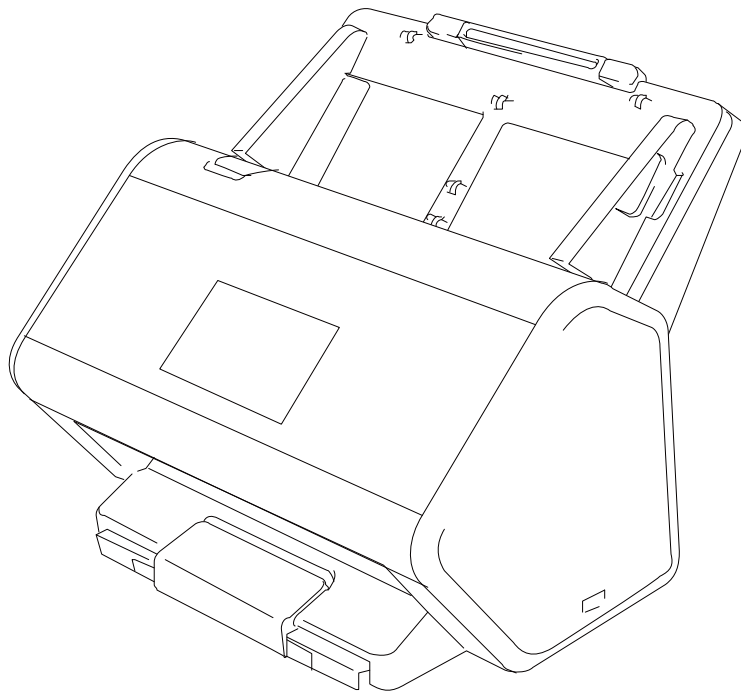**Brother Advanced Document Scanner**

SERVICE MANUAL

MODEL:
ADS-2800W/3600W

Read this manual thoroughly before maintenance work.
Keep this manual in a convenient place for quick and easy reference at all times.

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APPENDIX 3　INSTALLING THE MAINTENANCE PRINTER DRIVER

SAFETY INFORMATION

⚠️ **WARNING**

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injuries.

⚠️ **CAUTION**

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injuries.

🛈 **Important**

Important indicates a potentially hazardous situation which, if not avoided, may result in damage to property or loss of product functionality.

🚫   Prohibition icons indicate actions that must not be performed.

⚡   Electrical Hazard icons alert you to possible electrical shock.

🔥   Fire Hazard icons alert you to the possibility of fire.

🔌   Unplug icons indicate that you should unplug the machine.

Note   Notes indicates advice about how you should respond to a situation that may arise with your machine and/or advice about how the operation of the machine works with other features.

🚫   This icon indicates that flammable sprays may not be used.

🚫   This icon indicates that organic solvents such as alcohol and liquids may not be used.

Follow all warnings and instructions marked on the machine.

■ To use the Machine Safely

Please keep these instructions for later reference and read them before attempting any maintenance. If you do not follow these safety instructions, there is a possibility of a fire, electrical shock, burn or suffocation.

⚠ **WARNING**

DO NOT expose the machine to direct sunlight, excessive heat, open flames, corrosive gasses, moisture or dust.
DO NOT place your machine on a carpet or rug, as this will expose it to dust. Doing so may create a risk of an electrical short or fire. It may also damage the machine and/or render it inoperable.

DO NOT place the machine near heaters, air conditioners, electric fans, refrigerators, radiators, or water. Doing so may create the risk of a electrical short or fire should water come into contact with the machine (including condensation from heating, air conditioning, and/or ventilation equipment that may be sufficient to create a electrical shock, short circuit or fire).

DO NOT place the machine near chemicals or in a place where chemicals could be spilled on it. Should chemicals come into contact with the machine, there may be a risk of fire or electric shock. In particular, organic solvents or liquids such as benzene, paint thinner, polish remover, or deodorizer may melt or dissolve the plastic cover and/or cables, resulting in a risk of fire or electric shock. These or other chemicals may also cause the machine to malfunction or become discolored.

The product should be placed so as not to come into contact with any wall or other device. Otherwise, it could create a risk of overheating and/or fire.
Instead:
• Place the machine on a solid surface, never on a bed, sofa, rug, or other similar soft surface.
• Do not place this machine in a "built-in" installation unless adequate ventilation is provided.

Slots and openings in the casing, back or bottom of the product are provided for ventilation. To avoid blocking or covering these openings, the product should be placed where it will not touch any wall or other device. Blocking the unit's ventilation could create a risk of overheating and/or fire.

IMPORTANT
• Always place the unit on a solid surface, never on a bed, sofa, rug, or similar soft surfaces.
• DO NOT place the unit in a "built-in" installation.

⚠ **CAUTION**

Avoid placing your machine in a high-traffic area. If you must place it in a high-traffic area, ensure that the machine is in a safe location where it cannot be accidentally knocked-over, which could cause injury to you or others and serious damage to the machine.

Ensure that cables and cords leading to the machine are secured so as not to pose a tripping hazard.

DO NOT place this machine on an unstable or tilted cart, stand, table or on any tilted/slanted surface. The machine is heavy and may fall, causing injury to you and serious damage to the machine.

Make sure that no part of the machine protrudes from the desk or stand where the machine is located. In particular, do not leave the output tray open and extended beyond the edge of a cabinet, table or stand when the machine is located on the edge of a cabinet, table, stand, etc. As previously cautioned, make sure that the machine is located on a flat, level, and stable surface free from vibration. Failure to observe these precautions could cause the machine to fall, causing injury to you or others and serious damage to the machine.
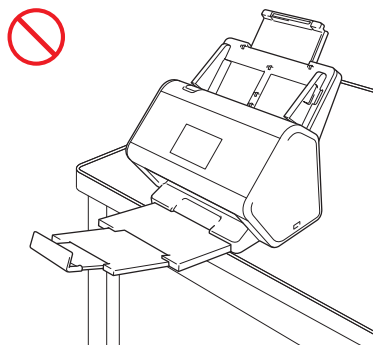
🛈 Important

- DO NOT place your machine next to sources of interference, such as speakers or the base units of non-Brother cordless telephones. Doing so may interfere with the operation of the machine's electronic components.
- DO NOT connect your machine to an AC power outlet controlled by wall switches or automatic timers. Disruption of power can delete information from the machine's memory, and repeated cycling of the power can damage the machine.
- DO NOT put objects on top of the unit.

⚠ WARNING

ELECTRICAL HAZARDS
Failure to follow the warnings in this section may create the risk of an electrical shock. In addition, you could create an electrical short, which may create the risk of a fire.

⚠

There are high-voltage electrodes inside the machine. Before you access the inside of the machine, including for routine maintenance such as cleaning, make sure you have unplugged the power cord from the AC power outlet, as well as unplugged any Ethernet ables from the machine.
DO NOT push objects of any kind into the machine through slots or openings in the casing, as they may touch dangerous voltage points or short out parts.

⚠ ⚠
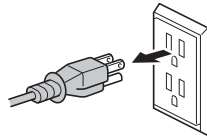
DO NOT continue using the machine if it has been dropped or the cabinet has been damaged. Instead, unplug the machine from the power outlet and contact Brother Authorized Service Personnel.

⚠ ⚠

The machine should be connected to an AC power source within the range indicated on the rating label. DO NOT connect it to a DC power source or inverter. Doing this might cause an electrical shock or fire. If you are not sure what kind of power source you have, contact a qualified electrician.

⚠

If water, other liquids, or metal objects get inside the machine, immediately unplug the machine from the AC power outlet and contact Brother Authorized Service Personnel.

⚠ ⚠

Power Cord Safety:
• Use only the power cord supplied with this product.
• DO NOT allow anything to rest on the power cord.
• DO NOT place the machine where people can walk on the cord.
• DO NOT place the machine in a position where the cord is stretched or strain is otherwise put on the cord, as it may become worn or frayed.
• DO NOT use the machine or handle the cord if the cord has become worn or frayed. If unplugging the machine, DO NOT touch the damaged/frayed part.
• Brother strongly recommends that you DO NOT use any type of extension cord.

This product was packaged in a plastic bag. To avoid suffocation, keep this plastic bag away from babies and children. Do not use the bag in cribs, beds, carriages or play pens. The bag is not a toy.

AC Adapter Safety

⚠ ⚠

Only use the supplied AC adapter with the unit. Only plug the AC adapter into a power outlet with voltage that is within the range indicated on Specifications in the User's Guide. Failure to do so may result in injury to yourself or others, or damage to the machine or other property. Brother does not assume any responsibility for any damage resulting from using an AC adapter other than the one specified.

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⚠️ ⚠️

DO NOT use the unit near any liquids, for example, near a bath tub, wash bowl, kitchen sink or washing machine, in a wet basement or near a swimming pool.

⚠️ ⚠️

DO NOT use a damaged AC adapter.

⚠️ ⚠️

DO NOT place heavy objects on, damage, or modify the AC adapter.

⚠️ ⚠️

DO NOT forcibly bend the cord of the AC adapter.

⚠️ ⚠️

DO NOT forcibly pull the cord of the AC adapter.

⚠️ ⚠️

DO NOT drop, hit, or otherwise damage the AC adapter.

⚠️

DO NOT touch the unit during a thunderstorm when the AC adapter is plugged in. There may be a remote risk of electric shock from lightning when the machine is used during a thunderstorm.

⚠️ ⚠️ 🔌

When disconnecting the AC adapter from the machine or from the power outlet, always hold the connector, not the cable, and pull firmly. Failure to do so may result in exposed or broken power cord wires and/or create a risk of fire, or electric shock.

⚠️ ⚠️

Make sure that one end of the power cord is firmly plugged into a standard power outlet and the other end is firmly plugged into the adapter block. Do not use an outlet that is loose. If the power cord is not completely plugged into the power outlet and adapter block, the adapter may become hot and/or catch fire.

⚠️ ⚠️
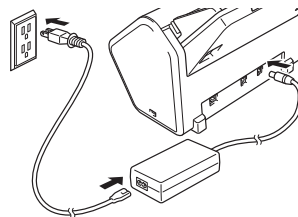
DO NOT exceed the rated input or output of the AC adapter.

⚠️

DO NOT connect the supplied AC adapter to other products.

⚠🔥 ⚠⚡

Never insert any objects into the slots in the machine's casing, since they may touch dangerous voltage points or short out parts resulting in the risk of fire or electric shock.

FIRE HAZARDS
Failure to follow the warnings in this section may create the risk of a fire.

⚠🔥 ⚠⚡ 🚫 🚫

DO NOT use flammable substances, any type of spray or an organic solvent/liquid that contains alcohol or ammonia to clean the inside or outside of the machine. Doing this may cause a risk of fire or electrical shock. Please use a dry cloth to clean the unit.

⚠🔥 ⚠⚡

Do not disassemble or modify the machine, otherwise fire or electric shock may result. If the machine requires repair, contact the place of purchase or Brother Authorized Service Personnel.

⚠🔥

If the machine becomes hot, releases smoke, or generates any strong or unusual odors, immediately unplug the machine from the power outlet and call Brother Customer Service.

⚠🔥

DO NOT handle the plug with wet hands.
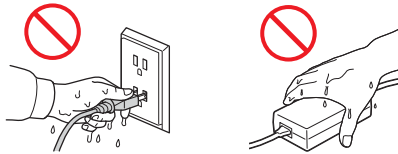
⚠ CAUTION

DO NOT put pressure or weight on the unit or use it for any purpose beyond its intended purpose.

To avoid cutting yourself, do not slide or scrape your hand or fingers along the edge of the Carrier Sheet.

Wait until the machine ejects the pages to avoid trapping your fingers in the rollers.

Some areas of the machine can cause injury if covers (shaded) are closed with force. Take care when placing your hand in the areas shown in the illustrations.
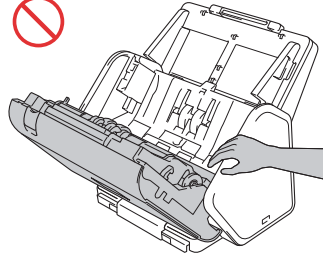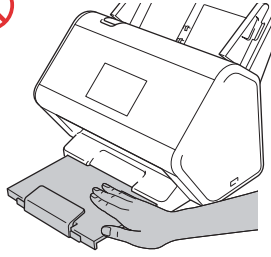
DO NOT carry the machine by holding the Extendable Automatic Document Feeder (ADF). Doing this may cause the Extendable Automatic Document Feeder (ADF) to detach from the machine. Only carry the machine by placing your hands under the entire machine.
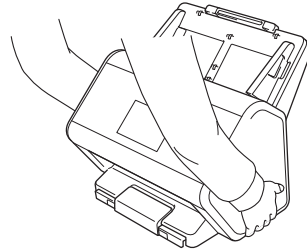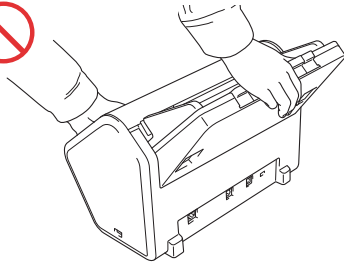
Use caution when operating the machine to prevent clothing (particularly sleeves, neckties, etc.), hair, or accessories from being drawn into the machine, otherwise an injury may occur. In the event that an object is drawn into the machine, immediately disconnect the unit from the power source.

DO NOT swing the AC adapter around or play with it. Doing so may result in injury to yourself or others.

IMPORTANT
(ADS-2800W, ADS-3600W only)
DO NOT touch the Touchscreen immediately after plugging in the power cord or turning the machine on. Doing this may cause an error.

Use caution when operating the machine to prevent clothing (particularly sleeves, neckties, etc.), hair, or accessories from being drawn into the machine, otherwise injury may result. In the event that an object is drawn into the machine, immediately disconnect the machine from the power source.

❗ Important

- Disruption of power can wipe out information in the machine's memory.
- DO NOT put objects on top of the unit.
- If the machine does not operate normally when the operating instructions are followed, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage or minor exposure to electromagnetic waves and will often require extensive work by a qualified technician to restore the machine to normal operation.
- A distinct change in the machine's performance may indicate a need for service.
- (ADS-2800W, ADS-3600W only)
  DO NOT touch the Touchscreen while the machine is booting up. Doing this may cause an error.

Important safety instructions

DO NOT attempt to service the unit yourself because disassembling the unit may expose you to dangerous voltage points and other risks and may void your warranty. Refer all servicing to a Brother Authorized Service Center. For the location of your nearest Brother Authorized Service Center, please call:

In USA: 1-877-BROTHER (1-877-276-8437)

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CHAPTER 1 SUPPLEMENTAL SPECIFICATIONS

1. GENERAL

Part		ADS-2800W	ADS-3600W
Scanning Method		Dual CIS	
Resolution From ADF (Optical)		Max 600 x 600 dpi	
Resolution (Interpolated)		Max 1200 x 1200 dpi	
Scanning Speed	One-sided monochrome	30 ppm 300 dpi (2.0 seconds (A4/LTR))	50 ppm 300 dpi (1.2 seconds (A4/LTR))
	One-sided Color	30 ppm 300 dpi (2.0 seconds (A4/LTR))	50 ppm 300 dpi (1.2 seconds (A4/LTR))
	Two-sided monochrome	60 ipm (30 ppm) 300 dpi (60 image per min.) (2.0 seconds (A4/LTR))	100 ipm (50 ppm) 300 dpi (100 image per min.) (1.2 seconds (A4/LTR))
	Two-sided Color	60 ipm (30 ppm) 300 dpi (2.0 seconds (A4/LTR))	100 ipm (50 ppm) 300 dpi (1.2 seconds (A4/LTR))
CPU		Cortex-A9 800 MHz	
Memory		512 MB	
Interface		USB Hi-Speed 2.0, 10Base-T/100Base-TX/ 1000Base-T	USB Super-Speed 3.0, 10Base-T/100Base-TX/ 1000Base-T
Power consumption	Scanning	Approx. 27 W	Approx. 30 W
	Ready	Approx. 3.7 W	Approx. 4.9 W
	Sleep	Approx. 1.9 W	Approx. 2.9 W
	Power off	Approx. 0.12 W	Approx. 0.12 W
Noise level	Sound power — Scanning	62.8 dB	63.9 dB
Environment	Temperature	Operating: 5 to 35°C Storage: 0 to 40°C	
	Humidity	Operating: 20 to 80% Storage: 10 to 90% (without condensation)	
Dimensions (WxDxH)	Carton Size	382 x 254 x 330 mm	
	Machine Size	306 x 258 x 250 mm	
Weights	Machine Weight	4.55 kg	
	with Carton	US/CAN/GER/ASA/JPN: 6.2 kg UK/PAN-NOR/CEE-GEN: 6.3 kg	
LCD	LCD Type/Size	3.7 inch 93.4 mm TFT	
	Touch panel	3.7 inch TP	

Specifications are subject to change without notice.

<Computer requirements>

Computer Platform & Operating System Version		Supported PC Software Functions	PC Interface	Processor Minimum Speed	Hard Disk Space to install	
					For Drivers	For Applications
Windows® Operating System	Windows® XP Home [2] Windows® XP Professional (only 32 bit) [2]	Scanning	USB [1] 10/100/1000 Base-TX (Ethernet) 802.11 b/g/n (Wireless)	Intel® Pentium® II or equivalent	150 MB	1 GB
	Windows Vista® [2]			Intel® Pentium® 4 or equivalent 64-bit (Intel® 64 or AMD 64) supported CPU	500 MB	
	Windows® 7 [2]				650 MB	
	Windows® 8					
	Windows® 8.1					
	Windows Server® 2003 (only 32 bit)					
	Windows Server® 2008					
	Windows Server® 2008 R2					
	Windows Server® 2012					
	Windows Server® 2012 R2 [3]					
Macintosh Operating System	OS X v10.8.5			Intel® Processor	80 MB	1 GB
	OS X v10.9.x					
	OS X v10.10.x					

[1] Third-party USB ports are not supported.

[2] Nuance™ Paper port™ 12SE supports Windows® XP Home (SP3 or greater), XP Professional (SP3 or greater), Windows Vista® (SP2 or greater) and Windows® 7.

[3] Server OS is supported Scanner Driver Only.

Specifications are subject to change without notice.

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2. NETWORK CONNECTIVITY

	Part	All Models
Wired network	Network node type	NC-04h
	Network type	10Base-T/100Base-TX/1000Base-T
	Network security	SMTP-AUTH, SSL/TLS (HTTPS, SMTP), SSH, SNMP v3, 802.1x (EAP-MD5, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec
Wireless network	Network node type	NC-05w
	Network type	IEEE802.11 b/g/n (Infrastructure Mode/Ad-hoc Mode) IEEE802.11 g (Wi-Fi Direct™)
	Network security	SMTP-AUTH, SSL/TLS (HTTPS, SMTP), SNMP v3, 802.1x (LEAP, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPsec

Specifications are subject to change without notice.

3. SERVICE INFORMATION

Part	Approximate Life (pages)
Machine life	500,000 sheets (A4/LTR)
MTBF	4,000 hours
MTTR	0.5 hours
Maximum monthly volume	ADS-2800W: 60,000 sheets (A4/LTR) ADS-3600W: 100,000 sheets (A4/LTR)

Specifications are subject to change without notice.

4. CONSUMABLE PARTS

Part	All Models
Reverse Roller	Up to 200,000 sheets (A4/LTR) (User replacement parts)
Pick up Roller	Up to 200,000 sheets (A4/LTR) (User replacement parts)

Specifications are subject to change without notice.

5. PAPER

5.1 Paper Handling

Part	All Models
ADF Input	50 sheets
ADF Output	50 sheets
Duplex (Scan)	Yes

Specifications are subject to change without notice.

5.2 Media Specifications

Part		All Models
Paper Input	ADF	Plain Paper, Thin Paper, Thick Paper, Thicker Paper, Recycled Paper, Post Card (JPN), Business Card, Plastic Card
Media Weight	ADF (multiple paper)	27 to 413 g/m^2
	ADF (single paper)	Plain paper/Long paper 27 to 209 g/m^2 Thick paper 209 to 413 g/m^2
Media Size	ADF (multiple paper)	Width 51 to 215.9 mm, Length 51 to 355.6 mm
	ADF (single paper)	Width 51 to 215.9 mm, Length 51 to 5,000 mm

* For best performance it is recommended to use a carrier sheet for the following weights: 27 to 39 g/m^2.

Specifications are subject to change without notice.

6. SCANNER

Color/Black		Yes/Yes
TWAIN Compliant	Windows®	Windows® XP (32 bit only) [*1] / Windows Vista® / Windows® 7, 8, 8.1 / Windows Server® 2003 (only 32 bit) / Windows Server® 2008 / Windows Server® 2008 R2 / Windows Server® 2012 / Windows Server® 2012 R2 [*3]
	Macintosh	OS X 10.8.x / 10.9.x / 10.10.x (Download only) [*2]
WIA Compliant	Windows®	Windows® XP (32 bit only) [*1] / Windows Vista® / Windows® 7, 8, 8.1, 10
ICA Compliant	Macintosh	OS X 10.8.x / 10.9.x / 10.10.x (Download only) [*2]
ISIS™ Compliant	Windows®	Windows Vista® / Windows® 7, 8, 8.1, 10
Color Depth	Input	30 bit color Processing
	Output	24 bit color Processing
Resolution	Interpolated	Up to 1200 x 1200 dpi
	Optical	Up to 600 x 600 dpi
Scanning Width		Up to 215 mm
Gray Scale		256 levels

*1 Windows® XP in this Service Manual includes Windows® XP Home Edition and Windows® XP Professional.

*2 For the latest driver updates for the Mac OS X you are using, visit us at http://support.brother.com/.

*3 Server OS is supported Scanner Driver Only.

Specifications are subject to change without notice.

CHAPTER 2 ERROR INDICATIONS & TROUBLESHOOTING

1. INTRODUCTION

Troubleshooting is a collection of solution procedures that service personnel should follow if an error or malfunction occurs in the machine. It is difficult to determine troubleshooting procedures for all possible problems that may occur in the future. Therefore, this chapter describes typical problem cases and recovery procedures for these. These will help service personnel identify and repair other similar defective sections.

1.1 Precautions

Be sure to observe the following precautions to prevent any secondary problems occurring during troubleshooting:

(1) Be sure to unplug the AC power cord before removing any covers or PCBs, adjusting the machine, or conducting continuity tests using a tester.

(2) Do not hold the cable when connecting or disconnecting the cable. Be sure to hold the connector.

(3) Static electricity charged in your body may damage electronic parts.
Before handling the PCBs, touch a metal section of the machine to discharge static electricity.
When transporting PCBs, be sure to wrap them in conductive sheets.
When replacing PCBs, wear a grounding wrist band and perform replacement on a conductive mat. Also take care not to touch the conductor sections on the flat cables.

(4) Be sure to always observe all warnings.

(5) After repair is completed, check that the repaired sections, including those removed once and then remounted, operate normally.

1.2 Checks before Commencing Troubleshooting

Check the following items before commencing repairs on the machine.

■ Operating environment

(1) The machine is placed on a flat, stable surface.

(2) The machine is used in a clean environment where the temperature is between 10°C (50°F) and 32.5°C (90.5°F) and the relative humidity is maintained between 20% and 80%.

(3) The machine is not exposed to direct sunlight, excessive heat, moisture, or dust.

(4) Hold the machine level while moving it.

■ Power supply

(1) Power described on the rating label attached on the machine is supplied. Power fluctuation should be within ±10% of the rated voltage.

(2) The AC input power supply is within the regulated value.

(3) The cables and harnesses are connected correctly.

(4) The fuses are not blown.

■ Document

(1) The recommended paper is used for the document. (Refer to "5.2 Media Specifications" in Chapter 1.)

(2) The document is not damp.

(3) Acid paper is not used.

■ Others

(1) Condensation

When the machine is moved to a warm room from a cold location, condensation may occur inside the machine, causing various problems as listed below.

- Condensation on the surface of optical devices such as the CIS glass and CIS unit may result in poor quality of scanned images.

- Condensation on the pick up roller or reverse roller may cause document feed problems.
  If condensation has formed in the machine, leave the machine for at least two hours until it reaches room temperature.

(2) Low temperature

The motor may not operate normally in a cold environment because too much load is applied to each drive. In this case, raise the room temperature.

■ Cleaning

Use a soft lint-free cloth.

> ⚠ **WARNING**
>
> **DO NOT** use any flammable spray or flammable solvent such as alcohol, benzine, or thinner to clean the machine. **DO NOT** use these articles near the machine.
>
>

2. OVERVIEW

2.1 Cross-section Drawing

Document detection actuator

Document stopper

Reverse roller

Multi feeding sensor (Sent)

Document scanning position actuator

Second side CIS unit

Eject jam actuator
(Duplex scanning speed
100 ipm model only)

Eject roller

Output tray

Document tray

Pick up roller

Paper feed jam actuator
(Duplex scanning speed 100 ipm model only)

Multi feeding sensor (Receive)

Feed roller

First side CIS unit

Fig. 2-1

2.2 Paper Feeding

Feed path

<Front side>

<Back side>

Fig. 2-2

2.3 Operation of Each Part

Part name	Operation
Pick up roller / Reverse roller	Separates documents set in the document tray into single sheets, and feeds them into the machine.
Multi feeding sensor	Detects whether multiple documents are fed into the machine.
Feed roller	Feeds the document.
Eject roller	Feeds the document to the output tray.
Document detection actuator (Document detection sensor)	Detects the document in the document tray. Detects document jams.
Document scanning position actuator (Document scanning position sensor)	Detects document jams. Determines whether the document is fed from the document tray. Detects document pass and adjusts the scanning start position for the document.
Paper feed jam actuator (Paper feed jam sensor)	Detects document jams in the feeding path of the machine.
Eject jam actuator (Eject jam sensor)	Detects document jams in the ejecting path of the machine.
Front cover sensor	Detects whether the front cover is open.

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2.4 Block Diagram

Panel unit

Duplex Scanning Speed100 ipm model only

- NFC PCB
- LCD
- Key PCB
- Touch panel unit

Panel PCB

Feed motor

Pick up motor

First side CIS unit

Second side CIS unit

Multi feeding sensor PCB ASSY (Sent)

Multi feeding sensor PCB ASSY (Receive)

Document detection sensor PCB

Document scanning position sensor PCB

Duplex Scanning Speed100 ipm model only

- Paper feed jam sensor PCB
- eject jam sensor PCB

Main PCB

DC jack

USB3.0
(Duplex Scanning Speed 100 ipm model)
USB2.0
(Duplex Scanning Speed 60 ipm model)

LAN

Front cover sensor

USB host PCB

Wireless LAN PCB

Fig. 2-3

2.5 Main Components

Paper feed jam sensor

Front cover ASSY

Document tray

Multi feeding sensor PCB ASSY (Receive)

Document scanning position sensor PCB

Flat cable support film

Eject jam sensor

Side cover L

Second side CIS unit

Pick up roller

Back cover

Feed belt

Front cover L

Feed motor

Front cover sensor

Paper feed motor

Side cover R

Multi feeding sensor PCB ASSY (Sent)

Paper feed belt

Wireless LAN PCB ASSY

Front cover R

First side CIS unit

USB host PCB ASSY

Panel unit

Bottom cover ASSY

Main PCB ASSY

Exit stopper

NFC PCB ASSY

Panel PCB ASSY

Fig. 2-4

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3. ERROR INDICATIONS

The machine is equipped with self-diagnostic function. If the machine does not work normally, it judges that an error has occurred. Then indicates the corresponding error message on the LCD to help service men to quickly find out the problem.

3.1 Error Codes

Errors in the shaded columns do not usually occur during normal use. The possible causes are noise around the installation site, fluctuation of the power supply voltage, and failures in the software.

