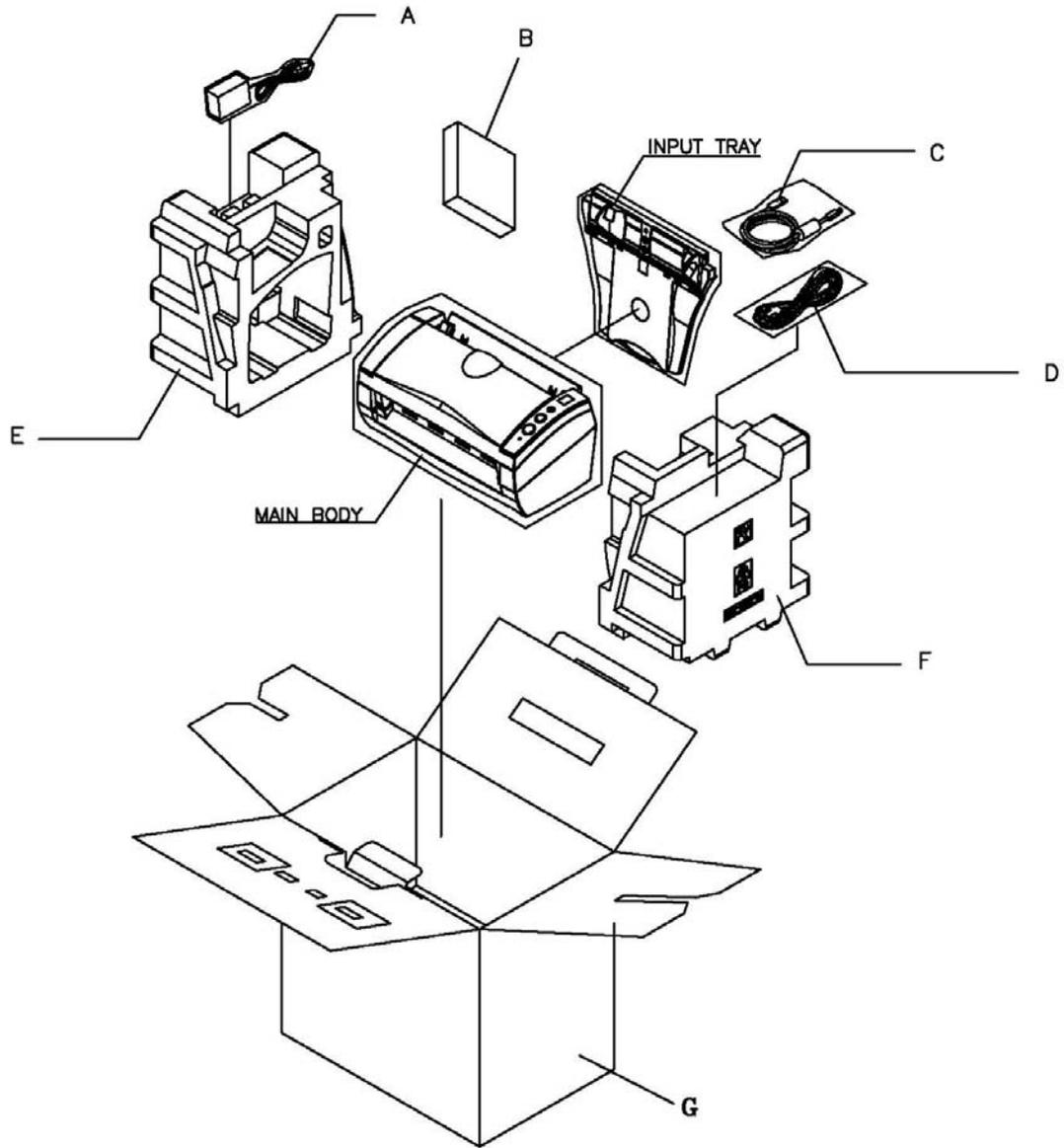
7. PARTS

<h3>7.1 Spare Part Diagram/Table</h3>

7.1 Spare part diagram







ITEM	P/N	DESCRIPTION	REV.	ACCEPT ORDER QUANTITY
1	003-5980-0-SP	S-PARTS:ASS'Y,PAPER GUIDE,UPPER W/O LAMP,RoHS	100	1
1-1	002-1603-0-SP	S-PARTS: ASS'Y, PAD, RoHS	200	1
1-2	004-1142-9-SP	PCBA:LBA96,PAVO PLUS,RoHS	100	1
1-3	104-0462-09-SP	S-PARTS:CABLE:2/2 HOUSING,14P+6P,P=2.0mm,L=420mm,28AWG , W/TUBE,W/CORE,RoHS	100	1
1-4	104-0395-09-SP	S-PARTS:CABLE:2 HOUSING,12P/12P,P=2.0mm,L=420mm,28AWG,1500.002147.00, W/TUBE,RoHS	100	1
1-5	004-1140-9-SP	S-PARTS:PCBA:SBA45,IR Sensor Board,RoHS	100	1
1-6	004-1235-9-SP	S-PARTS:PCBA:SBA51,RoHS	100	1
2	008-0053-09-SP	S-PARTS:ASS'Y, SENSOR:SG-413JAV01,3P,P=2.0mm,L=120mm,RoHS	100	1
3	066-0330-0-SP	S-PARTS:SHEET, CALIBRATION, UPPER, 230X6.5X0.3T, MELINEX 329, 210, (5PCS),RoHS	100	1
4	051-1260-0-SP	S-PARTS: BEARING COVER HINGE, OD=13, ID=10, POM, WHITE,RoHS	100	10
5	003-5698-0-SP	S-PARTS:Screw & Damper,For Optical module,(1SET=10PCS),RoHS	100	1
6	003-6123-0-SP	S-PARTS:ASS'Y,OPTICAL,FACE UP,W/LAMP(002-3087-0),W/INVERTER(005-0021-09),RoHS	100	1
6-1	002-3081-0-SP	S-PARTS:ASS'Y,OPTICAL,FACE UP,RoHS	100	1
6-2	002-3087-0-SP	S-PARTS:ASS'Y,LAMP,FACE UP,RoHS	100	1
6-3	005-0021-09-SP	S-PARTS:INVERTER:24V,6mA,35KHz,XAD355SR-1,TDK,RoHS	100	1
7	003-6122-0-SP	S-PARTS:ASS'Y,OPTICAL,FACE DOWN,W/LAMP(002-3343-0),W/INVERTER(005-0022-09),RoHS	100	1
7-1	002-3082-0-SP	S-PARTS:ASS'Y,OPTICAL,FACE DOWN,RoHS	100	1
7-2	002-3343-0-SP	S-PARTS:ASS'Y,LAMP ,FACE DOWN,RoHS	100	2
7-3	005-0022-09-SP	S-PARTS:INVERTER:24V,6mA,35KHz,XAD355-2,TDK,WIRE:200mm,RoHS	200	1
8	003-6134-0-SP	S-PARTS:ASS'Y,PAPER GUIDE,LOWER,W/O LAMP(002-3343-0),RoHS	100	1
9	057-0123-0-SP	S-PARTS:BELT, 58T, MXL,W=4.8, (10PCS),RoHS	100	1
10	002-2192-0-SP	S-PARTS:ASS'Y, MOTOR,RoHS	200	1
11	002-1599-0-SP	S-PARTS:ASS'Y,RELEASE HOOK,RoHS	100	1

12	002-2082-0-SP	S-PARTS:ASS'Y, ADF ROLLER,RoHS	200	1