Error codes	Problem	Refer to:	Error codes	Problem	Refer to:
0101	—		0D04	—	
0102	—		0E00	—	
0201	—		1003	—	
0202	—		1004	—	
0203	—		1100	—	
0300	—		1200	—	
0305	—		1300	—	
0401	—		1400	—	
0402	—		1701	—	
0405	—		1801	—	
0501	—		1802	—	
0502	—		1803	—	
0503	—		1808	—	
0504	—		1901	—	
0505	—		1A01	—	
0506	—		1B01	—	
0508	—		1C00	—	
050A	—		1D01	—	
050B	—		1D02	—	
050C	—		1D03	—	
050D	—		1D04	—	
050F	—		1E01	—	
0700	—		1E02	—	
0800	—		1F00	—	
0900	—		3801	—	
0A01	—		3802	—	
0A02	—		3900	—	
0B01	—		3A00	—	
0B02	—		3B00	—	
0C00	—		4000	—	
0D01	—		4001	—	
0D02	—		4002	—	
0D03	—		4003	—	

Error codes	Problem	Refer to:	Error codes	Problem	Refer to:
4004	—		6102	—	
4200	—		6103	—	
4201	—		6104	—	
4202	—		6200	—	
4203	—		6201	—	
4204	—		6202	—	
4300	—		6203	—	
4400	—		6204	—	
4500	—		6208	—	
4600	—		6209	—	
4700	—		620A	—	
4800	—		6300	—	
4900	—		6400	—	
4A00	—		6801	—	
4B01	—		6901	—	
4B02	—		6902	—	
4B03	—		6A00	—	
4B04	—		6B01	—	
4C01	—		6B02	—	
4C02	—		6B03	—	
4C03	—		6B04	—	
4C04	—		6B0A	—	
4C05	—		6C01	—	
4D01	—		6C02	—	
4E01	—		6C03	—	
4F01	—		6C04	—	
4F02	—		6D00	—	
4F03	—		6E00	—	
4F04	—		6F00	—	
5001	—		7000	—	
5002	—		7100	—	
5003	—		7200	—	
5004	—		7300	—	
5005	—		7301	—	
5006	—		7302	—	
6001	—		7400	—	
6004	—		7401	—	
6007	—		7402	—	
6101	—		7500	—	

Error codes	Problem	Refer to:	Error codes	Problem	Refer to:
7501	—		8801	—	
7502	—		8802	—	
7601	—		8808	—	
7602	—		8809	—	
7701	—		880A	—	
7702	—		8901	—	
7800	—		8902	—	
7900	—		8903	—	
7B01	—		8904	—	
7B02	—		8A01	—	
7B03	—		8A02	—	
7B04	—		8B01	—	
7B05	—		8C00	—	
7C00	—		8D01	—	
7D00	—		8D02	—	
7E00	—		8E01	—	
8100	A document longer than the specified length was set and scanned.	2-14	8E02	—	
8401	—		8F01	—	
8402	—		8F02	—	
8403	—		8F03	—	
8501	—		9001	—	
8502	—		9002	—	
8503	—		9003	—	
8504	—		9004	—	
8505	—		9005	—	
8506	—		9201	—	
8507	—		9202	—	
8508	—		9203	—	
8701	—		9204	—	
8702	—		9205	—	
8703	—		9206	—	
8708	—		9301	—	
8709	—		9302	—	
870A	—		9303	—	
870B	—		9304	—	
870C	—		9305	—	
870D	—		9306	—	
870E	—		9309	—	
870F	—		930A	—	

Error codes	Problem	Refer to:	Error codes	Problem	Refer to:
9601	—		AC00	—	
9608	—		AD00	—	
9701	—		AE00	—	
9702	—		AF00	—	
9703			B000	Detected that the first side CIS flat cable or second side CIS flat cable was not inserted correctly.	2-16
9704	—		B700	—	
9705	—		B800	—	
9706	—		B900	—	
9801	—		BB00	A white level not within the standard was scanned when function code 55 was executed.	2-16
9802	—		BC00	—	
9803	—		BD00	A black level not within the standard was scanned when function code 55 was executed.	2-16
9804	—		BF00	—	
9901	—		C001	—	
9902	—		C002	—	
9903	—		C003	—	
9A01	—		C004	—	
9A02	—		C100	—	
9A03	—		C700	—	
A000	—		C800	—	
A200	The first side document scanning position sensor detected that the document length was 90 cm or more while scanning a document.	2-14	C900	—	
A300	The document scanning position sensor has not detected the document passing even after the document has been fed for the specified time.	2-14	CA00	—	
A400	The front cover sensor detected an open front cover.	2-15	D100	—	
A500	—		D200	—	
A600	—		D800	An error occurred while initializing the touch panel.	2-16
A700	Color parameter in the ROM does not match the first side or second side CIS.	2-15	D900	—	
A800	—		DA00	—	
A900	A scanning error occurred while scanning the image.	2-15	DB00	—	
AA00	—		E000	An error occurred in the ROM check sum.	2-16
AB00	The multi feeding sensor detected multiple documents.	2-15	E100	The capacity of machine memory reached its maximum when installing the firmware.	2-16

Error codes	Problem	Refer to:	Error codes	Problem	Refer to:
E400	—		E900	Failed to initialize the NFC module.	2-17
E500	An error occurred during access to the DRAM in the main PCB ASSY.	2-17	EC00	An USB device not within the specifications is connected to the USB terminal, resulting in overcurrent.	2-17
E600	Write error in the EEPROM of the main PCB ASSY	2-17	ED00	—	
E701	—		EE00	—	
E702	—		F900	The country code was not entered correctly.	2-17

3.2 Error Messages

The error messages displayed on the LCD of the machine and their description are shown in the table below.

Display	Guidance	Description	Error codes	Refer to:
Cover is Open	Close the Front Cover.	The front cover sensor detected an open front cover.	A400	2-15
Document Jam	Open the front cover. Pull jammed paper out.	The first side document scanning position sensor detected that the document length was 90 cm or more while scanning a document.	A200	2-14
		The document scanning position sensor has not detected the document passing even after the document has been fed for the specified time.	A300	2-14
Machine Error **	—	A machine error occurred. Refer to error code "**".	**	
Replace pick up and reverse roller	—	Pick up roller is due for replacement.	—	2-28
Replace pick up roller	Pick up roller is due for replacement. The counter for the roller will be reset by pressing Complete.		—	2-28
Replace reverse roller	—	Reverse roller is due for replacement.	—	2-28
Scan error due to length, reduce length	—	Send or save the scanned image?	8100	2-14
Scan Unable **	—	Scanning related error. Refer to error code "**".	**	
Scanner Error	—	Detected that the first side CIS flat cable or second side CIS flat cable was not inserted correctly.	B000	2-16
		A white level not within the standard was scanned when function code 55 was executed.	BB00	2-16
		A black level not within the standard was scanned when function code 55 was executed.	BD00	2-16
Scheduled Maintenance alert	To prevent issues such as paper jams and reduced scan quality, please follow directions from the user's guide to clean inside of the machine.	To prevent issues such as paper jams and reduced scan quality, please follow directions from the user's guide to clean inside of the machine.	—	
Touchscreen Initialisation Failed	Remove any material which is on the touchscreen.	An error occurred while initializing the touch panel.	D800	2-16
Update Failed ****	—	USB Flash Memory Firm Update related error.	**	2-28
Unusable Device	Remove the Device. Turn the power off and back on again.	An USB device not within the specifications is connected to the USB terminal, resulting in overcurrent.	EC00	2-17
	Disconnect USB device.	A non-supported USB device such as USB mouse is connected.	—	2-27

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4. TROUBLESHOOTING

4.1 Error Cause and Remedy

■ Error code 8100

A document longer than the specified length was set and scanned.

<User Check>

• Set the document length within the standard.

Step	Cause	Remedy
1	Dirt on the eject roller	Clean the eject roller.
2	Feed belt failure	Replace the feed belt.
3	Feed motor failure	Replace the feed motor.
4	Main PCB failure	Replace the main PCB ASSY.

■ Error code A200

The first side document scanning position sensor detected that the document length was 90 cm or more while scanning a document.

<User Check>

• Set the document length within the standard.

• Remove the jammed document.

Step	Cause	Remedy
1	First side document scanning position actuator caught in sections of the machine	Reattach the first side document scanning position actuator.
2	First side document scanning position sensor failure	Replace the first side document scanning position sensor PCB.
3	Main PCB failure	Replace the main PCB ASSY.

■ Error code A300

The document scanning position sensor has not detected the document passing even after the document has been fed for the specified time.

<User Check>

• Set a document within the specified size in the ADF correctly.

• Remove the jammed document.

Step	Cause	Remedy
1	Document scanning position actuator coming off	Reattach the document scanning position actuator.
2	Connection failure of the first side document scanning position sensor harness	Reconnect the first side document scanning position sensor harness.
3	Document scanning position sensor failure	Replace the document scanning position sensor PCB ASSY.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Error code A400**

The front cover sensor detected an open front cover.

<User Check>

• Close the front cover correctly.

Step	Cause	Remedy
1	Connection failure of the front cover sensor harness	Reconnect the front cover sensor harness.
2	Front cover sensor attachment failure	Reattach the front cover sensor.
3	Front cover sensor failure	Replace the front cover sensor.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Error code A700**

Color parameter in the ROM does not match the first side or second side CIS.

Step	Cause	Remedy
1	Old firmware	Install the latest version of the firmware. (Refer to "1.1" in Chapter 4.)
2	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
3	Main PCB failure	Replace the main PCB ASSY.

■ **Error code A900**

A scanning error occurred while scanning the image.

Step	Cause	Remedy
1	Program malfunction	Install the latest version of the firmware. (Refer to "1.1" in Chapter 4.)
2	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
3	Main PCB failure	Replace the main PCB ASSY.

■ **Error code AB00**

The multi feeding sensor detected multiple documents.

<User Check>

• Check that the thickness of the document is within the standard.

• Check that the number of documents set in each tray is within the standard.

• Moisten a soft cloth with cleaning solution. Gently and evenly wipe the pick up roller and reverse roller perpendicular to the direction of the rotation with the cloth to clean it.

  Note: Do not use any solution except the one packaged in the accessory (ethanol or detergent on the market). Failure to keep this instruction may cause the roller deterioration or machine break down.

Step	Cause	Remedy
1	Incorrect multi feeding sensor threshold setting	Reset the multi feeding sensor threshold.
2	Multi feeding sensor (Sent/ Receive) failure	Replace the multi feeding sensor (Sent/ Receive).
3	Main PCB failure	Replace the main PCB ASSY.

■ **Error code B000**

Detected that the first side CIS flat cable or second side CIS flat cable was not inserted correctly.

Step	Cause	Remedy
1	Connection failure of the first side or second side CIS flat cable	Reconnect the first side or second side CIS flat cable.
2	First side or second side CIS unit flat cable failure	Replace the first side or second side CIS unit flat cable.
3	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Error code BB00**

A white level not within the standard was scanned when function code 55 was executed.

Error code BD00

A black level not within the standard was scanned when function code 55 was executed.

Step	Cause	Remedy
1	Dirty calibration sheet	Replace the calibration sheet with a new one.
2	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
3	Main PCB failure	Replace the main PCB ASSY.

■ **Error code D800**

An error occurred while initializing the touch panel.

<User Check>

• Check that nothing is on the touch panel.

Step	Cause	Remedy
1	Old firmware	Install the latest version of the firmware. (Refer to "1.1" in Chapter 4.)
2	Connection failure of the touch panel harness	Reconnect the touch panel harness.
3	Touch panel failure	Replace the touch panel ASSY.
4	Panel PCB failure	Replace the panel PCB.
5	Main PCB failure	Replace the main PCB ASSY.

■ **Error code E000**

An error occurred in the ROM check sum.

Error code E100

Program error

Step	Cause	Remedy
1	Program malfunction	Install the latest version of the firmware. (Refer to "1.1" in Chapter 4.)
2	Main PCB failure	Replace the main PCB ASSY.

■ **Error code E500**

An error occurred during access to the DRAM in the main PCB ASSY.

Error code E600

Write error in the EEPROM of the main PCB ASSY

Step	Cause	Remedy
1	Main PCB failure	Replace the main PCB ASSY.

■ **Error code E900**

Failed to initialize the NFC module.

Step	Cause	Remedy
1	Connection failure of the panel PCB flat cable	Reconnect the panel PCB flat cable.
2	Panel PCB failure	Replace the panel PCB ASSY.
3	NFC PCB failure	Replace the NFC PCB ASSY.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Error code EC00**

An USB device not within the specifications is connected to the USB terminal, resulting in overcurrent.

<User Check>

• Disconnect the USB device from the USB terminal and turn the machine OFF.
  Turn the machine ON again after a while.

• Replace the USB device with a different one.

Step	Cause	Remedy
1	USB host PCB failure	Replace the USB host PCB ASSY.
2	Main PCB failure	Replace the main PCB ASSY.

■ **Error code F900**

The country code was not entered correctly.

Step	Cause	Remedy
1	The country code was not entered correctly.	Reenter the country code. (Refer to "1.3.14 Setting by country (function code: 74)" in Chapter 5.)
2	Main PCB failure	Replace the main PCB ASSY.

4.2 Troubleshooting for Image Defects

4.2.1 Defect examples

Light

Faulty registration

Dark or
bluish white

Completely
blank

Vertical streaks

White vertical
streaks

Hue defect

Expanded image
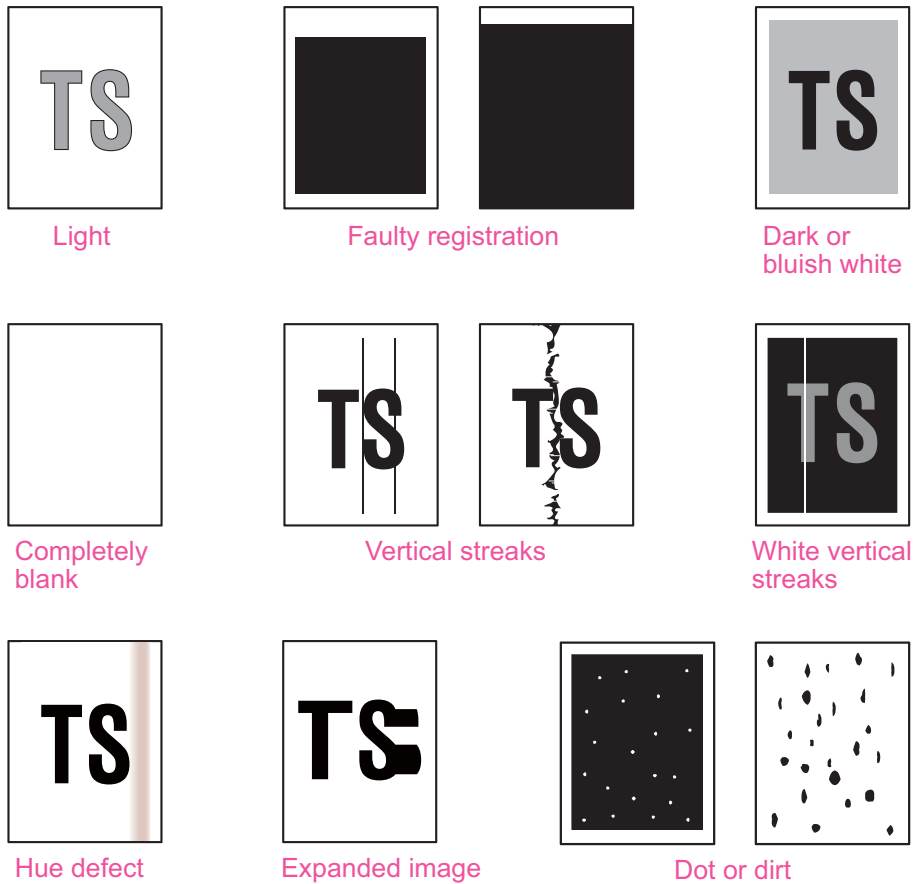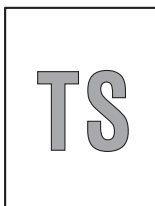
Dot or dirt

Fig. 2-5

4.2.2 Troubleshooting according to image defect

■ **Light**

\<User Check\>

- Check that the contrast setting is not too light.

- Clean the CIS glass.

Step	Cause	Remedy
1	Incorrect white level correction data	Execute the maintenance mode function "Acquire white level data and set CIS scan area". (Refer to "1.3.12" in Chapter 5.)
2	Dirty calibration sheet	Replace the calibration sheet with a new one.
3	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Faulty registration**

Step	Cause	Remedy
1	Document scanning position actuator caught in sections of the machine	Reattach the document scanning position actuator.

■ **Dark or bluish white**

<User Check>
 - Check that the contrast setting is not too dark.

Step	Cause	Remedy
1	Incorrect white level correction data	Execute the maintenance mode function "Acquire white level data and set CIS scan area". (Refer to "1.3.12" in Chapter 5.)
2	Dirty calibration sheet	Replace the calibration sheet with a new one.
3	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Completely blank**

<User Check>
 - Check that the document is not reversed.
 - Check that the document is set in the document tray correctly.

Step	Cause	Remedy
1	Incorrect white level correction data	Execute the maintenance mode function "Acquire white level data and set CIS scan area". (Refer to "1.3.12" in Chapter 5.)
2	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
3	Main PCB failure	Replace the main PCB ASSY.

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■ **Vertical streaks**

<User Check>
- Clean the CIS glass.
- Clean the feeding path.

Step	Cause	Remedy
1	First side or second side CIS unit failure	Replace the first side or second side CIS unit.

■ **White vertical streaks**

<User Check>
- Wipe the first and second side CIS glass four times in the same direction with a cleaning cloth.
- Clean the feeding path.

Step	Cause	Remedy
1	First side or second side CIS unit failure	Replace the first side or second side CIS unit.

■ **Hue defect**


<User Check>
- Clean the document glass or CIS glass.

Step	Cause	Remedy
1	Color parameter failure	Execute the maintenance mode function "Acquire white level data and set CIS scan area". (Refer to "1.3.12" in Chapter 5.)
2	Dirty calibration sheet	Replace the calibration sheet with a new one.
3	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
4	Main PCB failure	Replace the main PCB ASSY.

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■ **Expanded image**

Step	Cause	Remedy
1	The maintenance mode function "Acquire white level data and set CIS scan area" are not set.	Execute the maintenance mode function "Acquire white level data and set CIS scan area". (Refer to "1.3.12" in Chapter 5.)
2	Old firmware	Install the latest version firmware. (Refer to "1.1" in Chapter 4.)
3	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
4	Main PCB failure	Replace the main PCB ASSY.

■ **Dot or dirt**
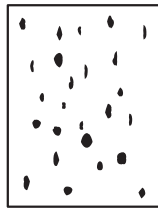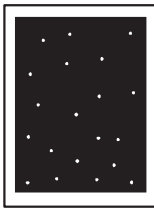
<User Check>
- Clean the feeding path.
- Moisten a soft cloth with cleaning solution. Gently and evenly wipe the pick up roller and reverse roller perpendicular to the direction of the rotation with the cloth to clean it.

  Note: Do not use any solution except the one packaged in the accessory (ethanol or detergent on the market). Failure to keep this instruction may cause the roller deterioration or machine break down.

Step	Cause	Remedy
1	First side or second side CIS unit failure	Replace the first side or second side CIS unit.

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4.3 Troubleshooting for Document Paper Feeding Problems

4.3.1 No document is fed

<User Check>

- Check that the paper used for the document is within the standard. If it is not within the standard, use a carrier sheet (Models with carrier sheet only).
- Check that the number of documents set is within the standard.
- Check that the front cover is closed correctly.
- Moisten a soft cloth with cleaning solution. Gently and evenly wipe the pick up roller and reverse roller perpendicular to the direction of the rotation with the cloth to clean it.

  Note: Do not use any solution except the one packaged in the accessory (ethanol or detergent on the market). Failure to keep this instruction may cause the roller deterioration or machine break down.

- Replace the reverse roller and pick up roller.

Step	Cause	Remedy
1	Document detection actuator coming off	Reattach the document detection actuator.
2	Front cover sensor attachment failure	Reattach the front cover sensor.
3	Connection failure of the front cover sensor harness	Reconnect the front cover sensor harness.
4	Connection failure of a feed motor harness	Reconnect a feed motor harness.
5	Connection failure of the document detection sensor PCB harness	Reconnect the document detection sensor PCB harness.
6	Attachment failure of the gears in a feeding system	Reattach the gears in a feeding system.
7	Front cover sensor failure	Replace the front cover sensor.
8	Document detection sensor failure	Replace the document detection sensor PCB.
9	Feed motor failure	Replace a feed motor ASSY.
10	Main PCB failure	Replace the main PCB ASSY.

4.3.2 Multiple documents are fed

<User Check>

- Check that the paper used for the document is within the standard. If it is not within the standard, use a carrier sheet (Models with carrier sheet only).
- Check that the document is not damp. If it is damp, dry it or use a carrier sheet (Models with carrier sheet only).
- Check that the number of documents set is within the standard.
- Moisten a soft cloth with cleaning solution. Gently and evenly wipe the pick up roller and reverse roller perpendicular to the direction of the rotation with the cloth to clean it.

  Note: Do not use any solution except the one packaged in the accessory (ethanol or detergent on the market). Failure to keep this instruction may cause the roller deterioration or machine break down.

- Replace the reverse roller and pick up roller.

Step	Cause	Remedy
1	Incorrect multi feeding sensor threshold setting	Reset the multi feeding sensor threshold.
2	Connection failure of the multi feeding sensor harness	Reconnect the multi feeding sensor harness.
3	Multi feeding sensor failure	Replace the multi feeding sensor.

4.3.3 Document becomes jammed

<User Check>

- Check that the paper used for the document is within the standard. If it is not within the standard, use a carrier sheet (Models with carrier sheet only).
- Check that the document is not wrinkled. If wrinkled, use a carrier sheet (Models with carrier sheet only).
- Check that the document is not torn. If torn, use a carrier sheet (Models with carrier sheet only).
- Check that the document is not damp. If it is damp, dry it or use a carrier sheet (Models with carrier sheet only).
- Check that the number of documents set is within the standard.
- Check that the front cover is closed correctly.

Step	Cause	Remedy
1	Foreign object inside the front cover	Remove the foreign object inside the front cover.
2	Document scanning position actuator coming off	Reattach the document scanning position actuator.
3	Document pinch roller coming off	Reattach the document pinch roller.
4	Connection failure of the document scanning position sensor PCB harness	Reconnect the document scanning position sensor PCB harness.
5	Front cover sensor failure	Replace the front cover sensor.
6	Document scanning position sensor failure	Replace the document scanning position sensor PCB ASSY.
7	Main PCB failure	Replace the main PCB ASSY.

4.3.4 Document becomes wrinkled

<User Check>

- Check that the document guide is adjusted to suit the document size.
- Check that the document is not curled.
- Replace the reverse roller and pick up roller.

4.4 Troubleshooting for Software Problems

End users can solve problems related to software, for instance, scanning is not possible from a computer although scanning can be performed from the machine, as long as they follow the User Check items. If the problem still cannot be solved, follow each procedure according to the step number in the tables below.

4.4.1 Does not respond to operation from a computer

<User Check>

- Check that the USB cable or LAN cable is not damaged.

- When using an interface switch, check that the correct machine is selected.

- Check the relevant section in the User's Guide.

- Check the driver settings.

- Reset the machine to the default settings. (Refer to the User's Guide.)

Step	Cause	Remedy
1	Program malfunction	Install the latest version firmware. (Refer to "1.1" in Chapter 4.)
2	Connection failure of the front cover sensor harness	Reconnect the front cover sensor harness.
3	Front cover sensor failure	Replace the front cover sensor ASSY.
4	Main PCB failure	Replace the main PCB ASSY.

4.4.2 Cannot read data

<User Check>

- Check that the USB cable or LAN cable is not damaged.

- When using an interface switch, check that the correct machine is selected.

- Check the relevant section in the User's Guide.

- Check the driver settings.

- Reset the machine to the default settings. (Refer to the User's Guide.)

Step	Cause	Remedy
1	Connection failure of the front cover sensor harness	Reconnect the front cover sensor harness.
2	Rubber key attachment failure	Reattach the rubber key.
3	Front cover sensor failure	Replace the front cover sensor ASSY.
4	First side or second side CIS unit failure	Replace the first side or second side CIS unit.
5	Main PCB failure	Replace the main PCB ASSY.

4.5 Troubleshooting for Control Panel Problems

4.5.1 Nothing is displayed on the LCD

<User Check>

- Check that the AC power cord or DC plug is connected correctly.

Step	Cause	Remedy
1	Connection failure of the panel PCB harness	Reconnect the panel PCB harness.
2	Connection failure of the LCD flat cable	Reconnect the LCD flat cable.
3	AC power cord failure	Replace the AC power cord.
4	AC adapter failure	Replace the AC adapter.
5	Panel PCB failure	Replace the panel PCB ASSY.
6	Key PCB failure	Replace the panel unit.
7	Main PCB failure	Replace the main PCB ASSY.

4.5.2 Control panel is inoperable

<User Check>

- Check that the function lock is not set.

Step	Cause	Remedy
1	Connection failure of the key PCB harness	Reconnect the key PCB harness.
2	Connection failure of the panel PCB harness	Reconnect the panel PCB harness.
3	Connection failure of the touch panel harness	Reconnect the touch panel harness.
4	Panel PCB failure	Replace the panel PCB ASSY.
5	Touch panel failure	Replace the touch panel ASSY.
6	Key PCB failure	Replace the panel unit.
7	Main PCB failure	Replace the main PCB ASSY.

4.6   Troubleshooting for Network Problems

4.6.1 Cannot scan via network connection

<User Check>

 - Check the relevant section in the Network Setting Guide.

 - Check the network connection.

 - Reset the network. (Refer to the User's Guide.)

 - Check the LAN cable.

Step	Cause	Remedy
1	Connection failure of the wireless LAN PCB connector	Reconnect the wireless LAN PCB ASSY connector.
2	Wireless LAN PCB failure	Replace the wireless LAN PCB ASSY.
3	Deformed LAN terminal pin Main PCB failure	Replace the main PCB ASSY.

4.6.2 Cannot connect to access point

<User Check>

 - Check the wireless LAN settings.

 - Check the access point settings.

 - Change the machine installation location.

 - Set the access point manually.

Step	Cause	Remedy
1	Invalid wireless LAN setting	Enable the WSW54 selector 4 setting.

4.7 Troubleshooting for Other Problems

4.7.1 Machine does not turn ON

<User Check>

- Check that the power cord or DC plug is connected to the host correctly.

Step	Cause	Remedy
1	Connection failure of the panel PCB harness	Reconnect the panel PCB harness.
2	Power cord failure	Replace the power cord.
3	AC adapter failure	Replace the AC adapter.
4	Panel PCB failure	Replace the panel PCB ASSY.
5	Panel unit failure	Replace the panel unit.
6	Main PCB failure	Replace the main PCB ASSY.

4.7.2 Cannot update firmware

<User Check>

- Make sure that there is no other function running.

Step	Cause	Remedy
1	Firmware version does not match	Install the latest version firmware. (Refer to "1.1" in Chapter 4.)
2	Main PCB failure	Replace the main PCB ASSY.

4.7.3 Cannot save data in USB flash memory

<User Check>

- Check that the USB flash memory is inserted into the USB terminal correctly.

- Replace the USB flash memory and try saving data again.

- Check that the USB flash memory is not write-protected.

Step	Cause	Remedy
1	Connection failure of the USB host PCB harness	Reconnect the USB host PCB harness.
2	Panel PCB failure	Replace the panel PCB ASSY.
3	USB host PCB failure	Replace the USB host PCB ASSY.
4	Main PCB failure	Replace the main PCB ASSY.

4.7.4 USB device connection error

<User Check>

- Check that the connected USB device is supported.

- Replace the USB flash memory and try again.

Step	Cause	Remedy
1	Connection failure of the USB host PCB harness	Reconnect the USB host PCB harness.
2	USB host PCB failure	Replace the USB host PCB ASSY.
3	Main PCB failure	Replace the main PCB ASSY.

4.7.5 Cannot register

<User Check>

- Check that the number of items registered has not been exceeded.

- Check the network connection.

- Check the relevant section in the Network Setting Guide.

Step	Cause	Remedy
1	Main PCB failure	Replace the main PCB ASSY.

4.7.6 Counter does not reset even the consumable part has been replaced

<User Check>

- Refer to the User's Guide to reset the pick up roller and reverse roller counters.

Step	Cause	Remedy
1	Main PCB failure	Replace the main PCB ASSY.

4.7.7 Installation using USB flash memory is not operable

Step	Cause	Remedy
1	"FIRM" folder cannot be found under the USB flash memory	Create the "FIRM" folder under the USB flash memory.
2	"_@UPDOP0.8080" file for automatic firmware update cannot be found under the USB flash memory	Save the "_@UPDOP0.8080" file for automatic firmware update under the USB flash memory.
3	Firmware (djf file) cannot be found in the "FIRM" folder	Save the firmware (djf file) in the "FIRM" folder.
4	There is an unnecessary file in the "FIRM" folder	Delete the unnecessary file from the "FIRM" folder.
5	Firmware (djf file) in the "FIRM" folder is not for the specific model	Save the firmware (djf file) for the specific model in the "FIRM" folder.
6	Cannot run "FirmUPDATE" as a program is already running	Install the firmware after the currently running function is finished.
7	USB flash memory is broken	Replace it with the other USB flash memory to install the firmware.

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CHAPTER 3 DISASSEMBLY/REASSEMBLY

1. SAFETY PRECAUTIONS

To avoid creating secondary problems by mishandling, follow the warnings and precautions below during maintenance work.

- Be careful not to lose screws, washers, or other parts removed.

- Be sure to apply grease to applicable positions specified in this chapter.

- When using soldering irons or other heat-generating tools, take care not to accidentally damage parts such as wires, PCBs and covers.

- Static electricity charged in your body may damage electronic parts. When transporting PCBs, be sure to wrap them in conductive sheets.

- When replacing the PCB and all the other related parts, put on a grounding wrist band and perform the job on a static mat. Also take care not to touch the conductor sections on the flat cables or on the wire harnesses.

- After disconnecting flat cables, check that each cable is not damaged at its end or short-circuited.

- When connecting flat cables, do not insert them at an angle. After insertion, check that the cables are not at an angle.

- When connecting or disconnecting harnesses, hold the connector body, not the cables. If the connector is locked, release it first.

- After a repair, check not only the repaired portion but also harness treatment. Also check that other related portions are functioning properly.

- After assembly, it is recommended to conduct dielectric test and continuity test.

2. PACKING

Confidential
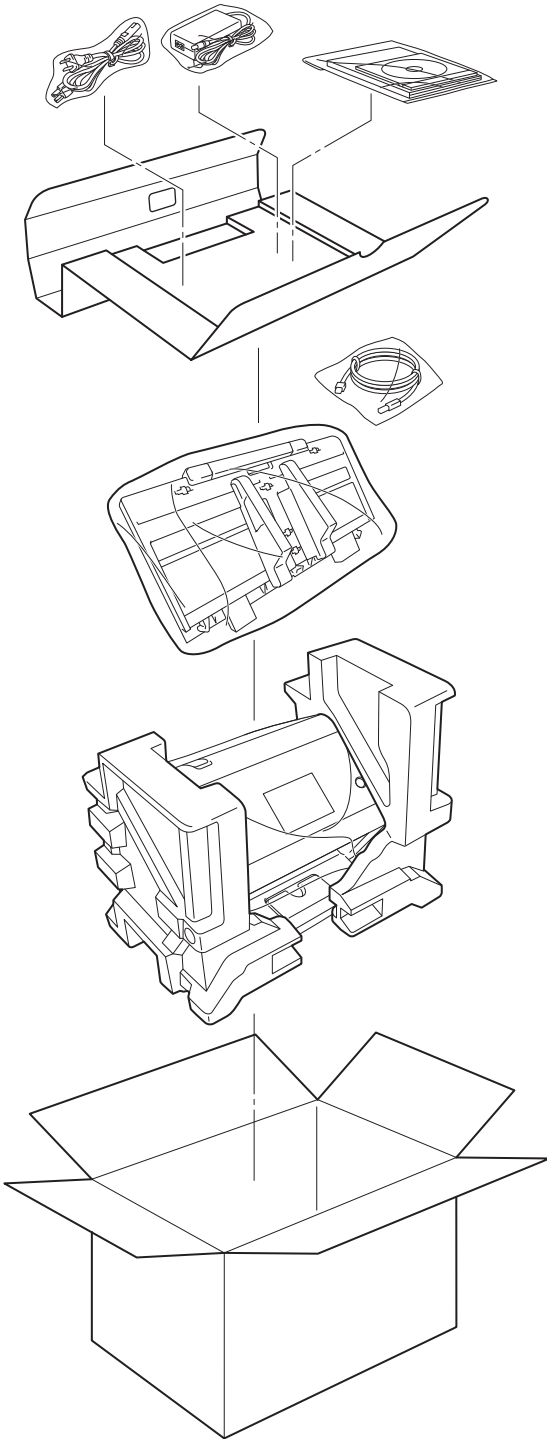
3. SCREW CATALOGUE

Taptite bind B

Taptite bind B M3x8	
Taptite bind B M4x10	

Taptite cup B

Taptite cup B M2.6x10 (BK)	
Taptite cup B M3x10	

Screw cup

Screw cup M3x6	

Screw bind

Screw bind M3x6	

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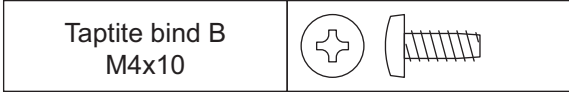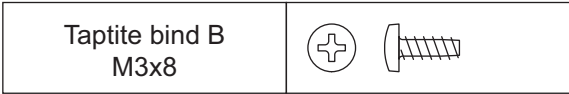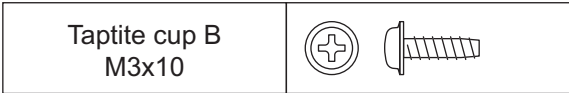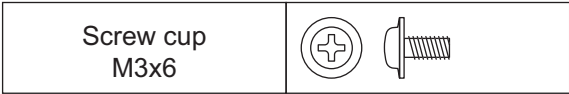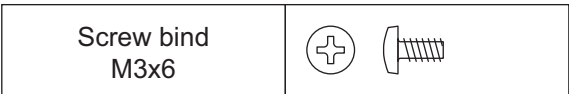
4. SCREW TORQUE LIST

Location of screw		Screw type	Q'ty	Tightening torque N · m (kgf · cm)
Bottom cover ASSY		Taptite bind B M3x8	4	0.5±0.1 (5±1)
Back cover ASSY		Taptite cup B M3x10	2	0.5±0.1 (5±1)
USB host FG plate		Taptite cup B M3x10	3	0.5±0.1 (5±1)
Drive earth plate (Models with copper seal)		Taptite bind B M3x8	1	0.5±0.1 (5±1)
Main PCB upper/lower shield (Models with copper seal)		Taptite cup B M3x10	1	0.7±0.1 (7±1)
	FG harness (YW)		1	
	FG harness (GR)		1	
Main PCB upper shield		Screw cup M3x6	2	0.7±0.1 (7±1)
Main PCB ASSY		Screw cup M3x6	3	0.7±0.1 (7±1)
Panel unit		Taptite cup B M2.6x10 (BK)	2	0.3±0.05 (3±0.5)
LCD presser base		Taptite cup B M3x10	6	0.5±0.1 (5±1)
Touch panel unit		Taptite cup B M3x10	1	0.5±0.1 (5±1)
Panel shield plate top		Taptite cup B M3x10	2	0.5±0.1 (5±1)
	FG harness (YW)		1	
FG harness / FG spring A		Screw cup M3x6	1	0.7±0.1 (7±1)
FG spring B		Screw cup M3x6	1	0.7±0.1 (7±1)
EJ pinch roller support plate		Taptite bind B M3x8	2	0.5±0.1 (5±1)
Sensor holder C		Taptite bind B M3x8	1	0.5±0.1 (5±1)
Reverse roller holder support		Screw cup M3x6	2	0.7±0.1 (7±1)
Pinch roller support		Taptite bind B M3x8	1	0.5±0.1 (5±1)
	FG spring	Screw cup M3x6	1	0.7±0.1 (7±1)
Document scanning position actuator holder		Taptite bind B M3x8	2	0.5±0.1 (5±1)
PF pinch roller holder		Taptite bind B M3x8	2	0.5±0.1 (5±1)
Front cover sensor holder		Taptite bind B M3x8	1	0.5±0.1 (5±1)
Lower frame		Taptite cup B M3x10	4	0.5±0.1 (5±1)
Tension pulley		Screw cup M3x6	1	0.7±0.1 (7±1)
Feed motor		Screw bind M3x6	2	0.7±0.1 (7±1)
Paper feed motor unit		Taptite bind B M4x10	3	0.7±0.1 (7±1)
Paper feed motor		Screw bind M3x6	2	0.7±0.1 (7±1)
Multi feeding sensor harness guide		Taptite bind B M3x8	1	0.5±0.1 (5±1)
Multi feeding sensor shield plate		Taptite bind B M3x8	2	0.5±0.1 (5±1)

5. LUBRICATION

There are no applicable parts for lubrication.

6. OVERVIEW OF GEARS

There are no gears to be disassembled.

7. HARNESS ROUTING

1 Main PCB ASSY

Feed motor harness (RD)

Paper feed motor harness (BK)

USB host harness (WH)

FG harness (YW)

Panel flat cable

First side CIS flat cable

Document detection / Document scanning position sensor harness (GR, WH)

Front cover sensor harness (WH)

Second side CIS flat cable

FG harness (GR)

Multi feeding sensor harness (Receive) (RD, BK, WH, BL)

Paper feed / Eject jam sensor harness (BL, RD)

Multi feeding sensor harness (Sent) (WH, BK)

Harness colors are subject to change for some reason.

2   Right side of the machine

Paper feed motor harness (BK)

Feed motor harness (RD)

Front cover sensor harness (WH)

3   Rear side of the machine

Multi feeding sensor harness (Receive) (RD, BK, WH, BL)

LD1317 >ABS< C1

Feed motor harness (RD)

Paper feed motor harness (BK)
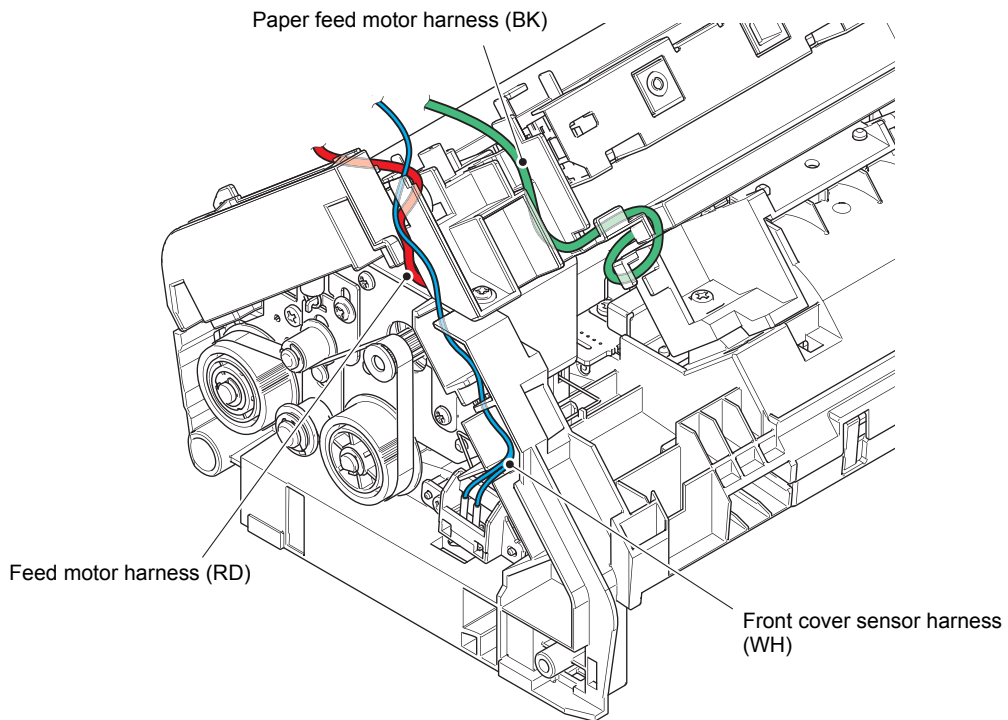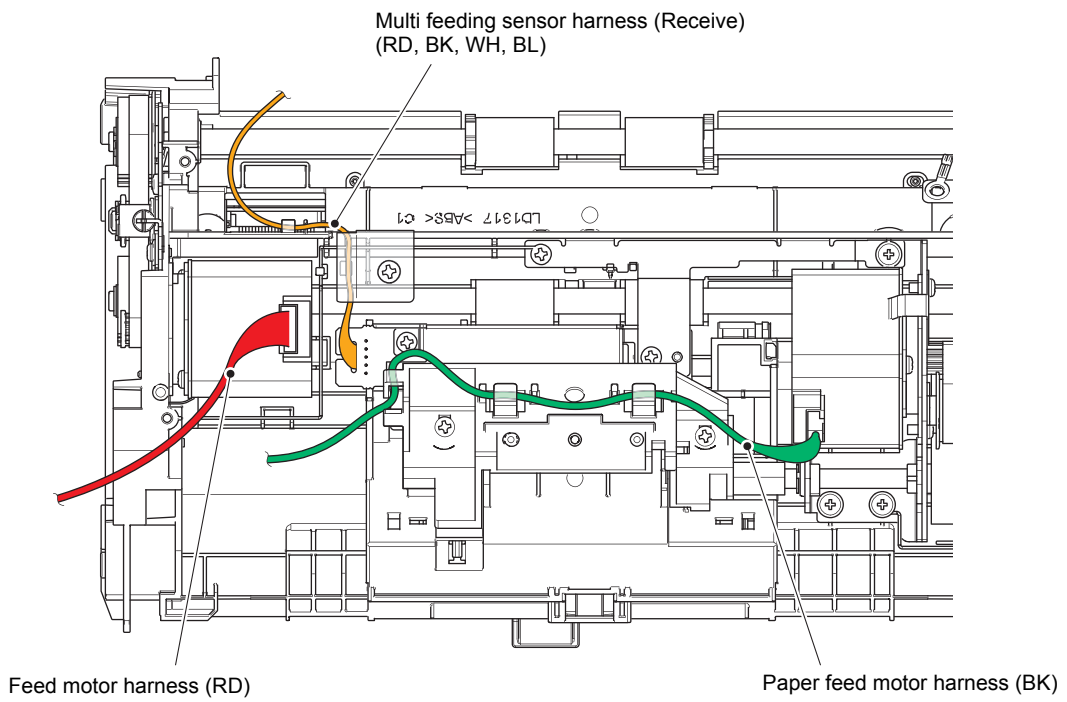
Harness colors are subject to change for some reason.

4 Panel unit

Touch panel flat cable

Key PCB flat cable

NFC flat cable

FG harness (YW)

Panel flat cable

FG harness (GR)

Second side CIS flat cable

Paper feed jam sensor harness (RD)

Multi feeding sensor harness (Sent) (WH, BK)

Eject jam sensor harness (BL)

Document detection sensor harness (GR)

Document scanning position sensor harness (WH)
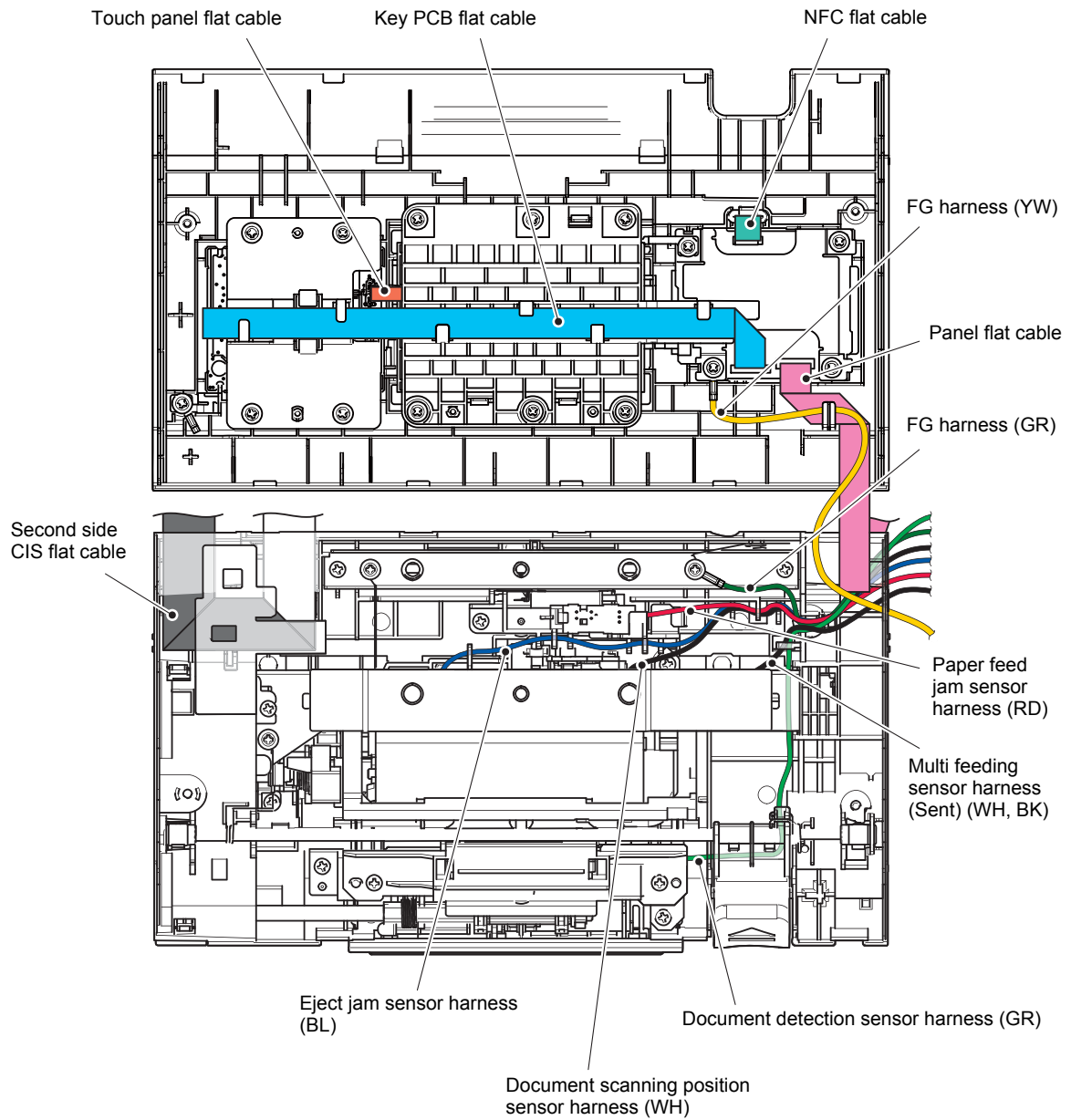
Harness colors are subject to change for some reason.

8. DISASSEMBLY FLOW CHART

```
9.1 Reverse roller / Pick    9.2 Bottom cover ASSY    9.2 Exit stopper         9.11 Second side CIS
up roller                    15/20                    5/5                      unit
10/10                                                                          5/5

                             9.3 Back cover           9.5 Wireless LAN PCB                              9.6 USB host PCB
                             15/20                    ASSY                                              ASSY
                                                      5/5                                               15/25

                   9.4 Side cover L     9.4 Side cover R        9.7 Main PCB ASSY        9.7 Main PCB ASSY
                   5/10                 5/10                    (Models without copper   (Models with copper
                                                               seal)                     seal)
                                                               60/230                    85/275
                   Ⓐ                                                                                    Ⓑ
                        Ⓑ                    Ⓐ

                   9.8 Front cover L     9.8 Front cover R       9.16 First side CIS unit  9.18 Lower frame
                   5/5                   5/5                     5/5                       15/80

     9.16 First side CIS flat   9.18 Feed belt      9.9 Front cover ASSY       9.18 Feed motor       9.19 Paper feed motor
     cable                      10/15               20/20                      10/15                 unit
     5/20                                                                                            15/25

          9.17 Front cover sensor    9.10 Panel unit      9.20 Multi feeding        9.19 Paper feed motor   9.19 Paper feed belt
          10/15                      40/50                sensor PCB ASSY           20/30                   5/5
                                                          (Receive)
                                                          35/45

9.10 Panel flat cable   9.13 Document        9.11 Flat cable support   9.14 Paper feed jam   9.15 Document      9.12 Eject jam sensor
5/20                    scanning position   film                      sensor PCB / Multi    detection sensor PCB  PCB
                        sensor PCB          5/5                       feeding sensor PCB    ASSY                  5/10
                        65/125                                        ASSY (Sent)          30/40
                                                                      60/90

          9.10 LCD presser base        9.11 Second side CIS
          25/50                        flat cable
                                       15/40

     9.10 LCD          9.10 Panel PCB ASSY
     5/5               5/5

     9.10 Touch panel
     5/10
```

9. DISASSEMBLY PROCEDURE

Preparation

■ Disconnecting Cables and Removing Accessories

Prior to proceeding with the disassembly procedure,

(1) Disconnect the following:

- AC adapter (AC power cord)
- USB cable (if connected)
- LAN cable (if connected)
- USB flash memory (if connected)

(2) Remove the following:

- Document tray
- LAN port cap
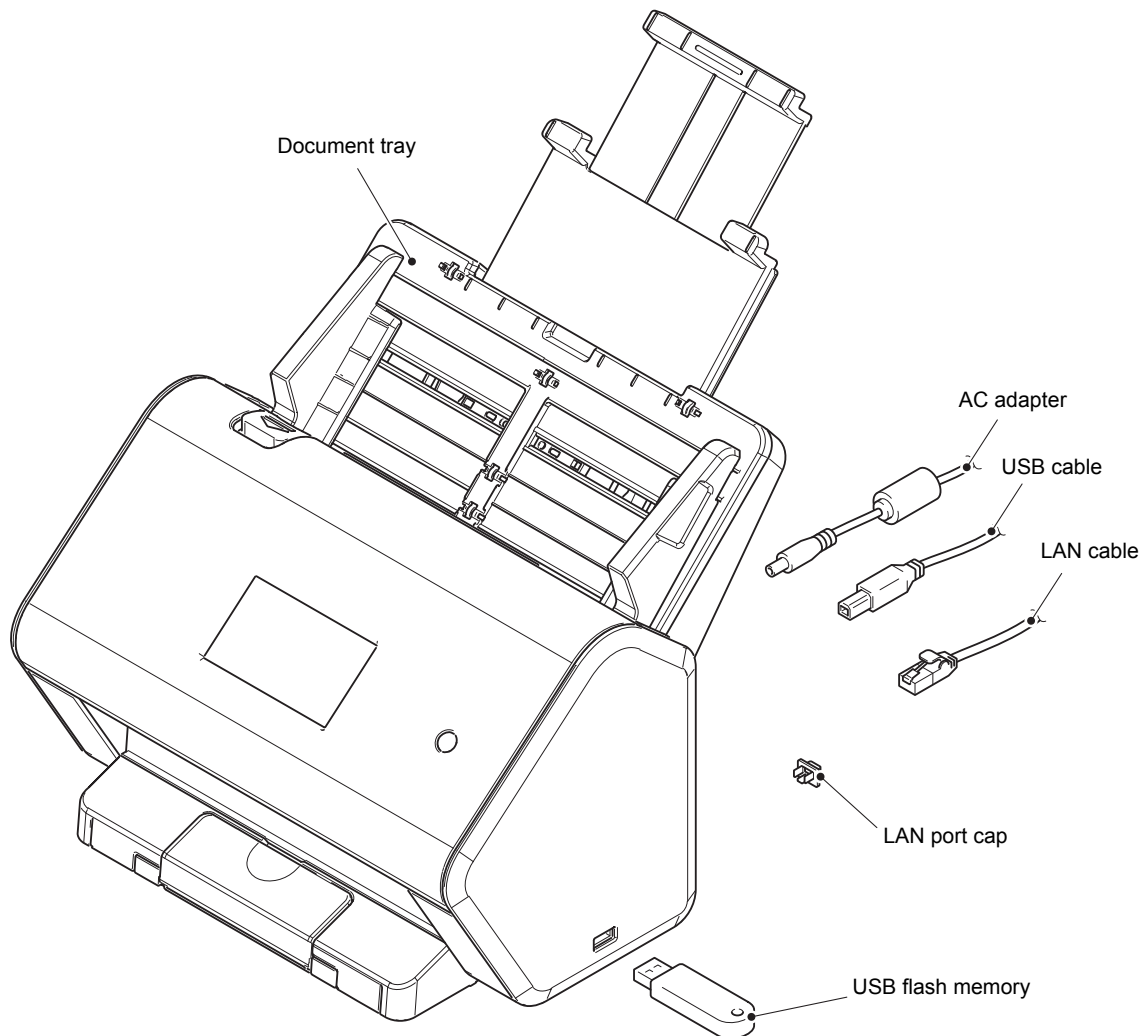
Fig. 3-1

9.1 Reverse roller / Pick up roller

(1) Push the release button, and open the front cover ASSY.

(2) Open the reverse roller cover to remove the reverse roller from the machine.
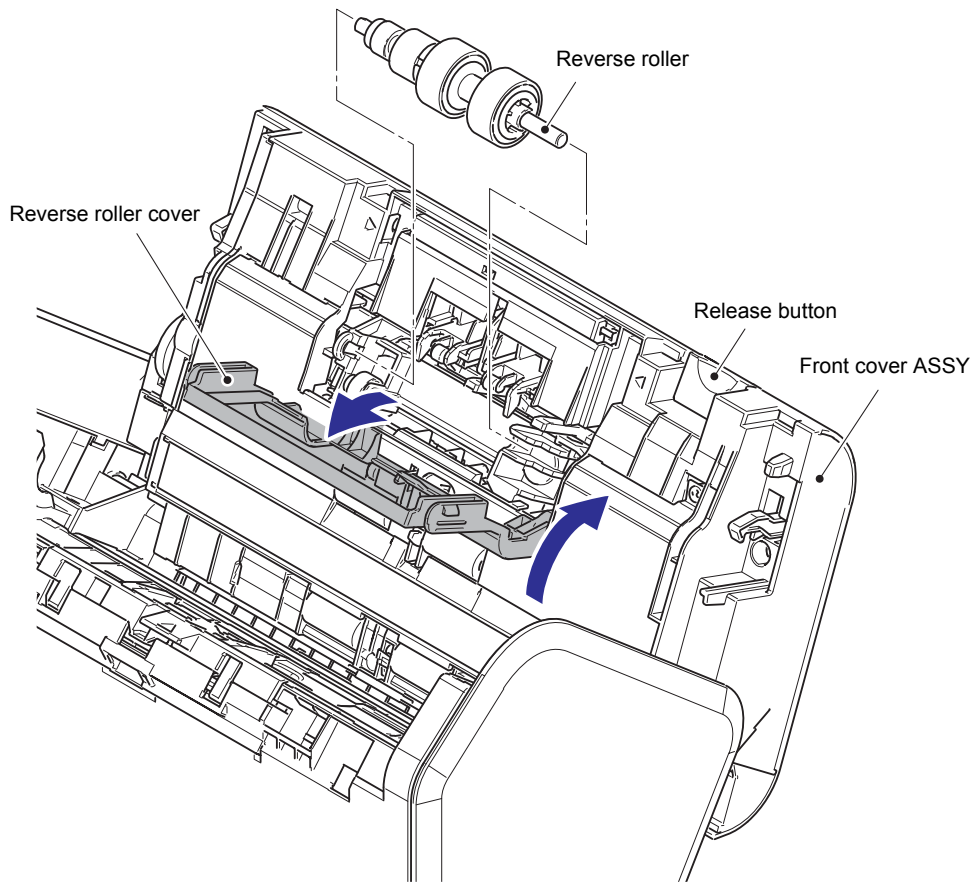
Fig. 3-2

(3) Close the reverse roller cover.

(4) Open the pick up roller cover.

(5) Turn the lever in the direction of the arrow A to unlock and remove the pick up roller from the machine.
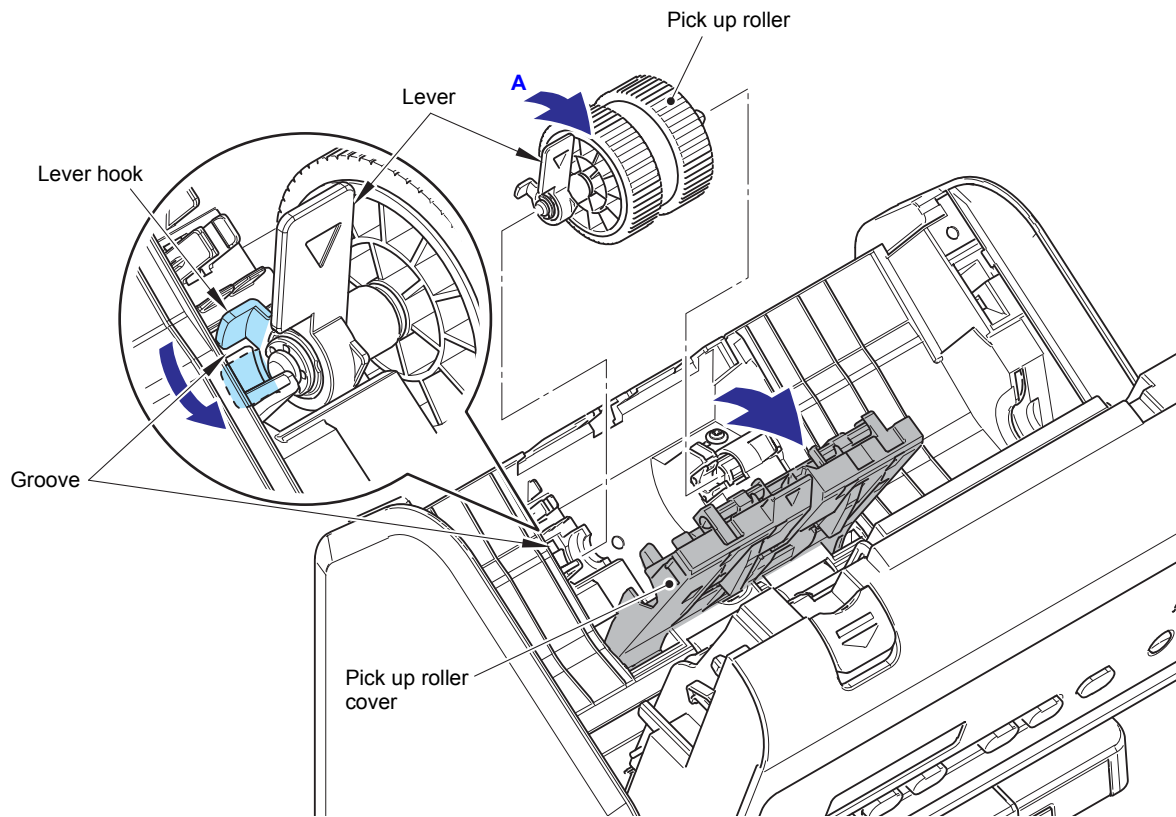
Fig. 3-3

(6) Close the pick up roller cover and then the front cover ASSY.