12-1	069-0001-0-SP	S-PARTS: ADF ROLLER, L=290, EPDM, RoHS	200	1
13	057-0256-0-SP	S-PARTS:ROLLER, FEED,PAPER OUT,φ14.5,EPDM,298.5,RoHS	200	1
14	057-0121-0-SP	S-PARTS:BELT, 65T, MXL,W=4.8, (10PCS),RoHS	100	1
15	057-0257-0-SP	S-PARTS:ROLLER, FEED,PAPER IN,φ14.5,EPDM,316.25,RoHS	200	1
16	088-0024-0-SP	S-PARTS:IDLE ROLLER,φ10.4x16,(8 PCS),RoHS	100	1
17	057-0122-0-SP	S-PARTS:BELT, 68T, MXL,W=4.8, (10PCS),RoHS	100	1
18	051-1305-0-SP	S-PARTS:IDLE PULLEY,11x25,POM+,(1SET=10PCS),RoHS	100	1
19	054-0133-0-SP	S-PARTS:MOUNT,IDLE SECC,(1SET=10PCS),RoHS	100	1
20	002-2476-0-SP	S-PARTS:ASS'Y,COVER TOP UNIT,RoHS	100	1
21	002-2194-0-SP	S-PARTS:ASS'Y,ADF INPUT TRAY	100	1
22	002-2195-0-SP	S-PARTS:ASS'Y, UPPER HOUSING,RoHS	100	2
23	104-0286-09- SP	S-PARTS:FFC CABLE:18P,P=1.0mm,L=160mm,FF- 18-1.0-C-160-D(4/4/8/8)AA,RoHS,(5 PCS)	100	1
24	003-6129-0-SP	S-PARTS:PCBA,MB325 WITH FW(259-0147-1), RoHS	100	1
25	051-2131-0-SP	S-PARTS:HOUSING, BOTTOM,ABS,2.5t,337x168x100,SILVER,RoHS	100	1
26	008-0054-09- SP	S-PARTS:ASS'Y,POWER S/W:GF037RA- 090,5P,P=2.5mm,L=50mm,W/TUBE,RoHS	100	1
27	002-1813-0-SP	S-PARTS: ASS'Y, PAPER OUTPUT TRAY	100	1
ACCESSORY				
A	005-3021-09- SP	S-PARTS:ADAPTER:DESK-TOP,IEC 320- C6,3P,100~240Vac,24Vdc,2A,48W,HEG42- 240200-7L(A) LF,HITRON,CLASS I,ENER,RoHS	100	1
B	003-2393-0	S/W PACKAGE,RoHS	100	1
C	104-6012-09- SP	S-PARTS:USB CABLE:USB A(M)/B(M),4P,L=1850mm,UL2725 28AWG,SV- 0411016,COLOR:W/CORE,RoHS	100	1
D-1	104-8006-09- SP	S-PARTS:AC POWER CORD,EUR.(CEE),2P+G. BASE,16A/250V,L=1800mm,3C*0.75mm ² ,BLACK, PG8B9CIJG0A-05B,RoHS	300	1
D-2	104-8007-09- SP	S-PARTS:AC POWER CORD:US,3P,10A/125V,L=1800mm,3C*18AWG,BL ACK, PH8B2EDJF0A-05B,RoHS	400	1
D-3	104-8011-09- SP	S-PARTS:AC POWER CORD,UK(BS/PSB),3P,3A/250V,L=1800mm,3C*0. 75mm ² ,BLACK, PG8B9X3JG0A-05B,RoHS	100	1
E	072-0375-0	FOAM, EPS,L:310x278x160,RoHS	100	1
F	072-0376-0	FOAM, EPS,R:310x278x160,RoHS	100	1
G	073-1474-0	CARTON:470x290x340,A/F,RoHS	100	1

Spare Parts Table