Assembling Note:

• When attaching the pick up roller, make sure that the lever hook is engaged with the groove on the machine. If not, the pick up roller wears out quickly because it comes in contact with the pick up roller cover.

9.2 Bottom cover ASSY / Exit stopper

(1) Remove the four taptite bind B M3x8 screws, and remove the bottom cover ASSY from the machine.

Bottom cover ASSY

Taptite bind B
M3x8
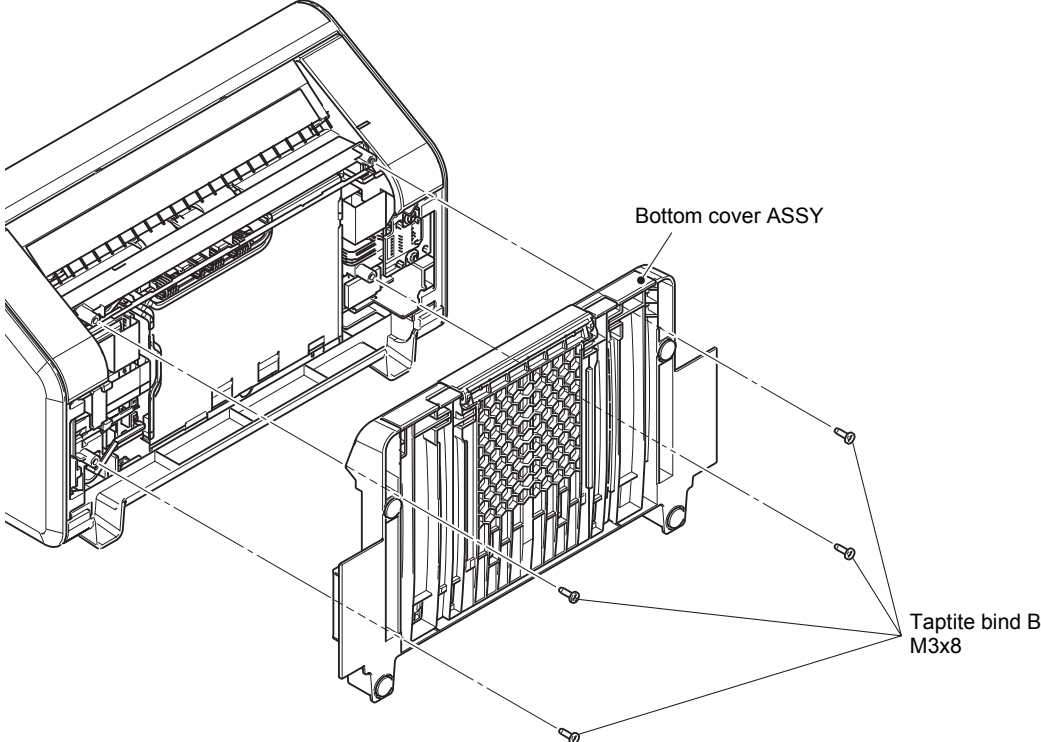
Fig. 3-4

(2) Remove the two stoppers, and remove the exit tray ASSY from the bottom cover ASSY.

(3) Remove the exit stopper from the exit tray ASSY.

Bottom cover ASSY

Stopper

Stopper

Exit tray ASSY

Exit stopper

Fig. 3-5

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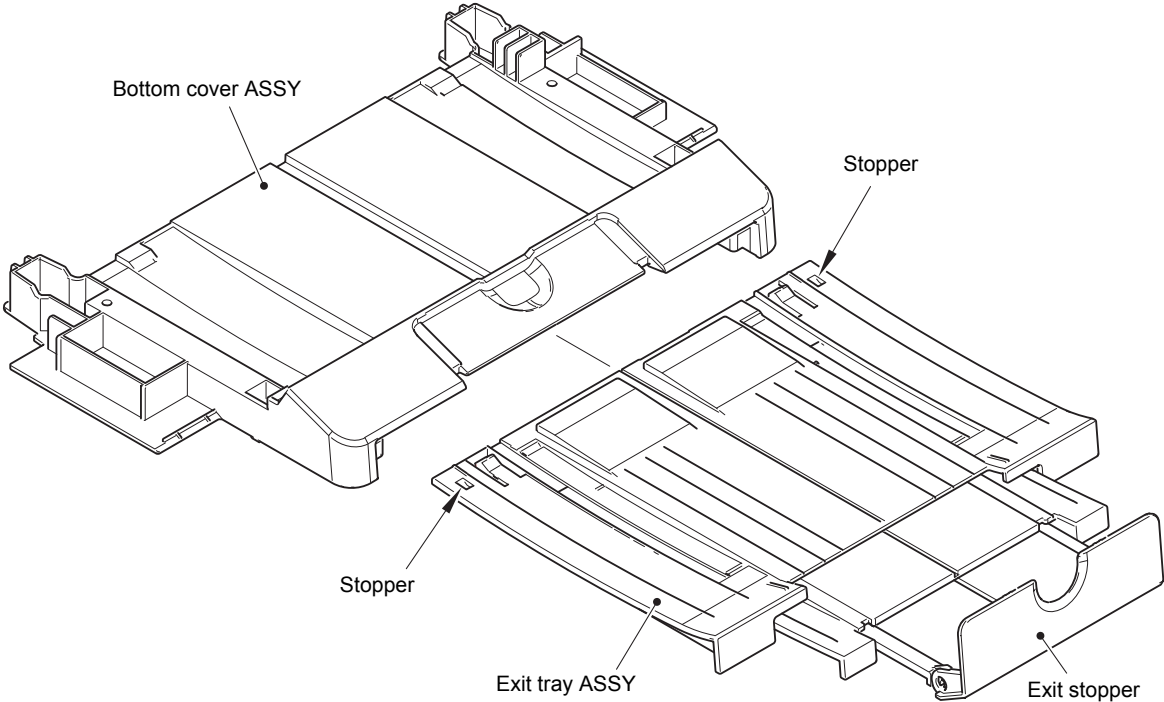
9.3 Back cover

(1) Push the release button, and open the front cover ASSY.

(2) Open the pick up roller cover to remove the two taptite cup B M3x10 screws from the machine.

Taptite cup B M3x10

Pick up roller cover

Front cover ASSY

Release button
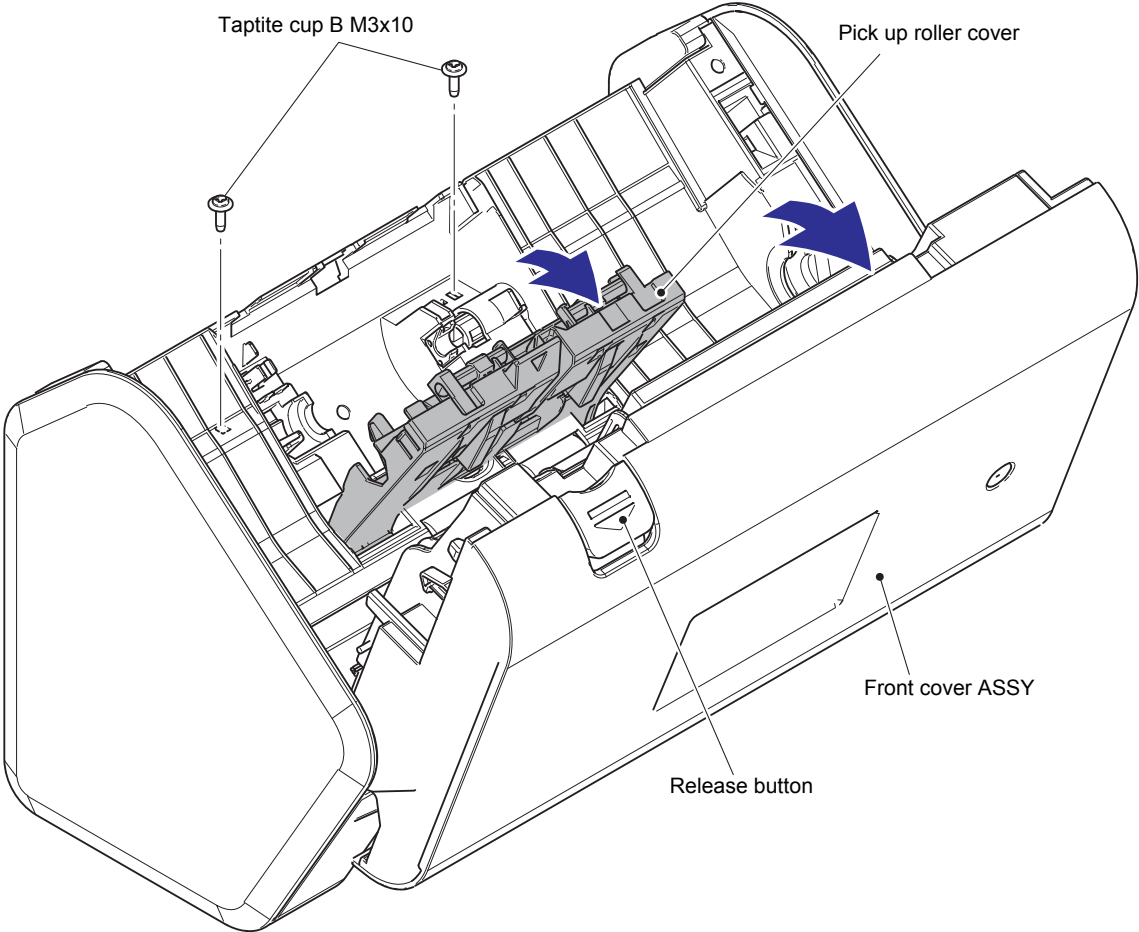
Fig. 3-6

(3) Release the four hooks to remove the back cover from the machine in the direction of the arrow.

Hooks

Hooks

Back cover
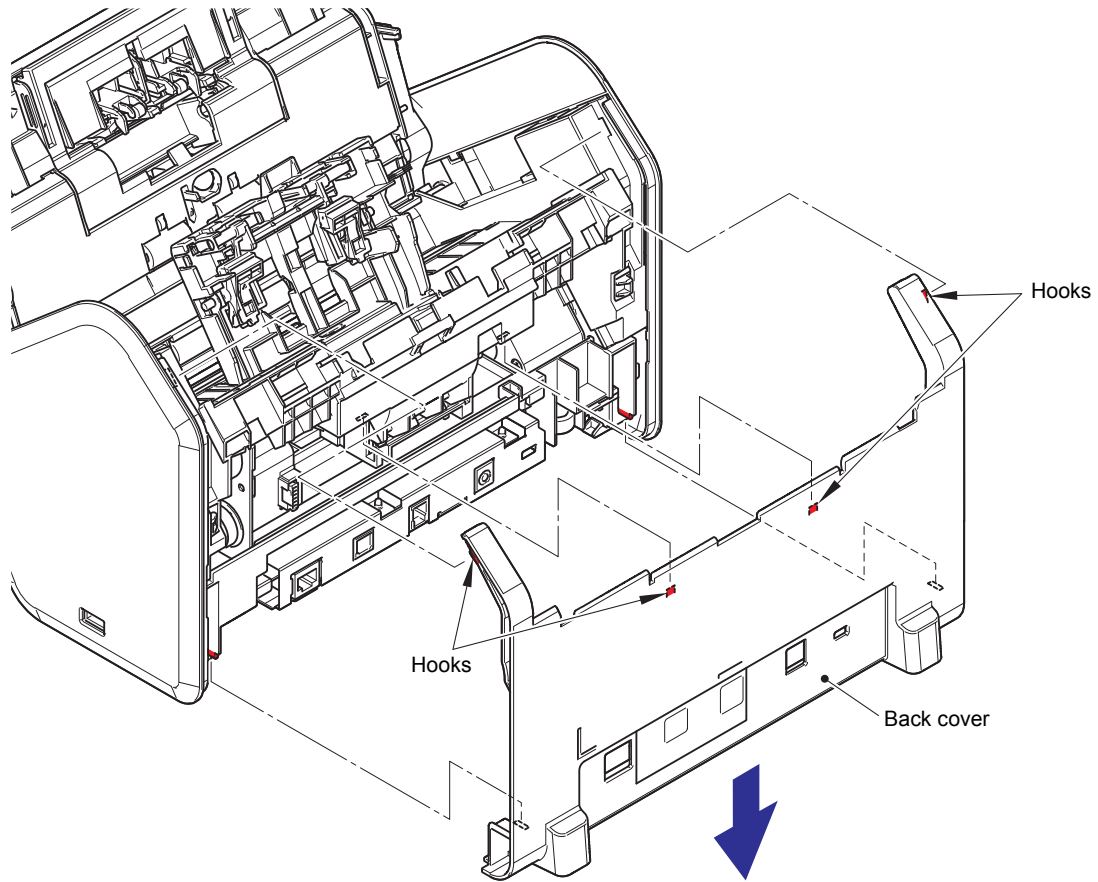
Fig. 3-7

(4) Close the pick up roller cover.

9.4   Side cover L/R

(1) Release the three hooks, and remove the side cover L from the machine.

Hook
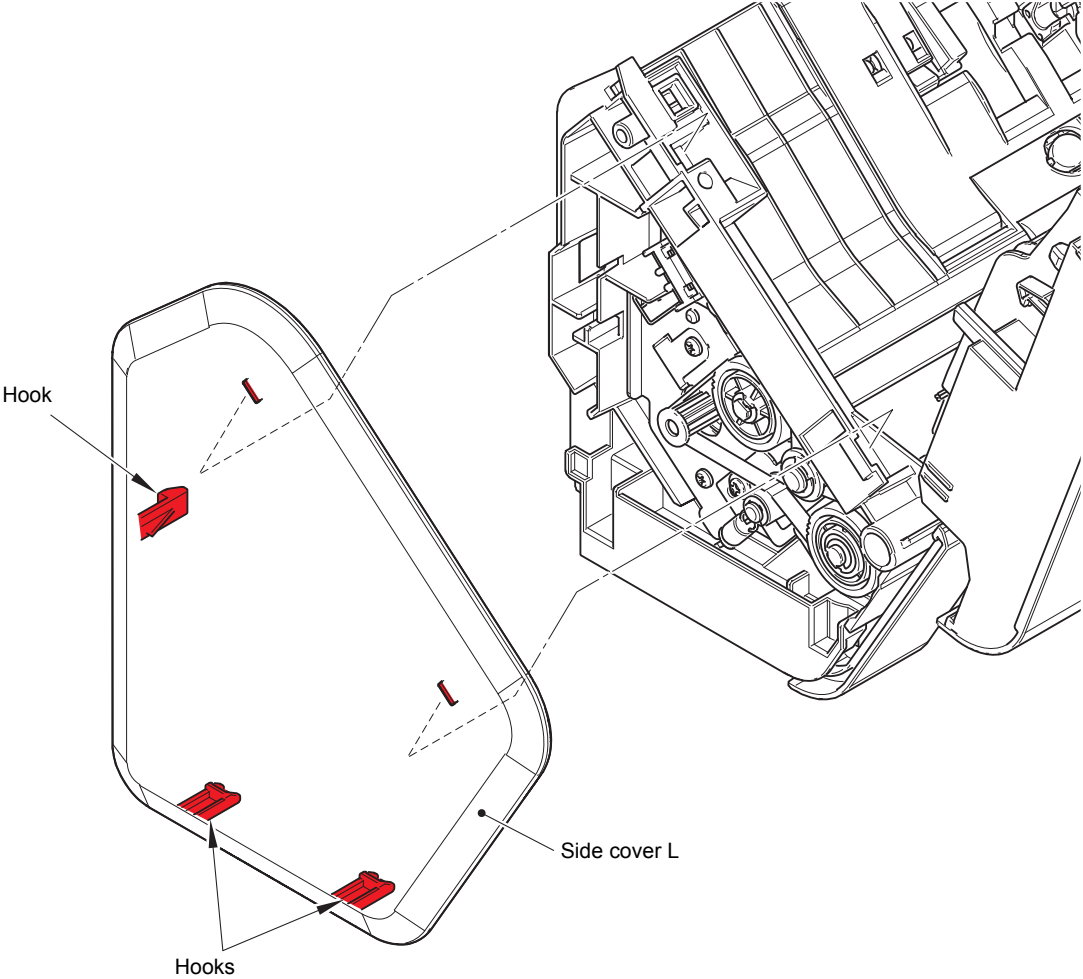
Hooks

Side cover L

Fig. 3-8

(2) Release the three hooks, and remove the side cover R from the machine.
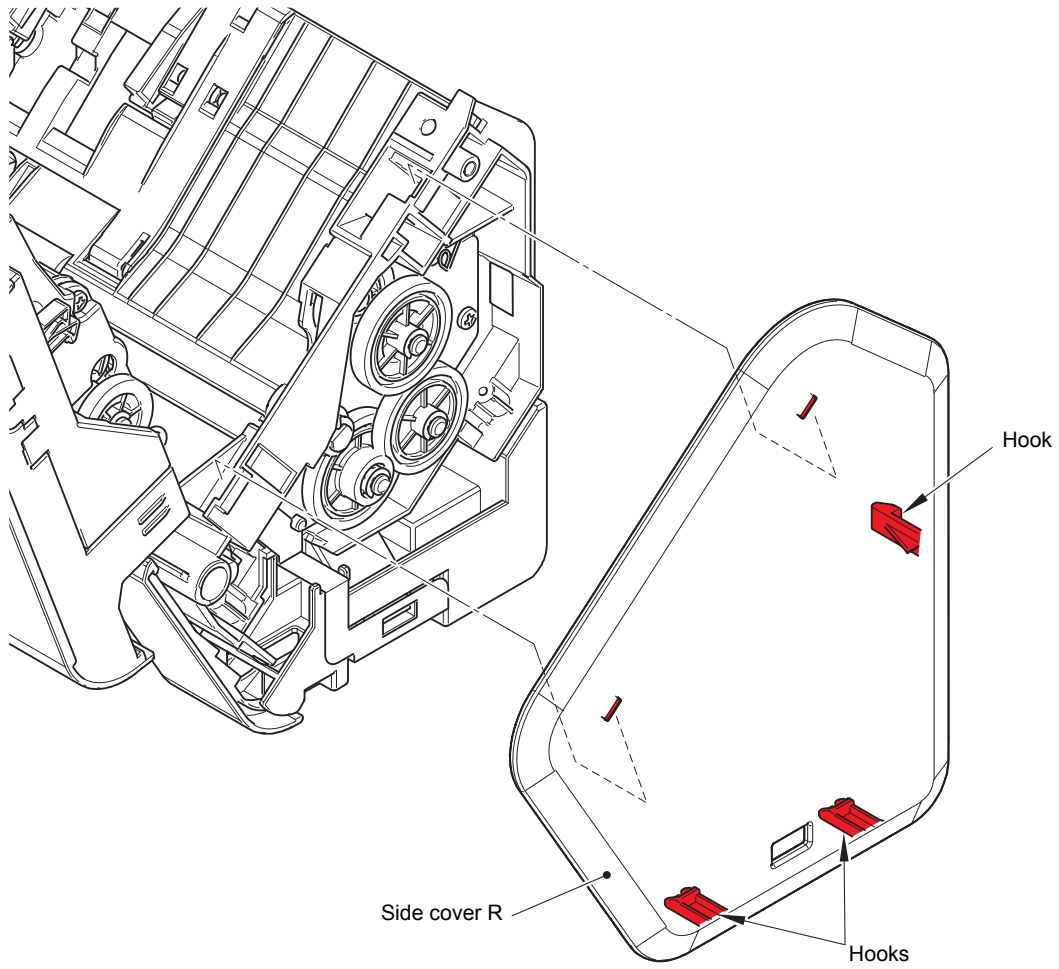
Fig. 3-9

(3) Close the front cover ASSY.

9.5 Wireless LAN PCB ASSY

(1) Remove the wireless LAN PCB ASSY from the main PCB ASSY.

Main PCB ASSY

Wireless LAN PCB ASSY
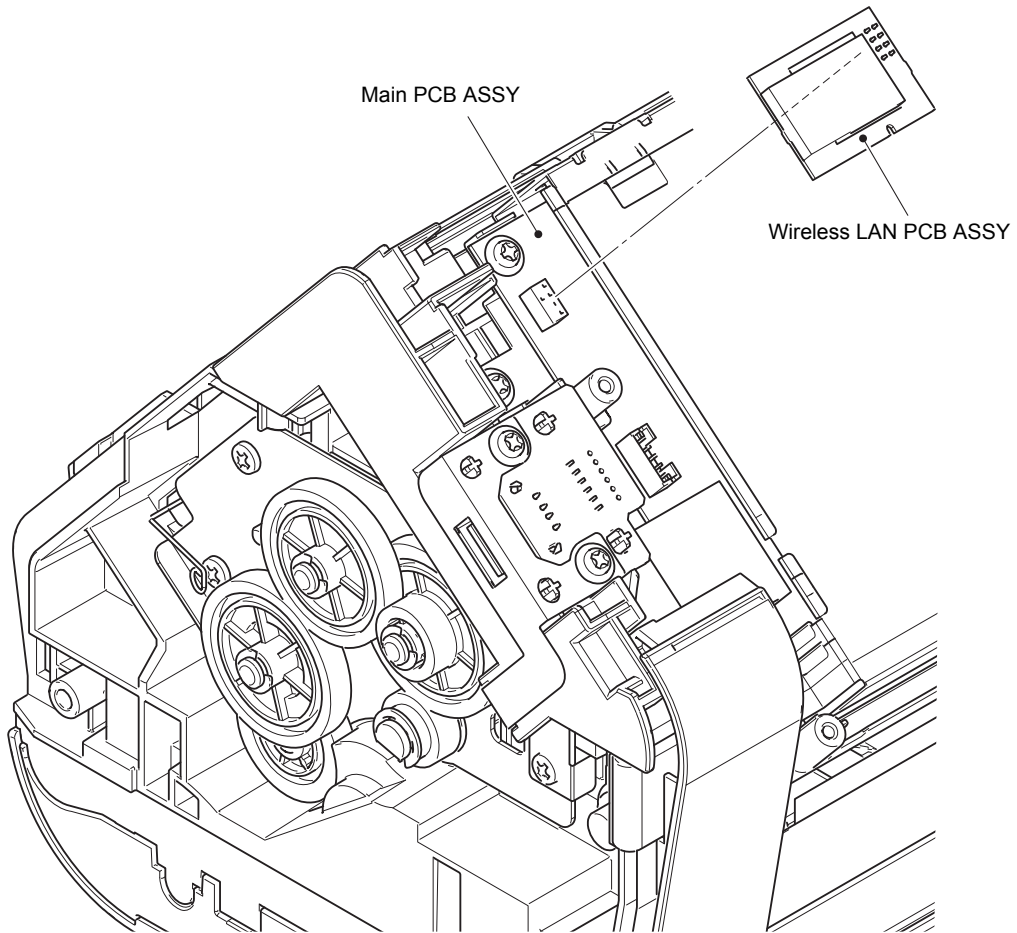
Fig. 3-10

9.6 USB host PCB ASSY

(1) Disconnect the USB host PCB harness and second side CIS flat cable from the main PCB ASSY.

(2) Remove the three taptite cup B M3x10 screws, and remove the USB host FG plate from the machine.

(3) Remove the USB host PCB ASSY from the machine.

Taptite cup B M3x10

USB host FG plate

USB host PCB ASSY

USB host PCB harness

Taptite cup B M3x10

Second side CIS flat cable
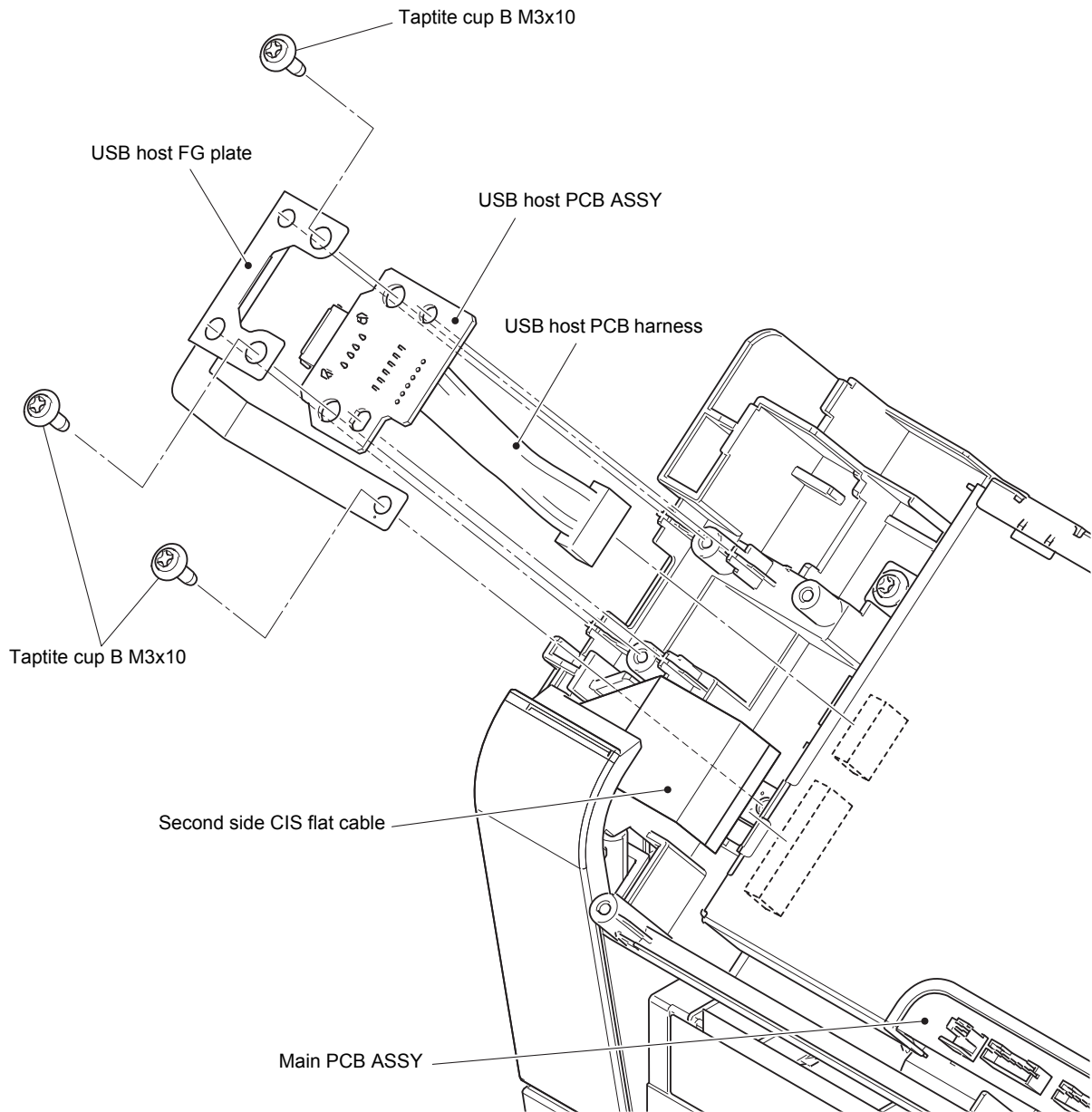
Main PCB ASSY

Fig. 3-11

HARNESS ROUTING: Refer to "1. Main PCB ASSY".

9.7 Main PCB ASSY

(1) Check the presence or absence of the copper seal on the main PCB upper shield.

Main PCB upper shield
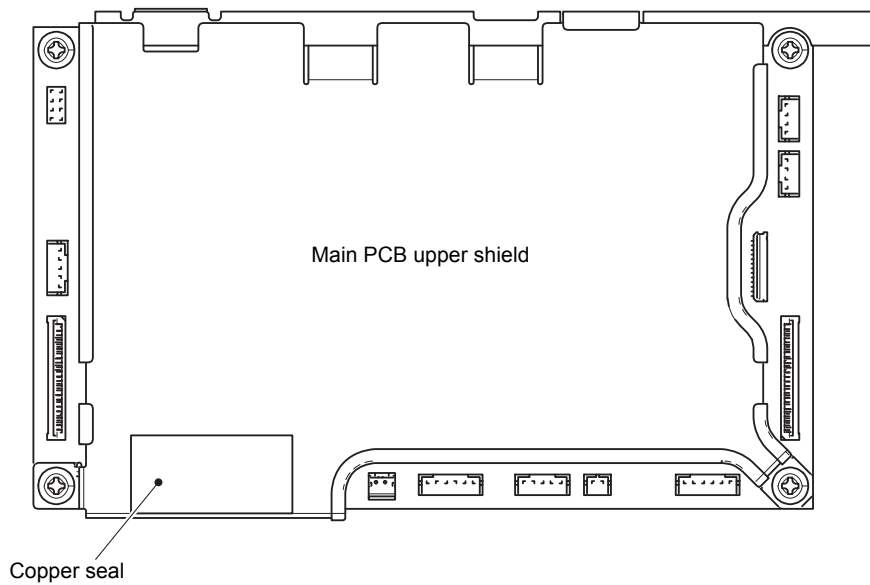
Copper seal

Fig. 3-12

■ **The presence case of the copper seal**

(2) Disconnect all harnesses and flat cables connected to the main PCB ASSY.

Main PCB ASSY

Paper feed motor harness

Feed motor harness

Panel flat cable

First side CIS flat cable

Front cover sensor harness

Paper feed / Eject jam sensor harness

Multi feeding sensor harness (Sent)

Multi feeding sensor harness (Receive)

Document detection / Document scanning position sensor harness
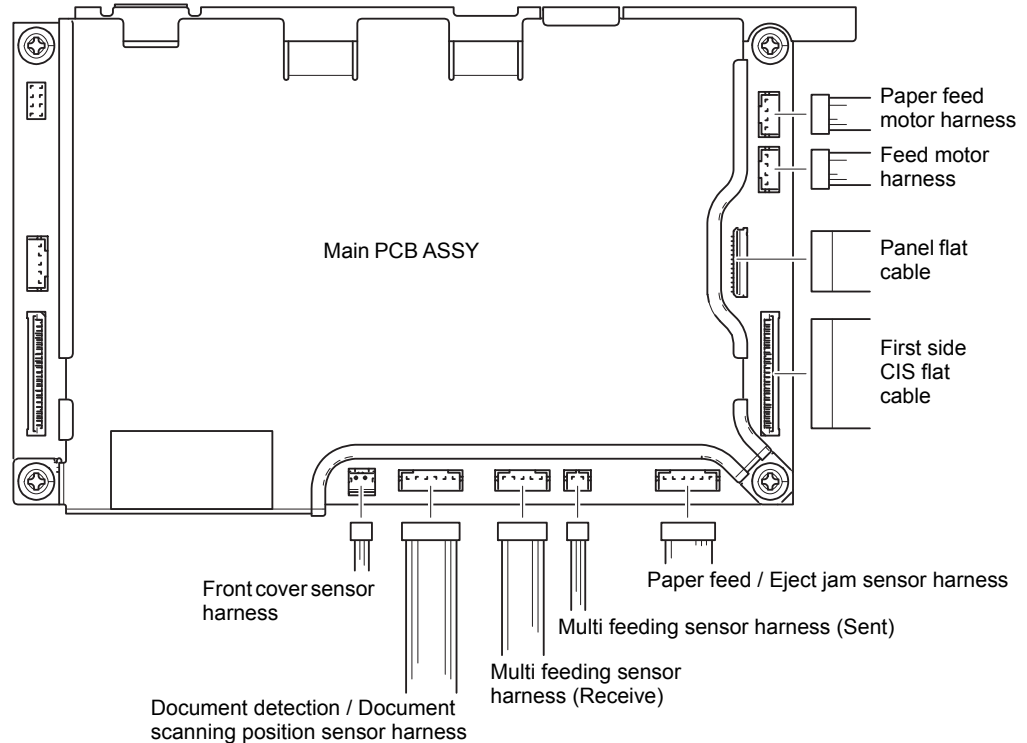
Fig. 3-13

HARNESS ROUTING: Refer to "1. Main PCB ASSY".

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(3) Remove the taptite bind B M3x8 screw, and remove the drive earth plate from the machine.

Drive earth plate

Taptite bind B M3x8
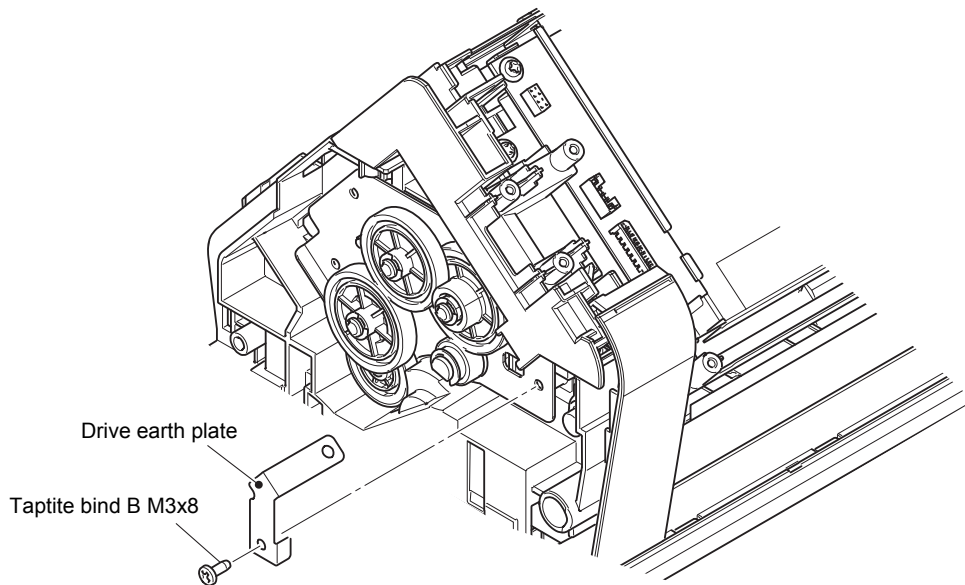
Fig. 3-14

(4) Remove the three taptite cup B M3x10 screws to remove the FG harness (YW), FG harness (GR) and main PCB upper/lower shield from the machine.

Taptite cup B M3x10

FG harness (YW)

Main PCB upper/lower shield

FG harness (GR)
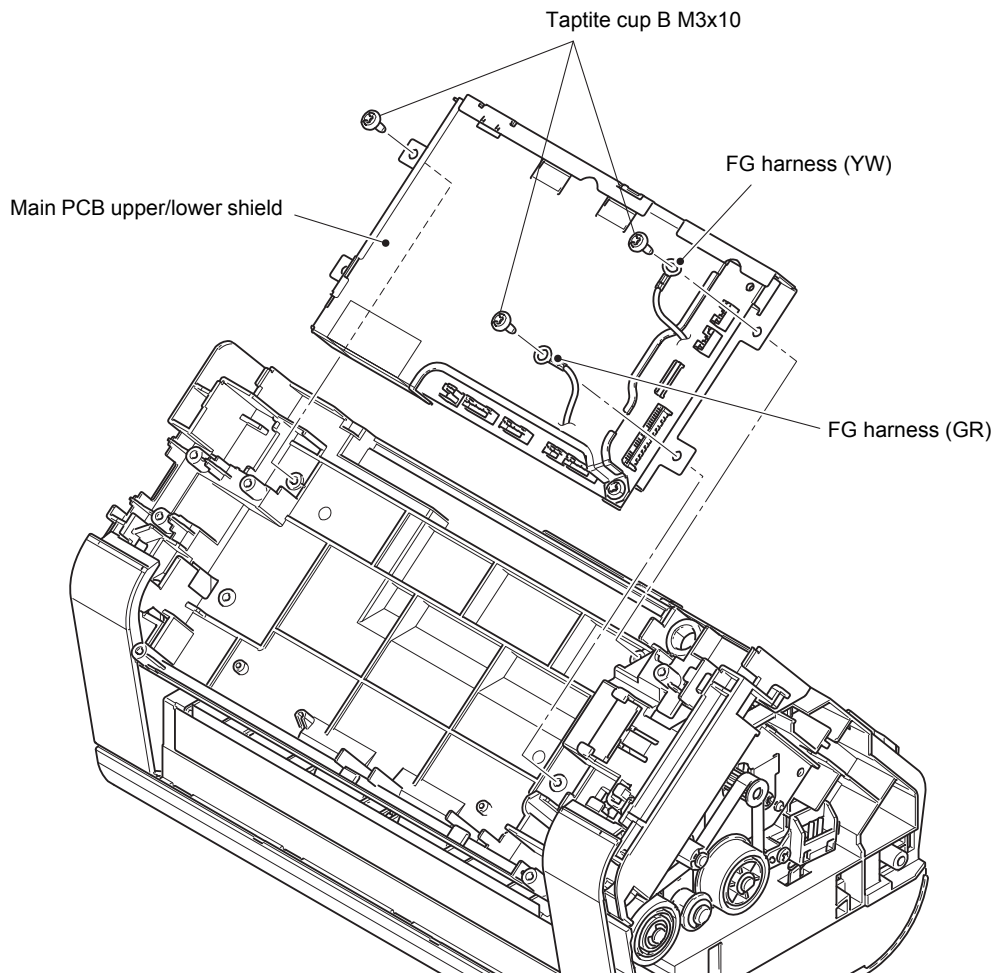
Fig. 3-15

HARNESS ROUTING: Refer to "1. Main PCB ASSY".

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(5) Remove the two screw cup M3x6 screws.

(6) Slide the main PCB upper shield in the direction of the arrow. Release the two ribs of the main PCB upper shield from the main PCB lower shield to open the main PCB upper shield.
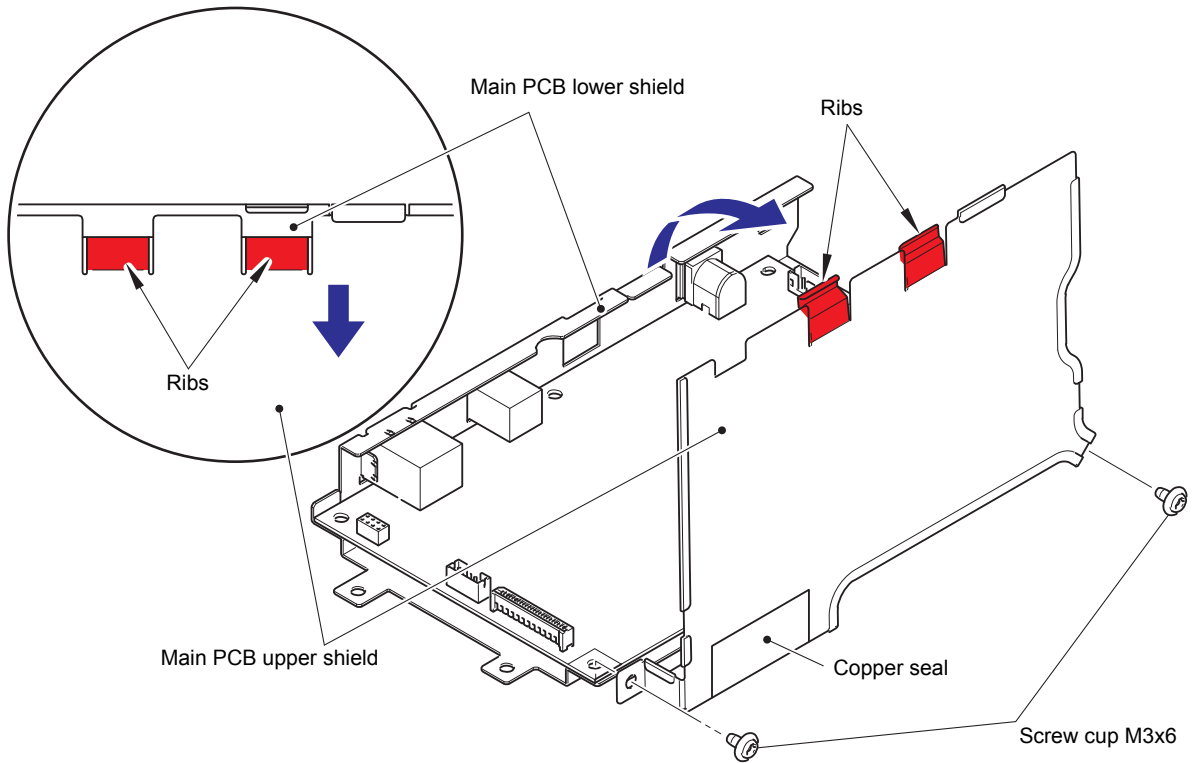
Fig. 3-16

Assembling Note:

• When assembling the main PCB upper shield, insert the two ribs of the main PCB upper shield below the main PCB lower shield.

• When opening the main PCB upper shield, take care not to break the copper seal. If the copper seal is broken, replace it with a new one.

Fig. 3-17

Confidential
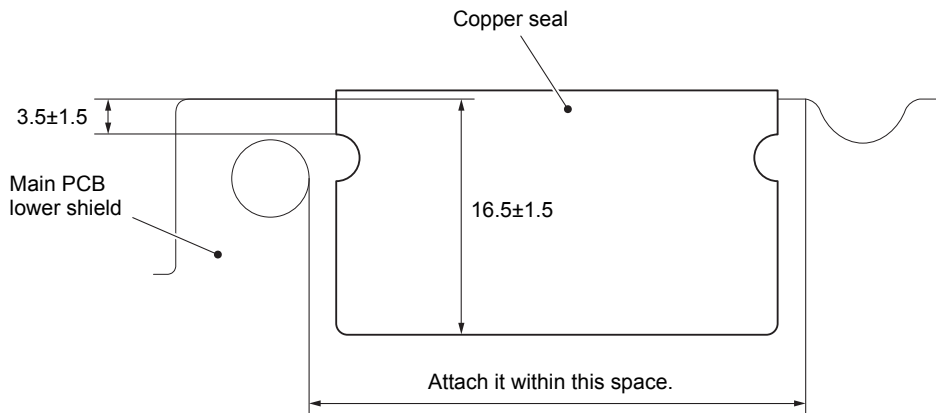
(7) Remove the three screw cup M3x6 screws to remove the main PCB ASSY from the main PCB lower shield.

Screw cup M3x6

Main PCB ASSY

Main PCB lower shield
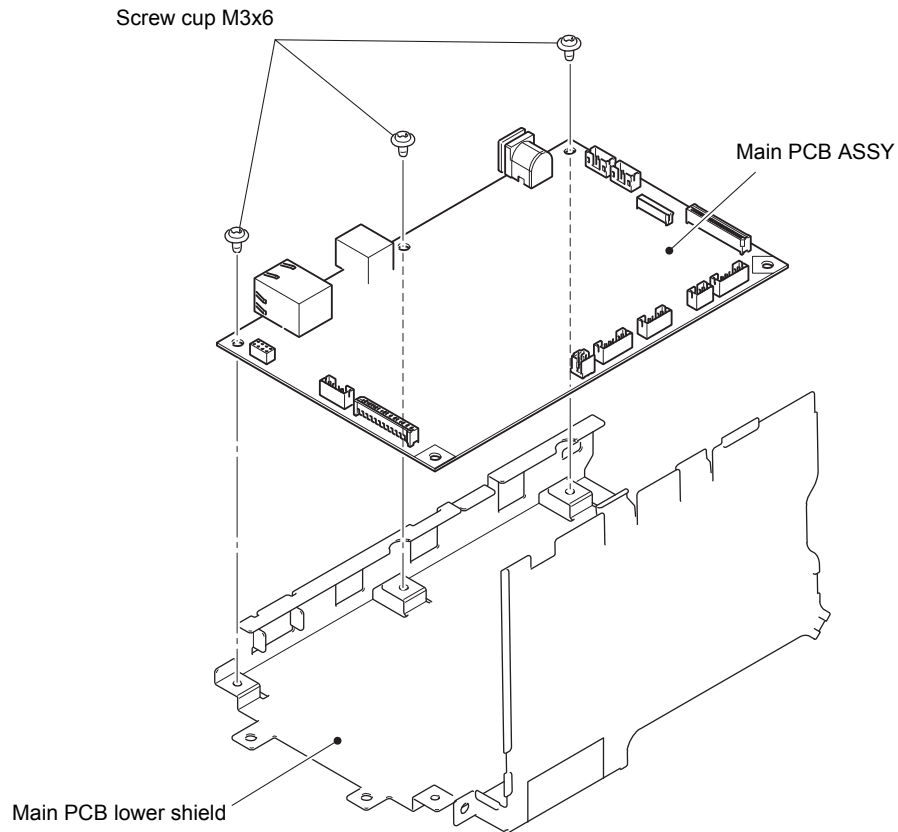
Fig. 3-18

(8) Remove the heat conductive sheet B and heat conductive sheet A from the main PCB ASSY.

Heat conductive sheet A

Heat conductive sheet B

Main PCB ASSY
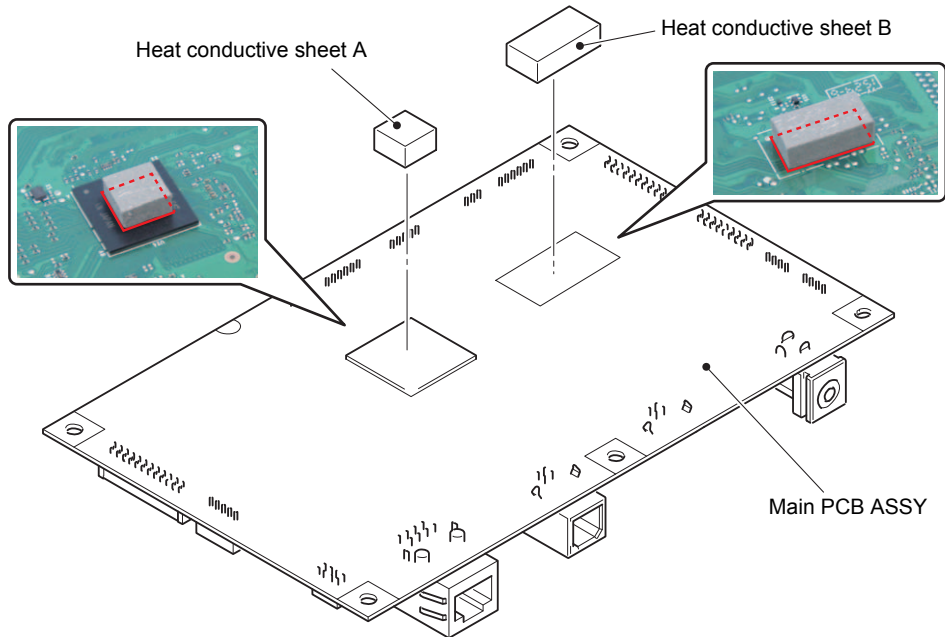
Fig. 3-19

Assembling Note:
• Attach the heat conductive sheet A and heat conductive sheet B in the red frame described in the figure above.

■ **The absence case of the copper seal**

(2) Remove the two screw cup M3x6 screws, and remove the main PCB upper shield from the machine.

Main PCB lower shield

Screw cup M3x6

Ribs

Main PCB upper shield

Ribs

Main PCB upper shield

Main PCB upper shield

Sponge

Radio wave absorptive sheet

Main PCB ASSY

Main PCB lower shield
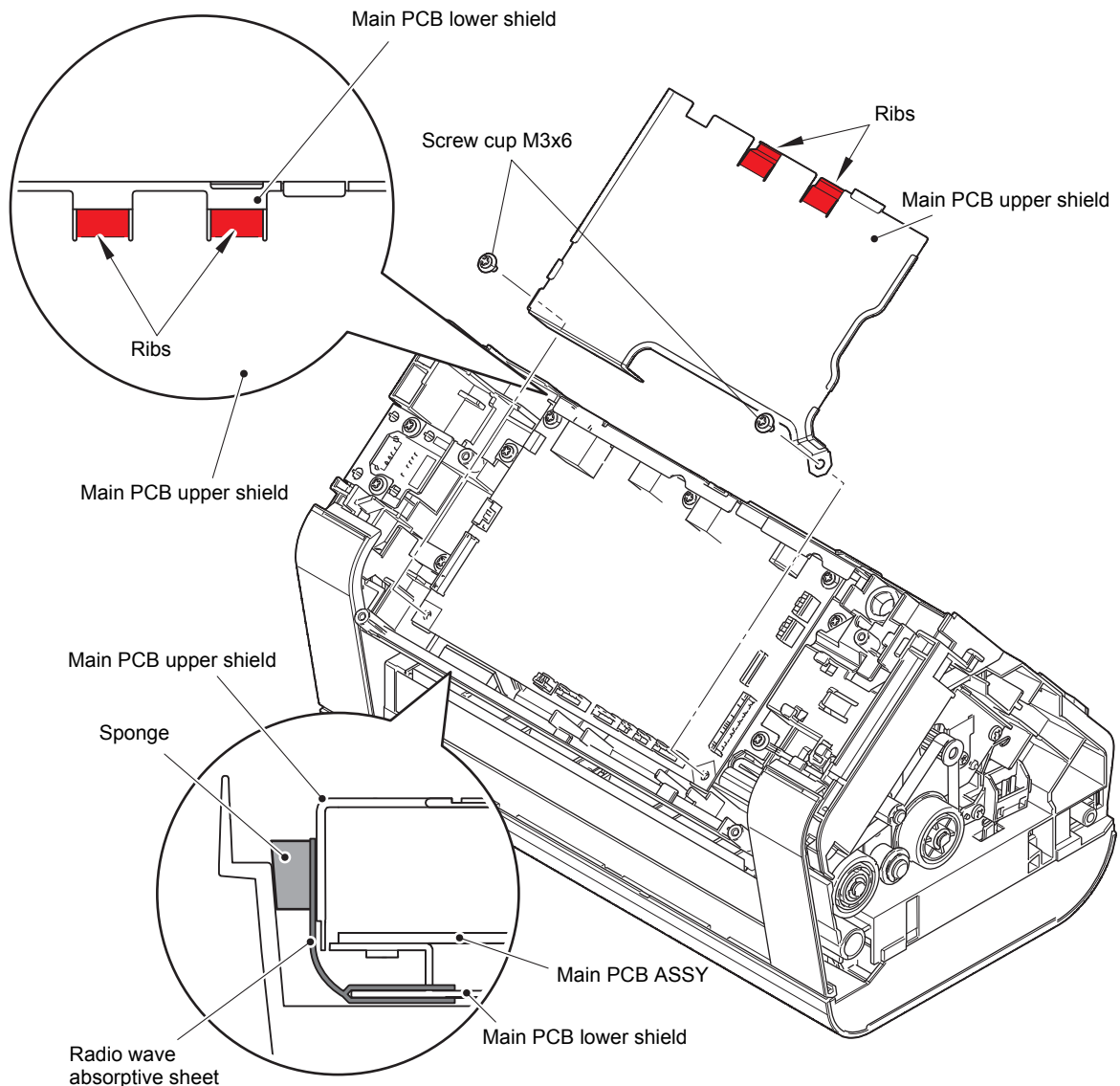
Fig. 3-20

Assembling Note:

• When assembling the main PCB upper shield, insert the two ribs of the main PCB upper shield below the main PCB lower shield.

• When assembling the main PCB upper shield, make sure to check that the main PCB upper shield is in contact with the radio wave absorptive sheet properly as shown in the figure above.

(3) Disconnect all harnesses and flat cables connected to the main PCB ASSY.
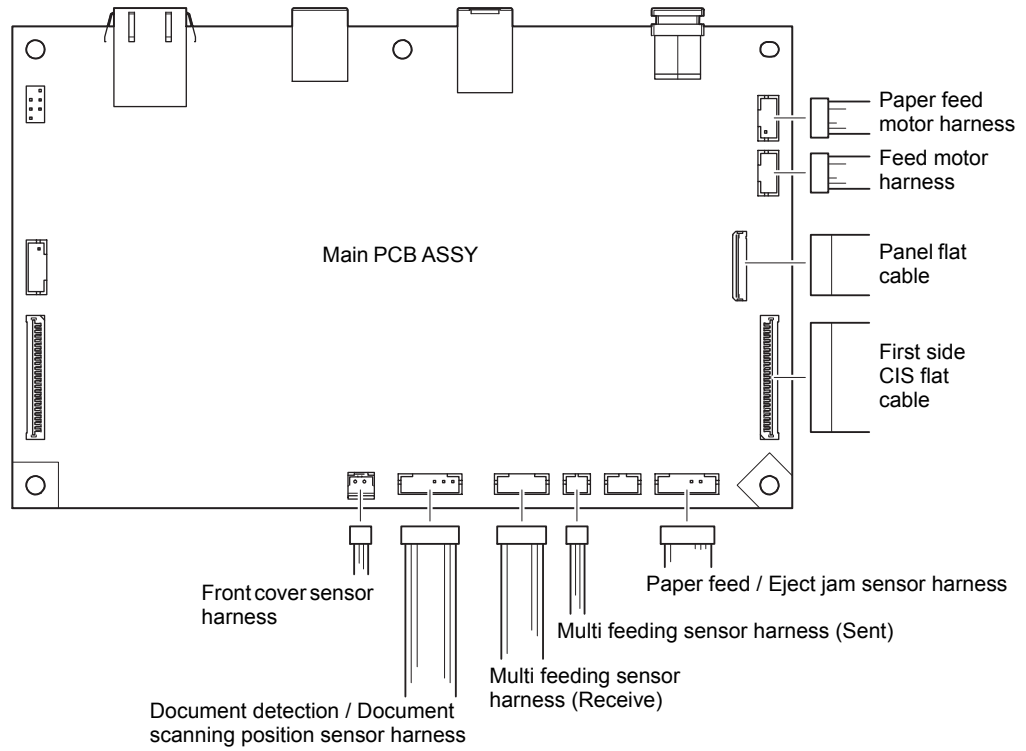
Fig. 3-21

HARNESS ROUTING: Refer to "1. Main PCB ASSY".

(4) Remove the three screw cup M3x6 screws, and remove the main PCB ASSY from the machine.
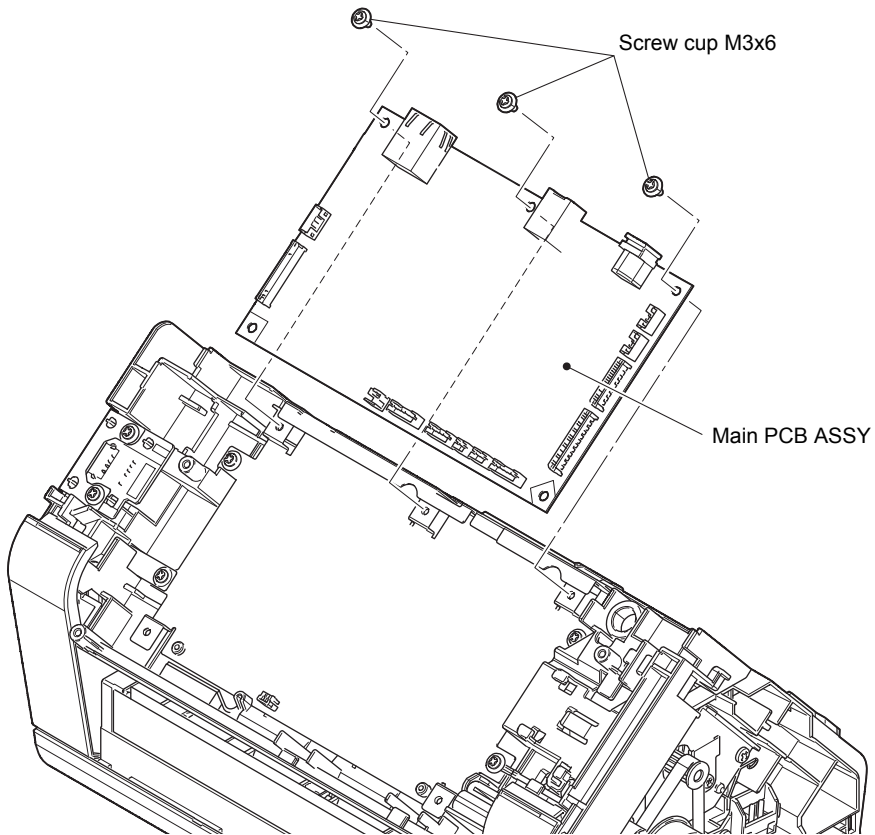
Fig. 3-22

(5) Remove the heat conductive sheet B and heat conductive sheet A from the main PCB ASSY.
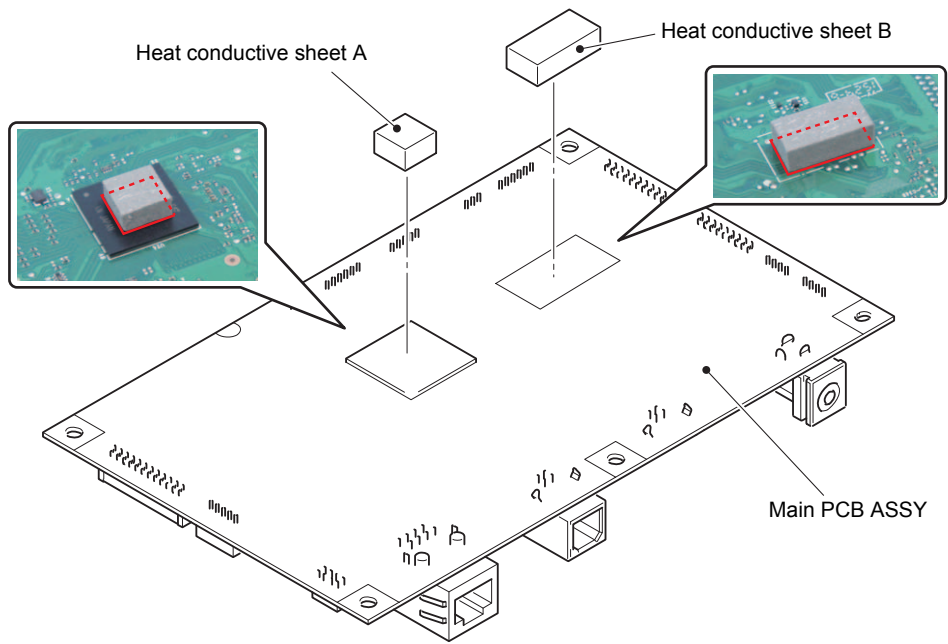
Fig. 3-23

Assembling Note:

• Attach the heat conductive sheet A and heat conductive sheet B in the red frame described in the figure above.

9.8 Front cover L/R

(1) Release the hook of the front cover L, and remove the front cover L from the machine.
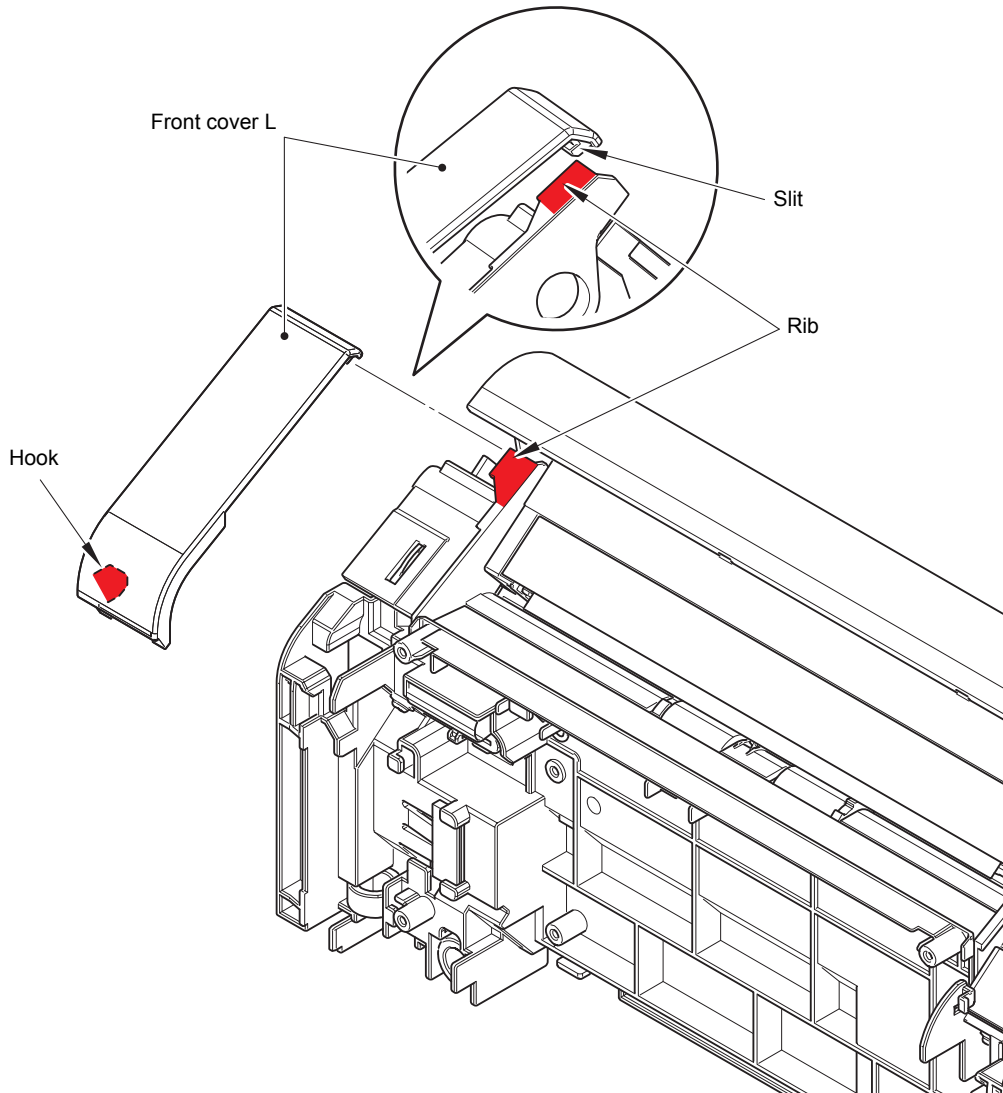
Fig. 3-24

Assembling Note:
- When assembling the front cover L, engage the slit of the front cover L with the rib of the machine.

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(2) Release the hook of the front cover R, and remove the front cover R from the machine.

Slit

Rib

Front cover R

Hook
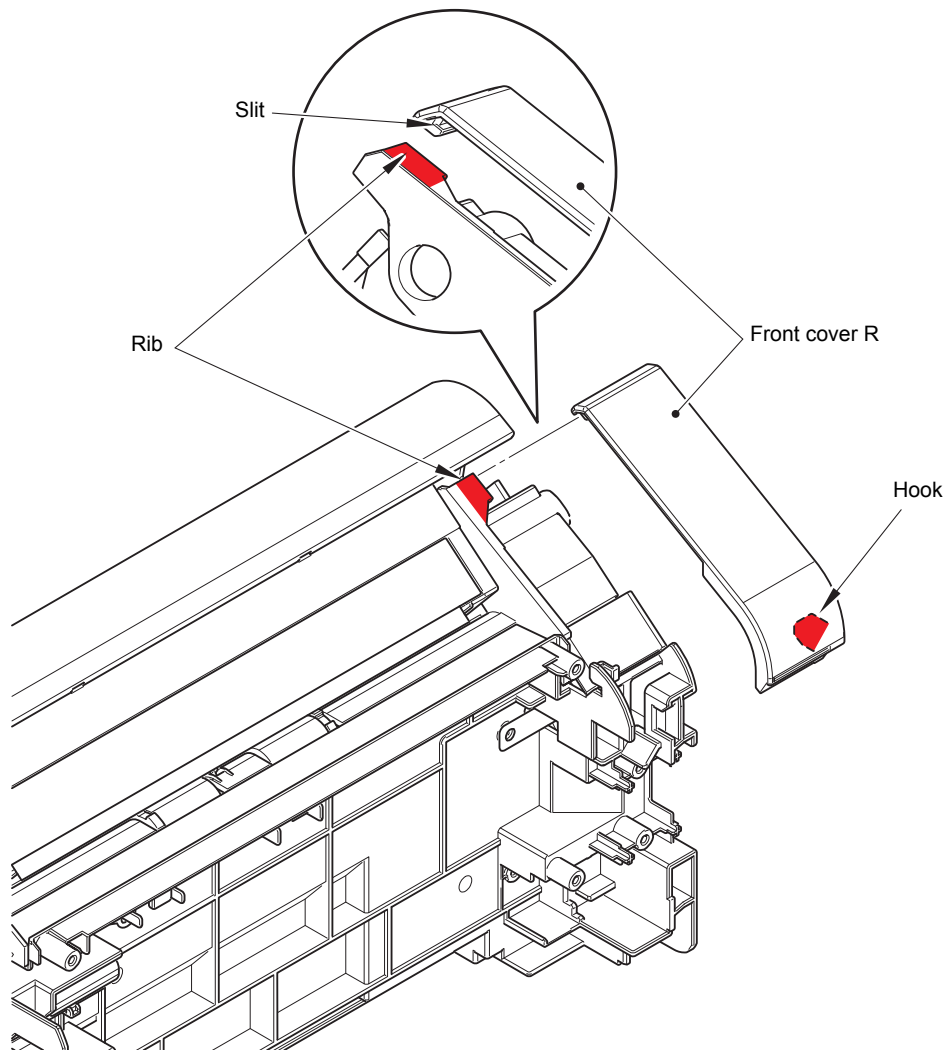
Fig. 3-25

Assembling Note:

• When assembling the front cover R, engage the slit of the front cover R with the rib of the machine.

Confidential

9.9 Front cover ASSY

(1) Release all the panel unit harnesses from the securing fixtures.

(2) Push the release button, and open the front cover ASSY.

(3) Remove the two bosses, and remove the front cover ASSY from the machine.
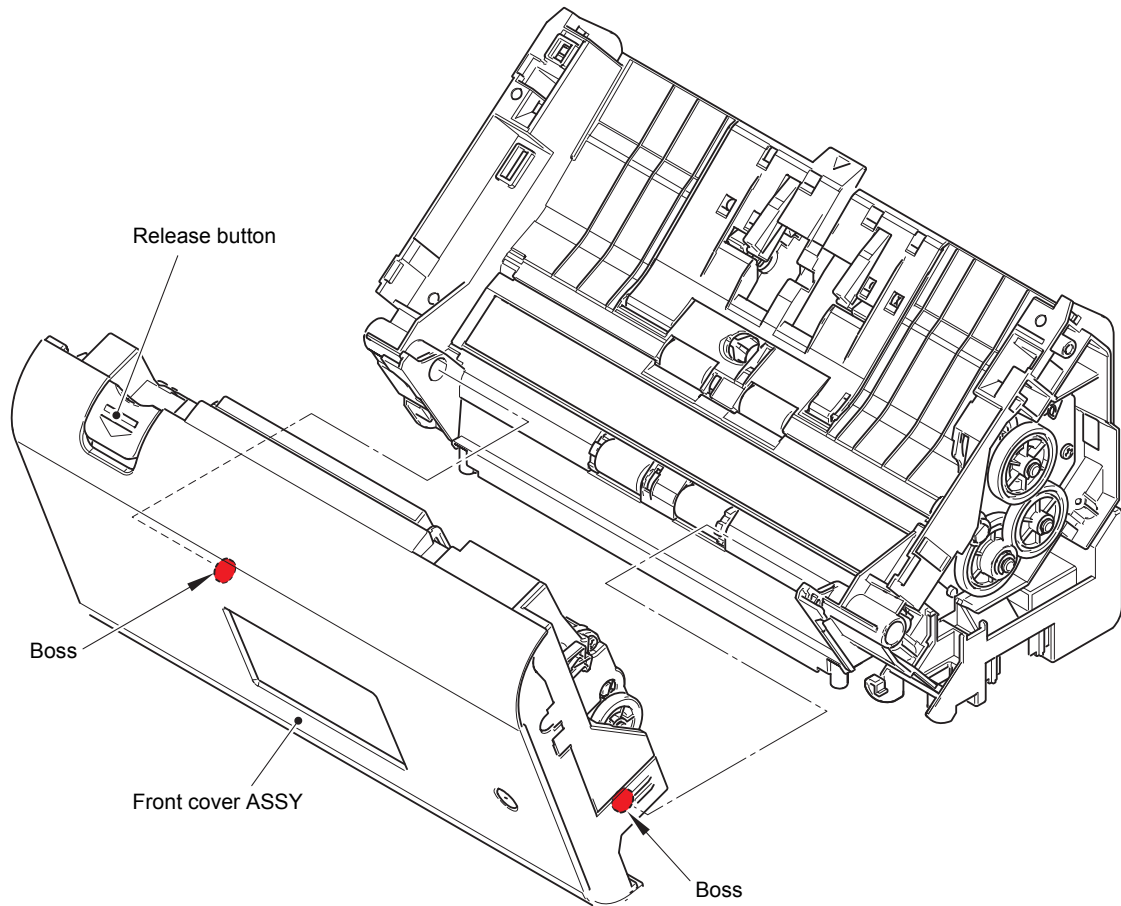
Fig. 3-26

9.10 Panel unit / Panel flat cable / Panel PCB / LCD / Touch panel unit / NFC PCB ASSY

(1) Remove the two taptite cup B M2.6x10 (BK) screws.

(2) Release the four tabs to lift the front cover ASSY. Slide the panel unit in the direction of the arrow to release the four hooks, and remove the panel unit from the front cover ASSY.
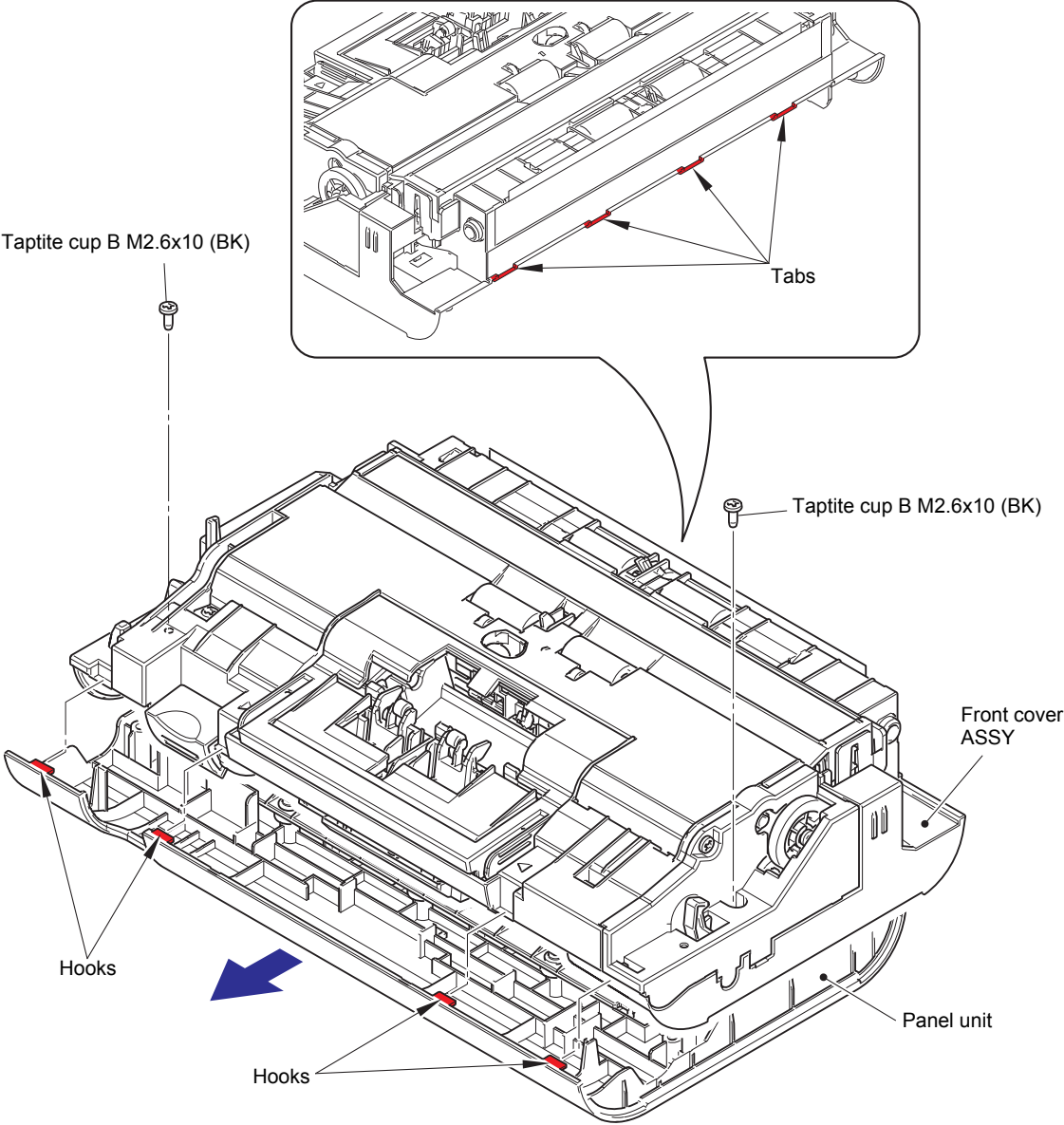
Fig. 3-27

(3) Disconnect the key PCB flat cable from the panel PCB ASSY and release it from the securing fixtures.

(4) Remove the six taptite cup B M3x10 screws. Release the three hooks to remove the LCD presser base from the panel unit.
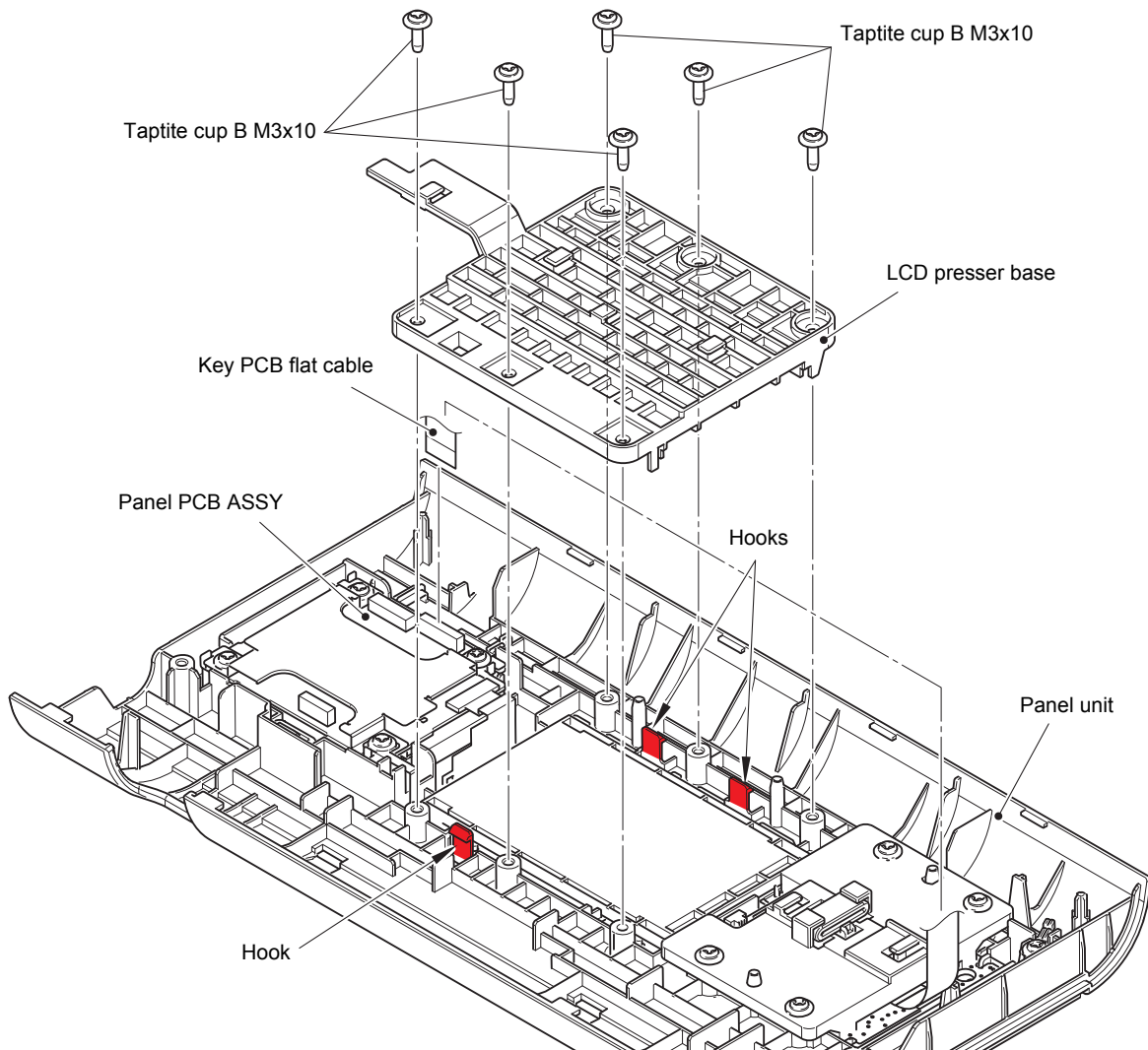
Fig. 3-28

HARNESS ROUTING: Refer to "4. Panel unit".

Assembling Note:

- When connecting the key PCB flat cable, fold it as shown in the figure below.

Fig. 3-29

Confidential
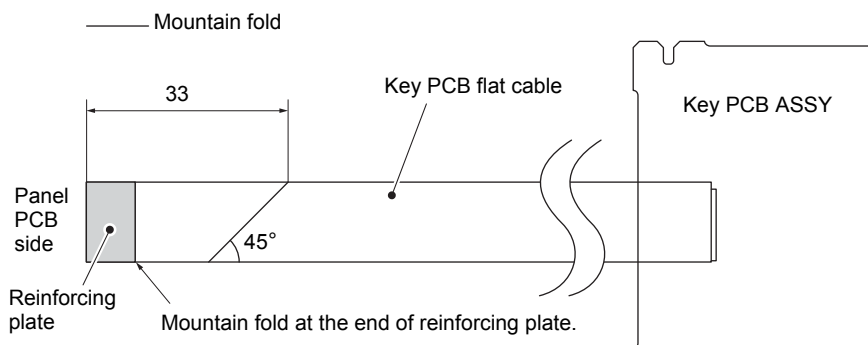
(5) Release the lock, and disconnect the LCD flat cable from the panel PCB ASSY. Remove the LCD.

(6) Disconnect the touch panel flat cable from the key PCB ASSY.

(7) Remove the taptite cup B M3x10 screw to remove the touch panel unit.
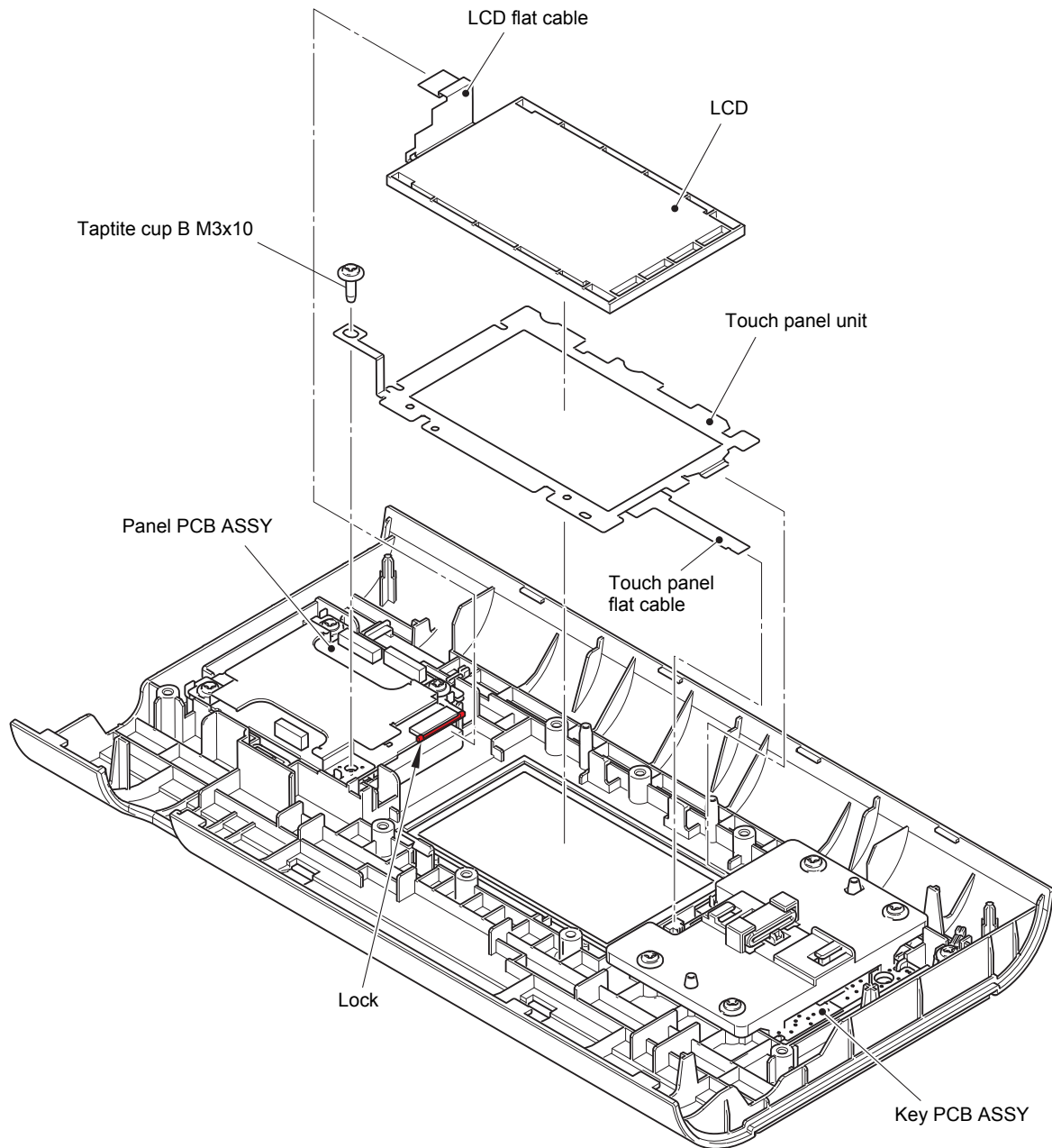
Fig. 3-30

(8) Release the panel flat cable and FG harness (YW) from the securing fixtures and disconnect it from the panel PCB ASSY.

(9) Disconnect the NFC flat cable from the panel PCB ASSY.

(10) Remove the three taptite cup B M3x10 screws, and remove the FG harness (YW) and panel shield plate top from the panel unit.

(11) Remove the panel PCB ASSY and panel insulation sheet / panel shield plate base from the panel unit.
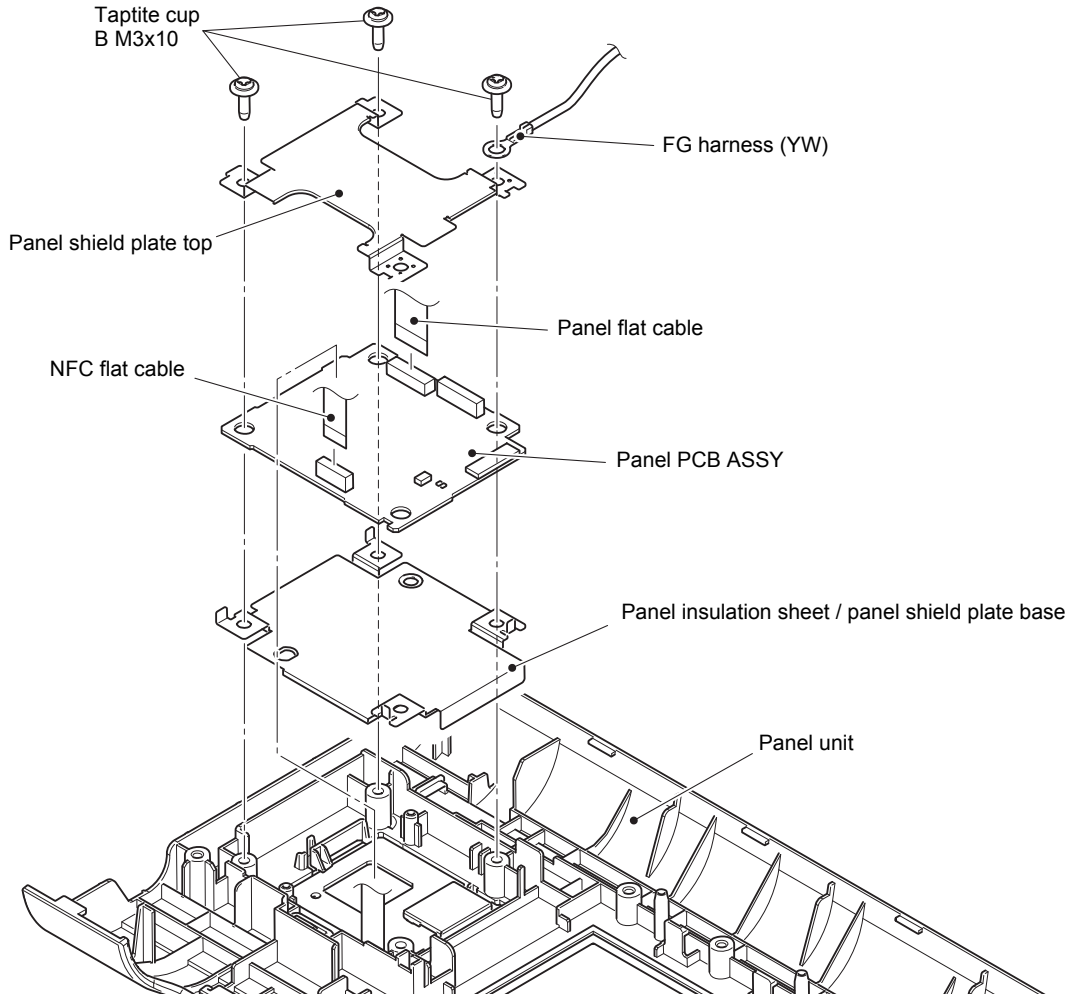
Fig. 3-31

HARNESS ROUTING: Refer to "4. Panel unit".

Assembling Note:
• When connecting the panel flat cable, fold it as shown in the figure below.

Fig. 3-32

Confidential
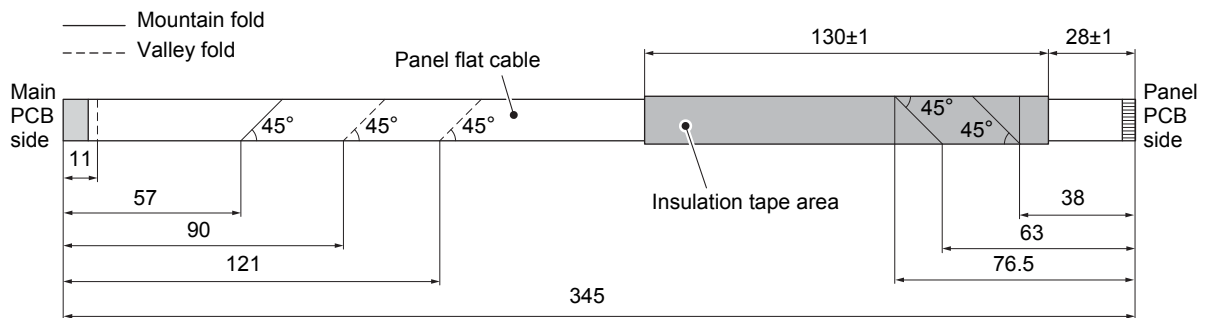
(12) Release the hook to remove the NFC PCB ASSY from the panel unit.

NFC PCB ASSY

NFC flat cable

Hook

Panel unit
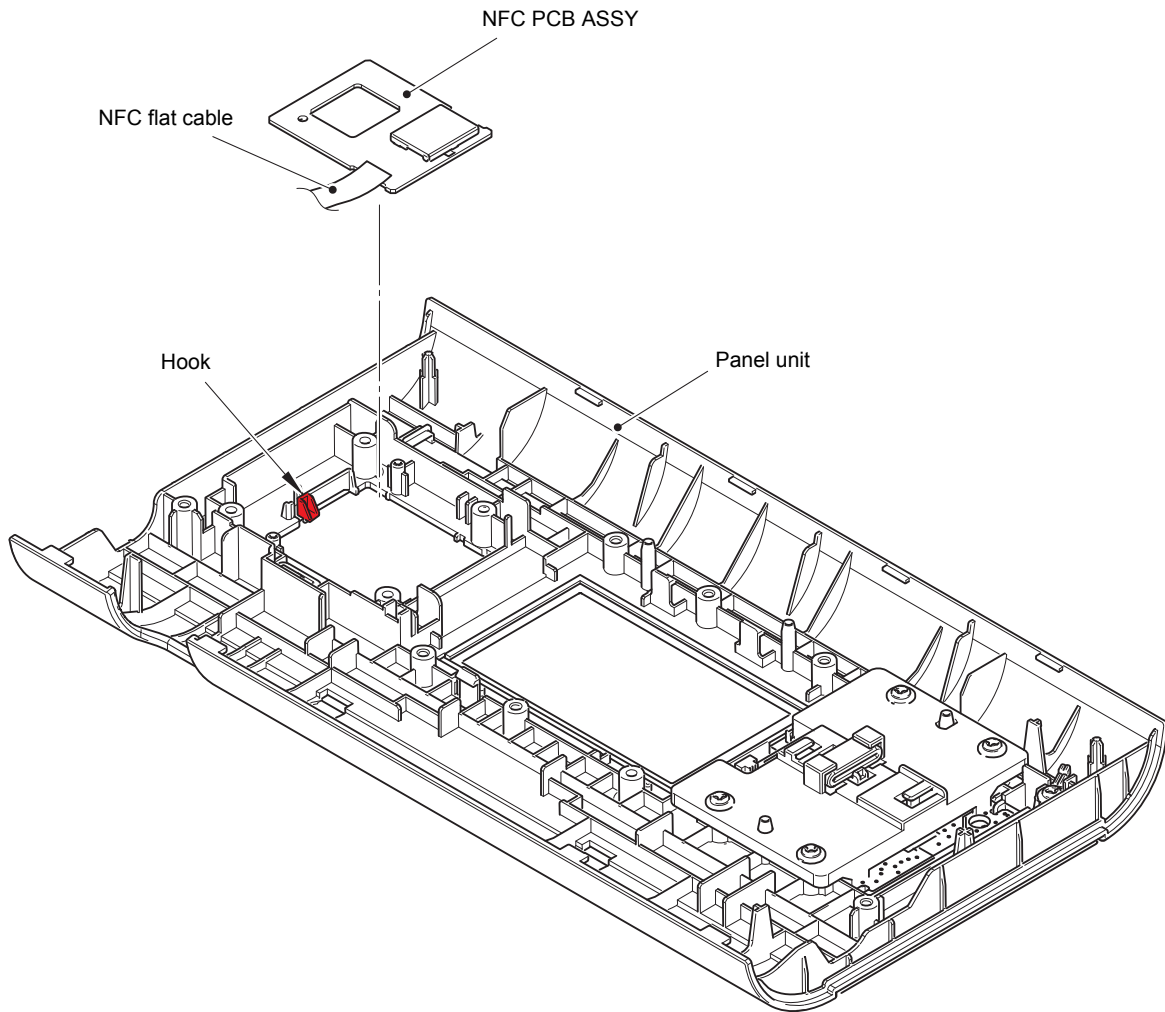
Fig. 3-33

Assembling Note:

• When connecting the NFC flat cable, fold it as shown in the figure below.

NFC PCB

29

2

Mountain fold at the end of reinforcing plate.

Reinforcing plate

Panel PCB side

45°

45°

11

8±2

27

38

___ Mountain fold

----- Valley fold

Fig. 3-34

Confidential
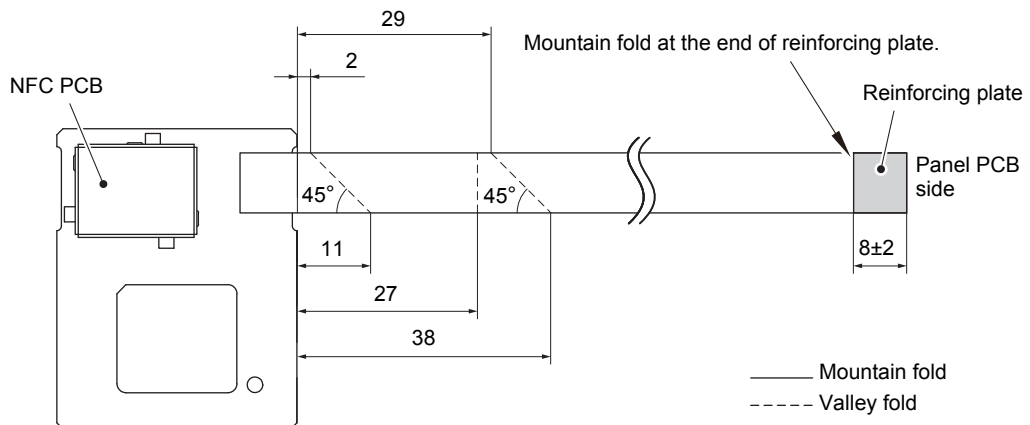
9.11 Second side CIS unit / Second side CIS flat cable / Flat cable support film

(1) Push the two ribs outwards to remove the second side CIS unit from the front cover ASSY. Disconnect the second side CIS flat cable from the second side CIS unit.

(2) Remove the second side CIS spring from the machine.

Second side CIS unit

Second side CIS flat cable

Rib

Second side CIS spring

Rib

Front cover ASSY

Fig. 3-35

Confidential
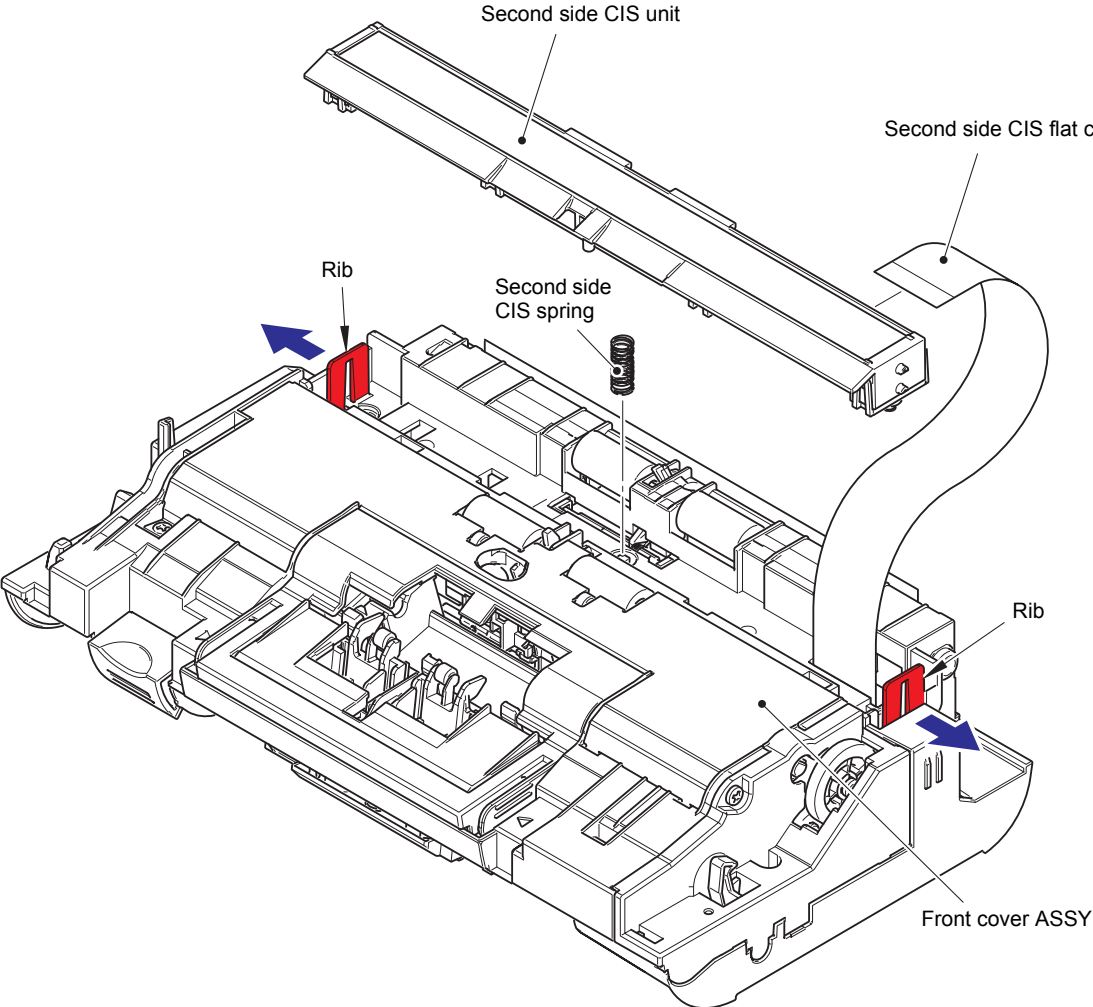
(3) Remove the flat cable support film from the front cover ASSY.

> **Assembling Note:**
> • Flat cable support film should not be reused as its double-sided tape looses the adhesive force once it is removed. Replace it with a new one.

(4) Remove the second side CIS flat cable from the front cover ASSY.
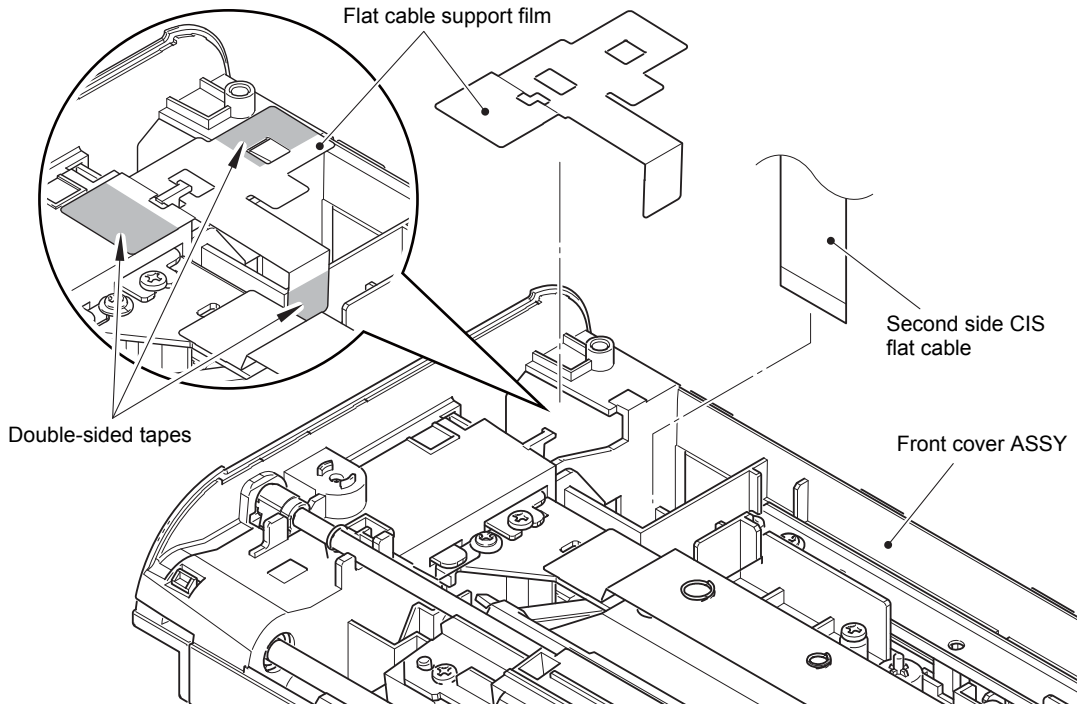
Fig. 3-36

HARNESS ROUTING: Refer to "4. Panel unit".

> **Assembling Note:**
> • When securing the flat cable support film with the double-sided tapes, attach the tape on the position shown in the figure above.
> • When connecting the second side CIS flat cable, fold it as shown in the figure below.
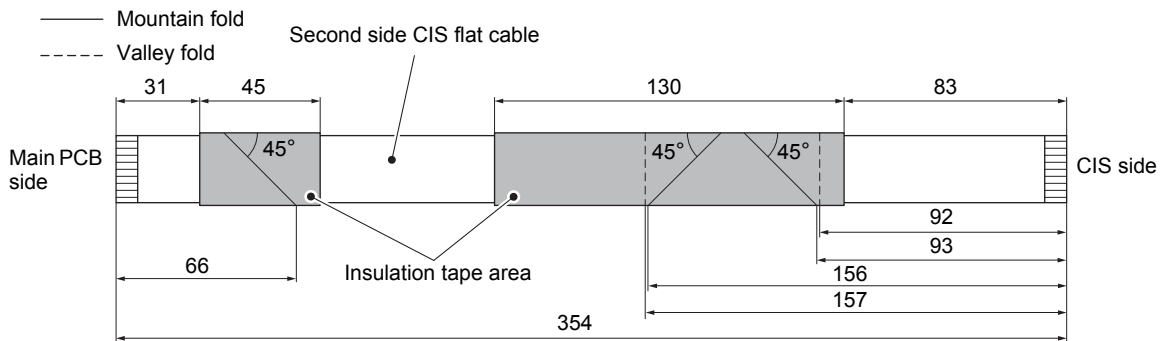
Fig. 3-37

9.12 Eject jam sensor PCB

(1) Release the paper feed / eject jam sensor harness from the securing fixtures. Release the hook to remove the eject jam sensor PCB from the sensor holder C.

(2) Remove the two screw cup M3×6 screws, and remove the FG harness, FG spring A, and FG spring B from the EJ pinch roller support plate.

(3) Remove the two taptite bind B M3x8 screws, and remove the EJ pinch roller support plate, spring C, and two springs D from the front cover ASSY.

(4) Remove the taptite bind B M3x8 screw, and remove the sensor holder C from the front cover ASSY.
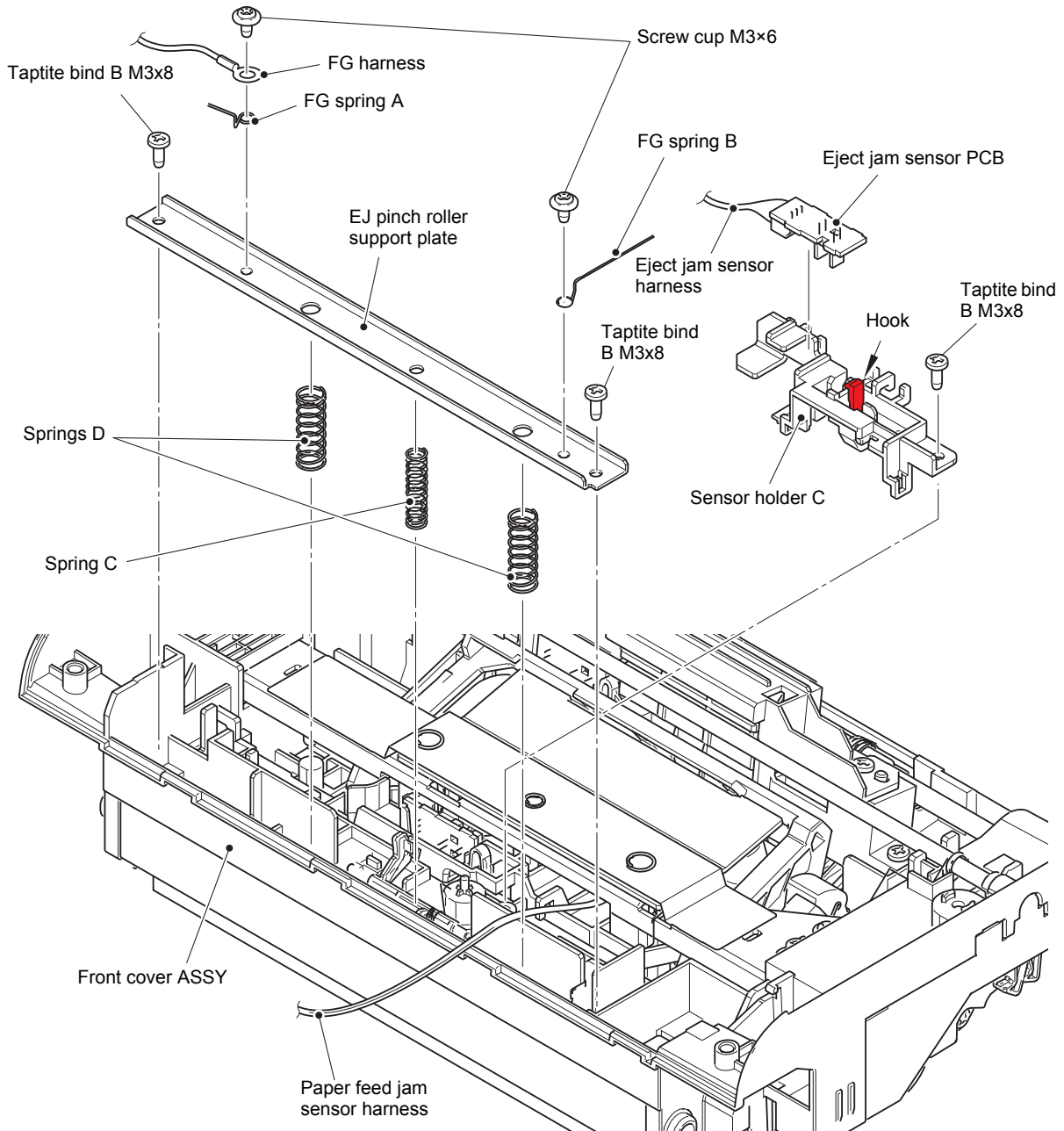
Fig. 3-38

HARNESS ROUTING: Refer to "4. Panel unit".

Confidential

9.13 Document scanning position sensor PCB

(1) Remove the guide film from the front cover ASSY.

> **Assembling Note:**
> • Guide film should not be reused as its double-sided tape looses the adhesive force once it is removed. Replace it with a new one.

(2) Remove the two screw cup M3x6 screws. Remove the FG spring and reverse roller holder support from the front cover ASSY. Remove the two springs.
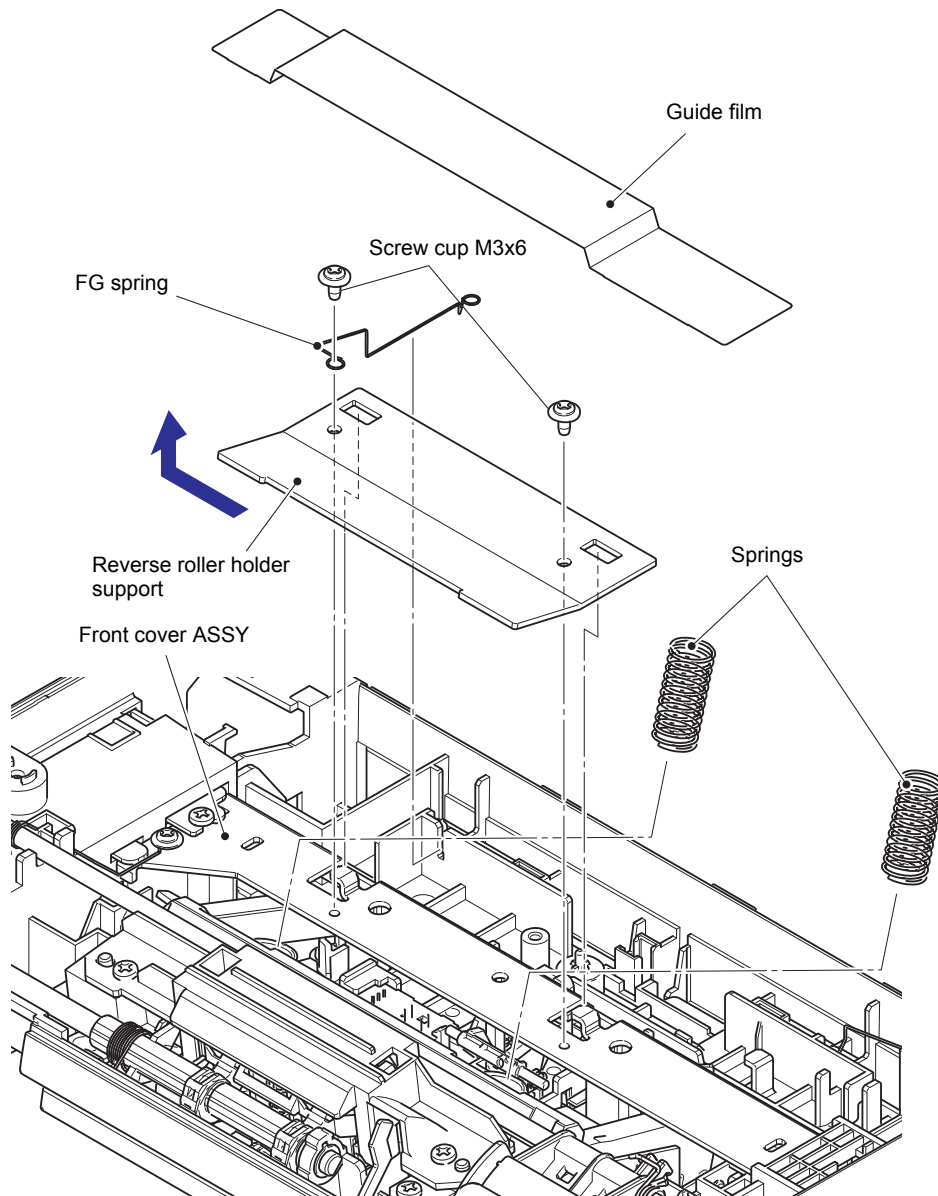
Fig. 3-39

(3) Remove the taptite bind B M3x8 screw and screw cup M3x6 screw. Lift the FG spring. Slide the pinch roller support in the direction of the arrow a to release it from the rib, and remove it from the front cover ASSY in the direction of the arrow b. Remove the spring A and two springs B.

Assembling Note:

- When assembling the pinch roller support, insert the pinch roller support below the rib as shown in the figure below.
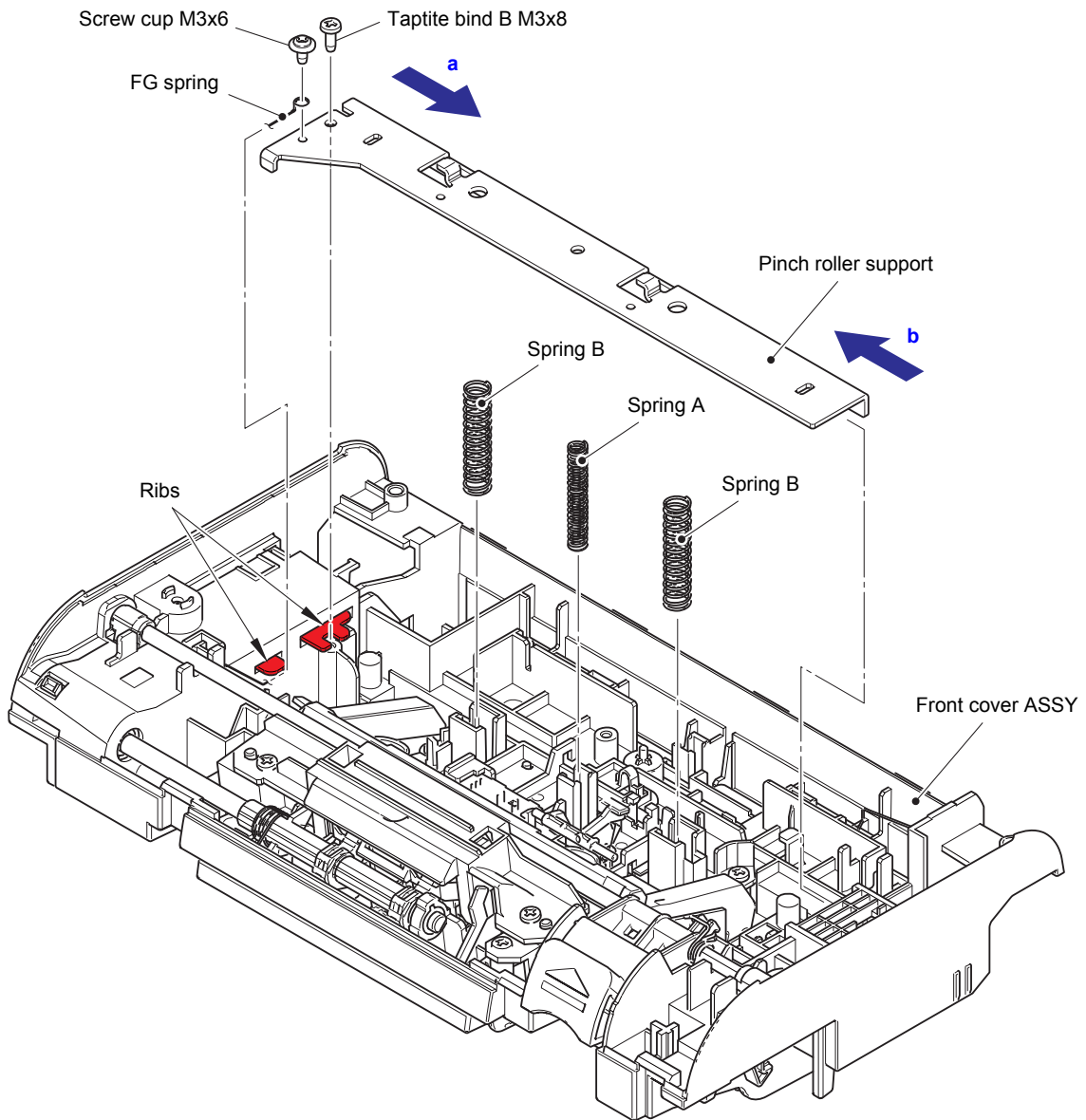
Fig. 3-40

(4) Release the document scanning position sensor harness from the securing fixtures. Release the hook to remove the document scanning position sensor PCB from the front cover ASSY.

(5) Disconnect the document scanning position sensor harness from the document scanning position sensor PCB.

Front cover ASSY

Document scanning position sensor PCB

Document scanning position sensor harness
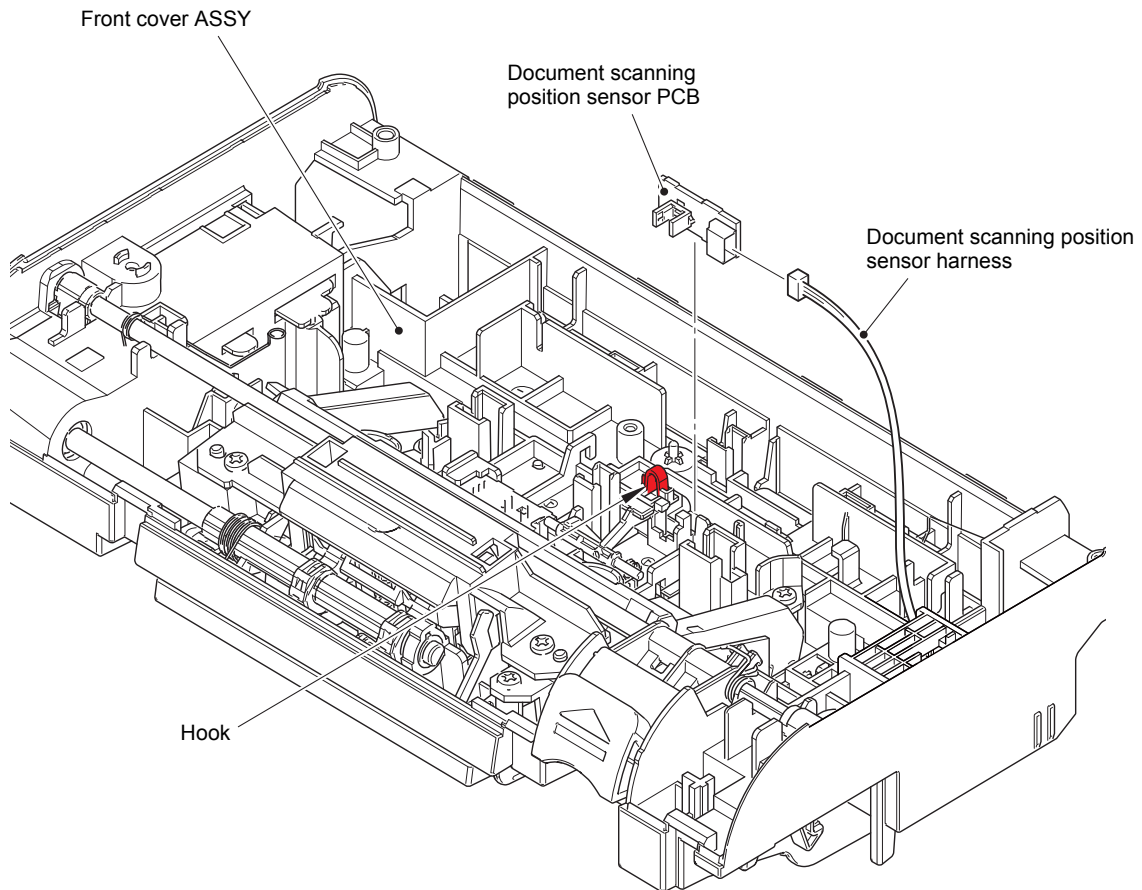
Hook

Fig. 3-41

HARNESS ROUTING: Refer to "4. Panel unit".

9.14 Paper feed jam sensor PCB / Multi feeding sensor PCB ASSY (Sent)

(1) Release the hook to remove the paper feed jam sensor PCB from the document scanning position actuator holder.

Paper feed jam sensor PCB

Hook

Document scanning position actuator holder
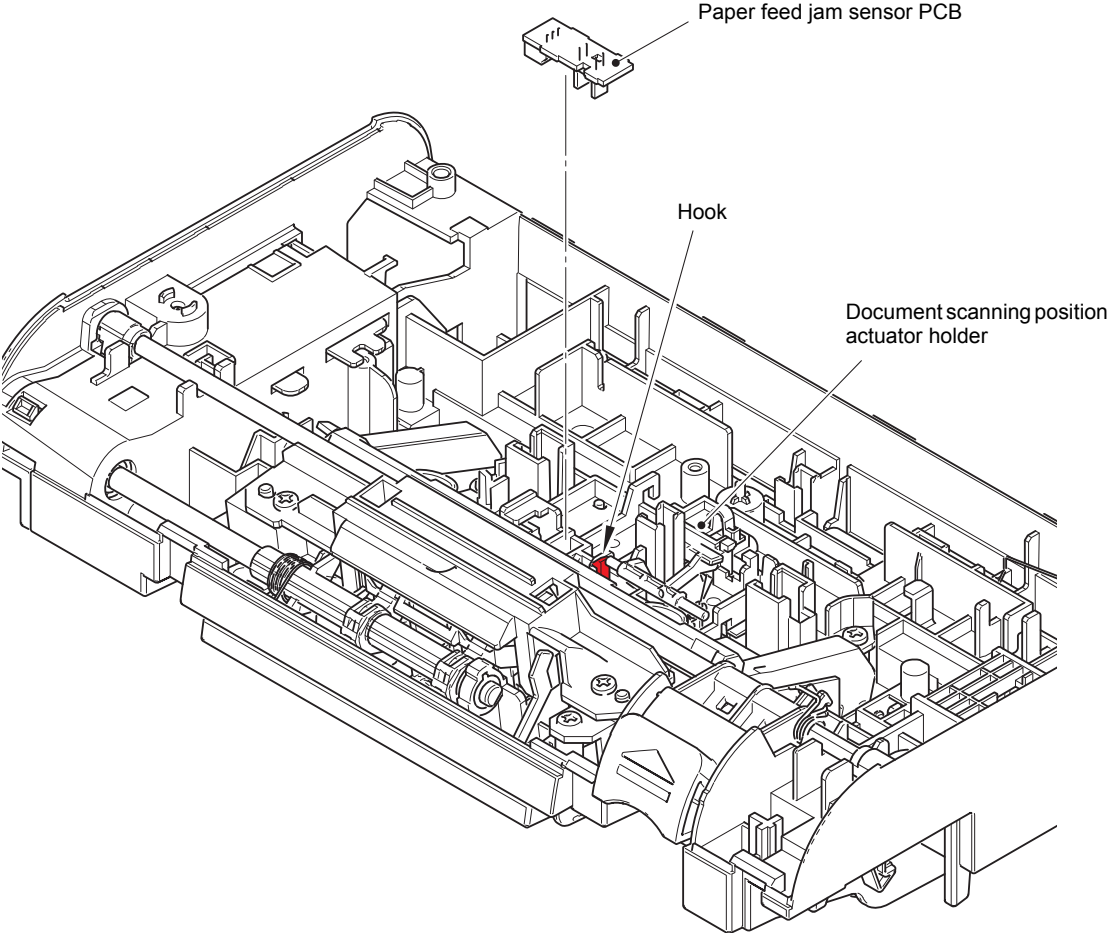
Fig. 3-42

(2) Remove the two taptite bind B M3x8 screws, and remove the document scanning position actuator holder from the front cover ASSY.

(3) Release the multi feeding sensor harness from the securing fixtures, and remove the multi feeding sensor PCB ASSY (Sent) from the front cover ASSY.

Taptite bind B M3x8

Document scanning position actuator holder

Multi feeding sensor PCB ASSY (Sent)

Multi feeding sensor harness
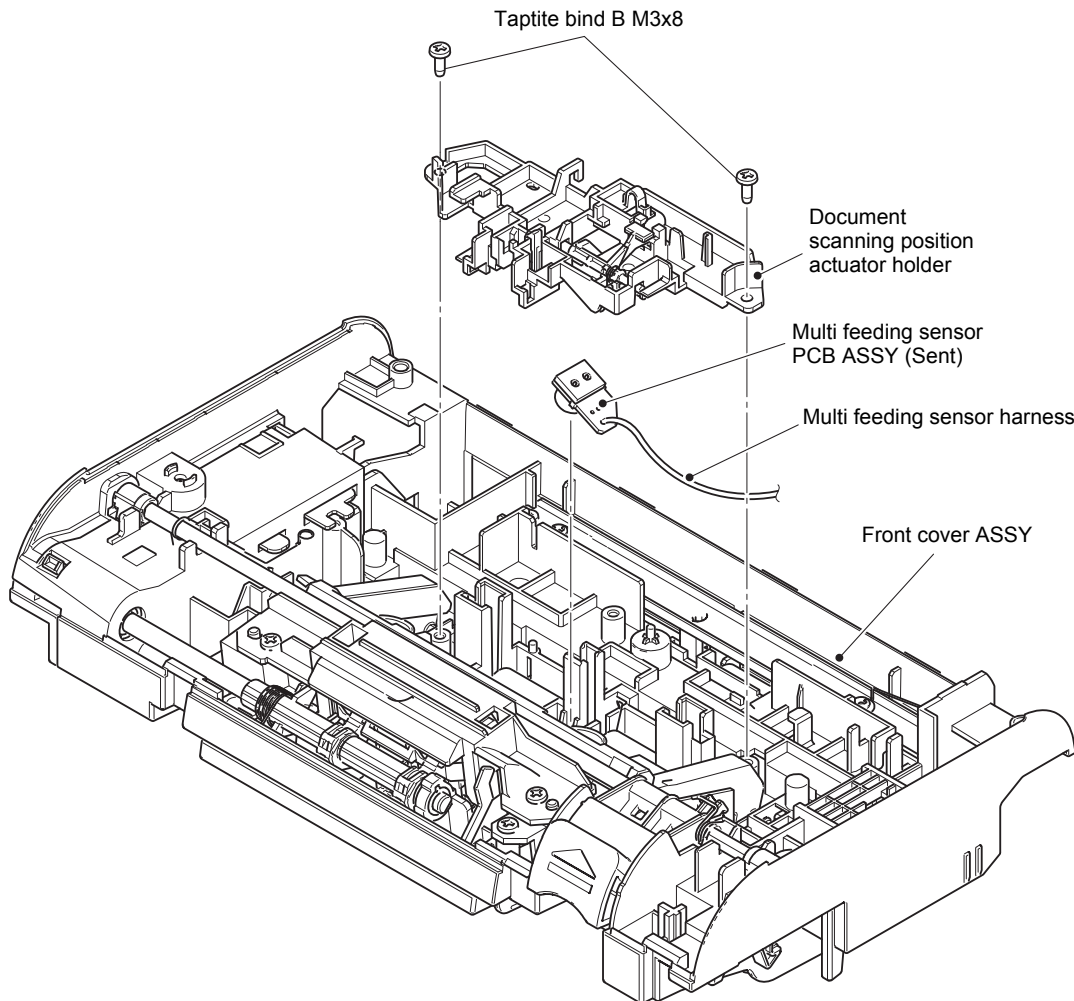
Front cover ASSY

Fig. 3-43

HARNESS ROUTING: Refer to "4. Panel unit".

9.15 Document detection sensor PCB ASSY

(1) Remove the two taptite bind B M3x8 screws, and remove the PF pinch roller holder from the front cover ASSY.

(2) Release the document detection sensor harness from the securing fixtures. Release the hook to remove the document detection sensor PCB ASSY from the front cover ASSY.

Taptite bind B M3x8

PF pinch roller holder

Document detection sensor PCB ASSY

Document detection sensor harness

Front cover ASSY
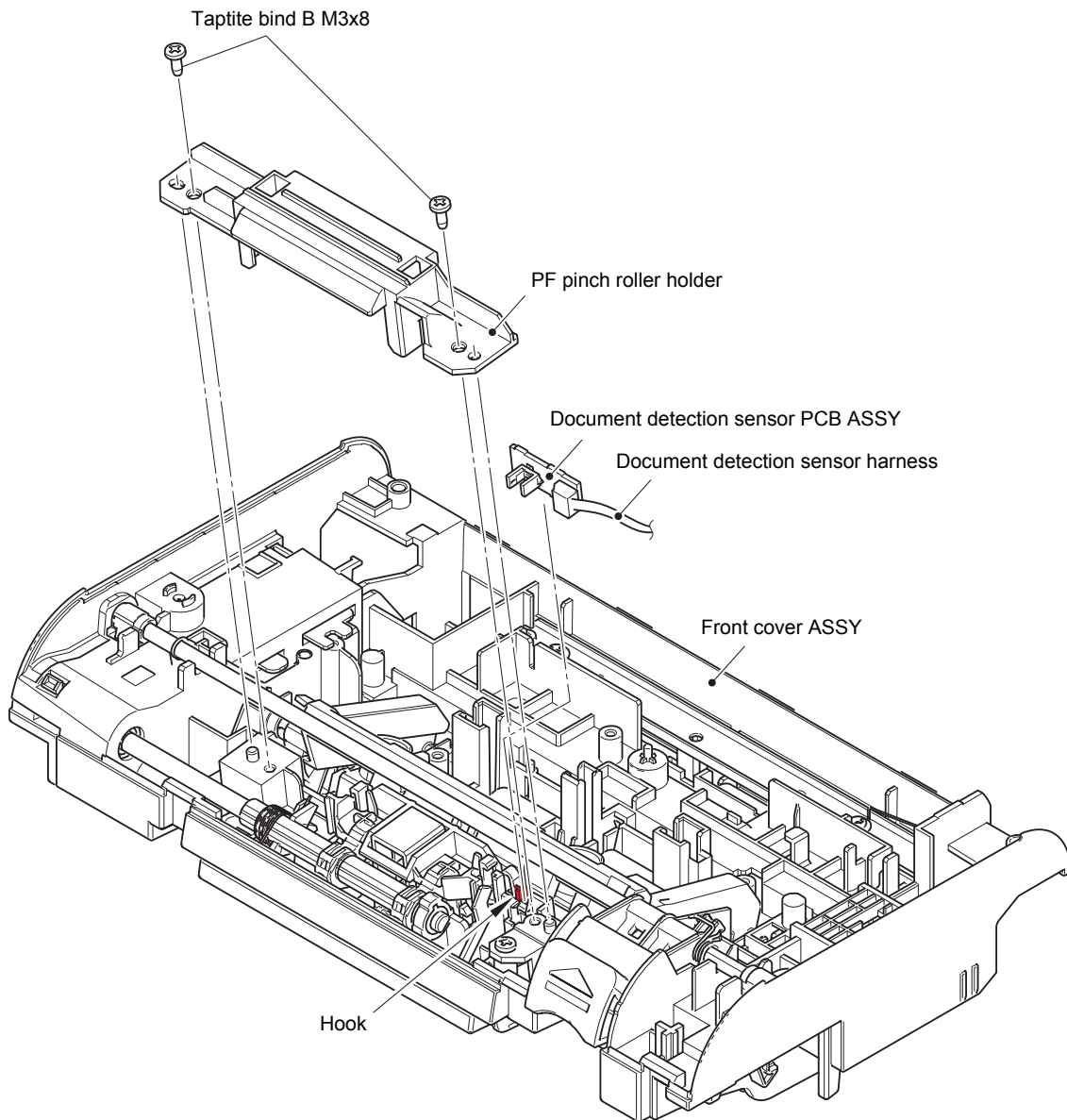
Hook

Fig. 3-44

HARNESS ROUTING: Refer to "4. Panel unit".

9.16 First side CIS unit / First side CIS flat cable

(1) Release the hook to remove the first side CIS unit from the machine.

(2) Disconnect the first side CIS flat cable from the first side CIS unit.

First side CIS unit

Hook

First side CIS flat cable
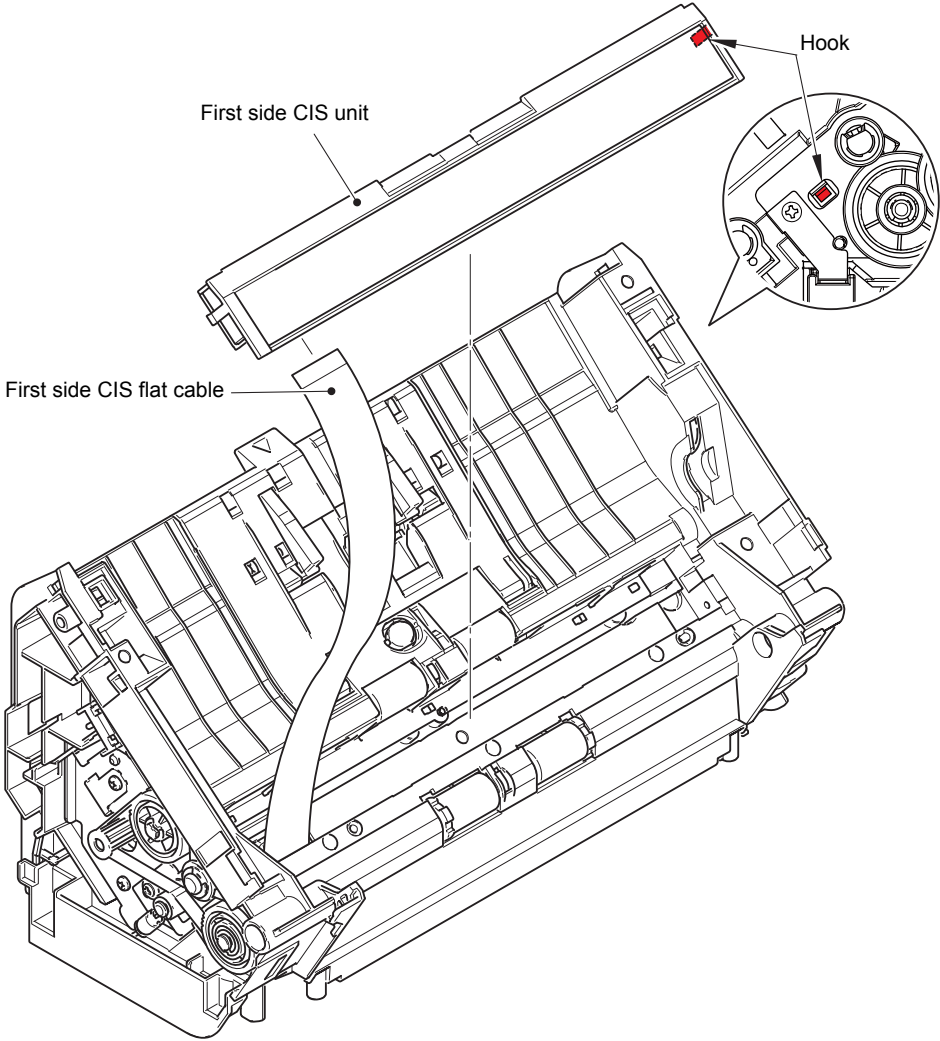
Fig. 3-45

(3) Release the hook to remove the core and first side CIS flat cable from the machine. Remove the core from the first side CIS flat cable.
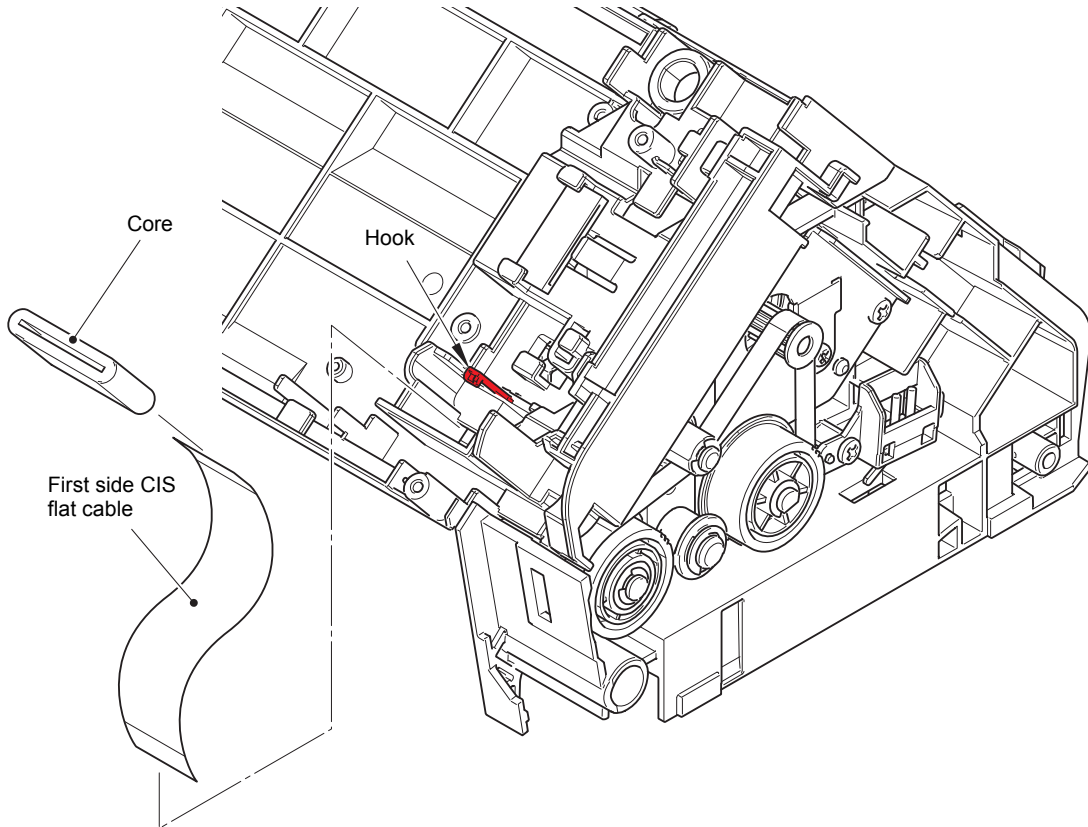
Fig. 3-46

HARNESS ROUTING: Refer to "1. Main PCB ASSY".

Assembling Note:
• When connecting the first side CIS flat cable, fold it as shown in the figure below.
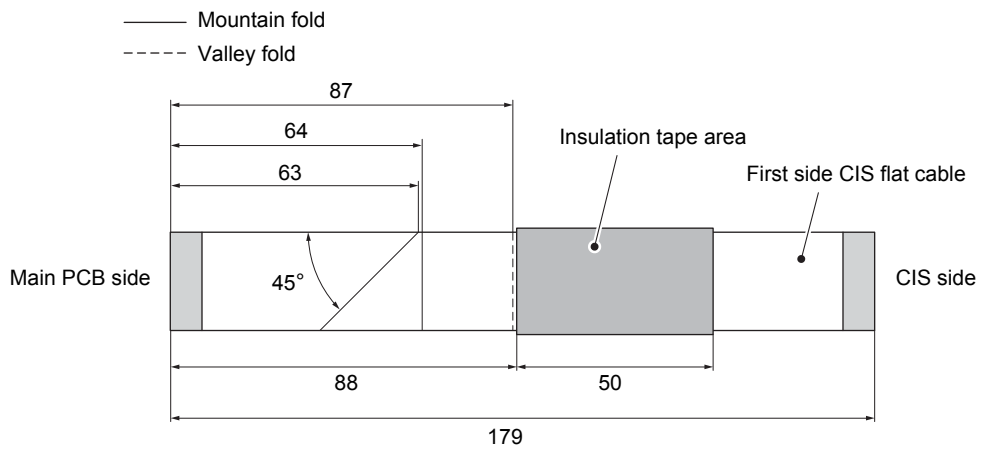
Fig. 3-47

9.17 Front cover sensor

(1) Release the front cover sensor harness from the securing fixtures. Remove the taptite bind B M3x8 screw, and remove the front cover sensor holder from the machine.

(2) Release the two hooks to remove the front cover sensor from the front cover sensor holder.

Front cover sensor harness

Hook   Hook

Front cover sensor

Front cover sensor holder

Taptite bind B M3x8
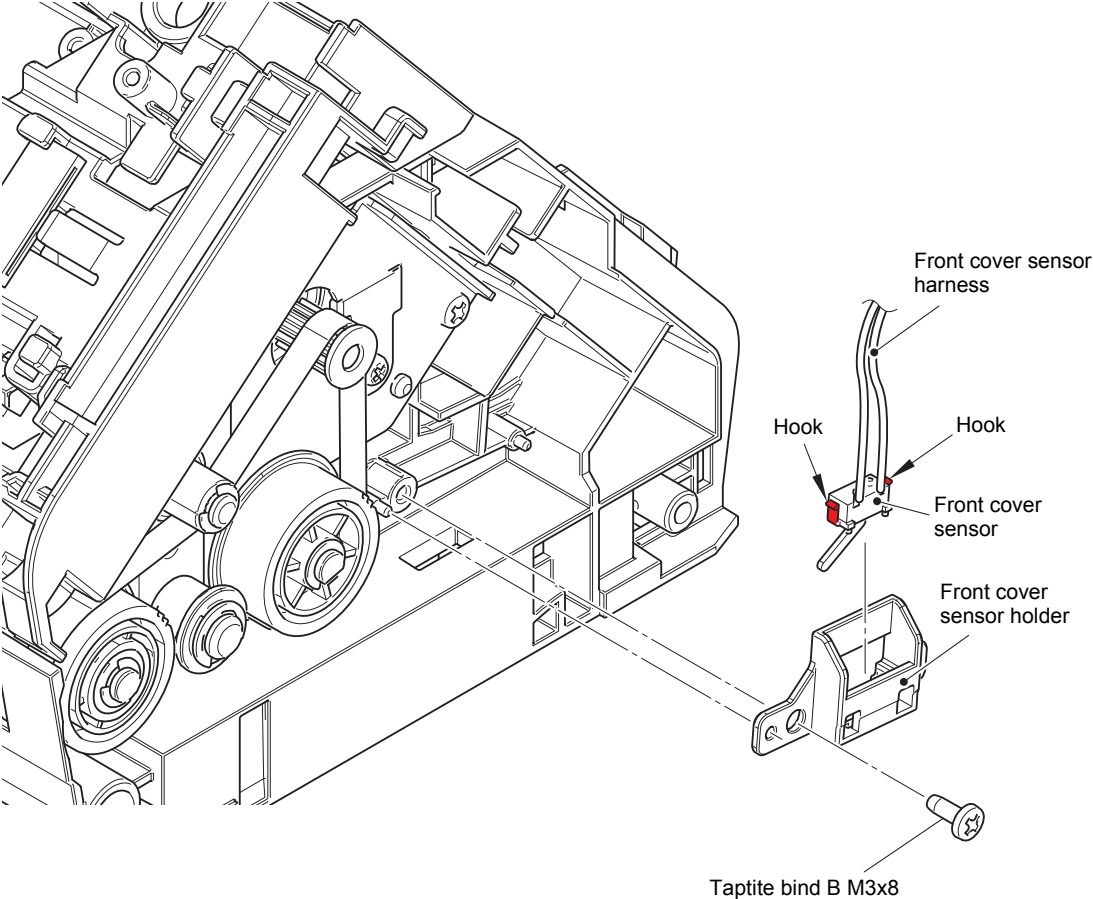
Fig. 3-48

HARNESS ROUTING: Refer to "2. Right side of the machine".

9.18 Feed belt / Feed motor

(1) Release the feed motor harness, paper feed motor harness and multi feeding sensor harness from the securing fixtures of the lower frame.

(2) Remove the four taptite cup B M3x10 screws, and remove the lower frame from the machine. Pull out the multi feeding sensor harness from the hole of the lower frame.
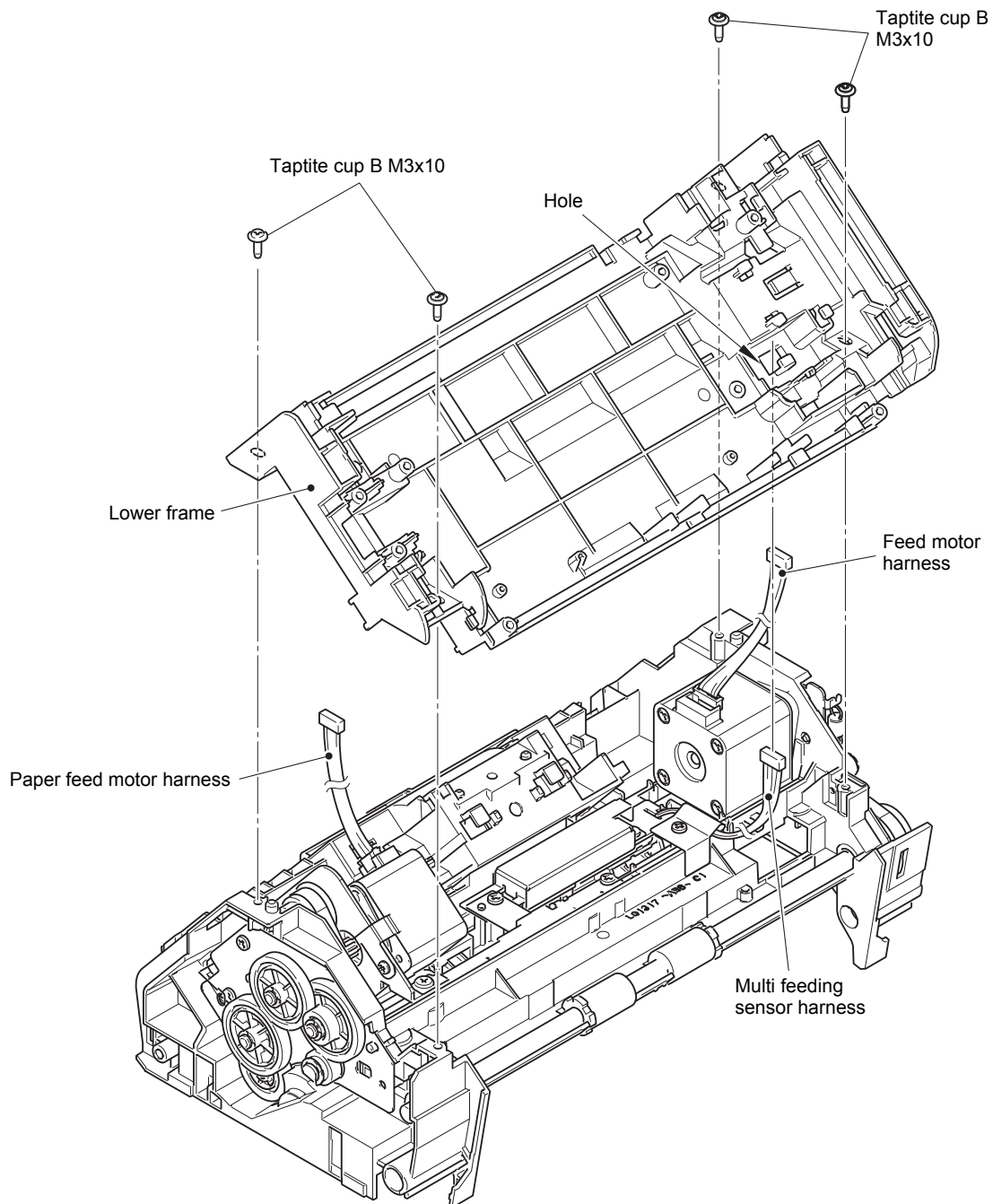
Fig. 3-49

HARNESS ROUTING: Refer to "2. Right side of the machine" and "3. Rear side of the machine".

(3) Loosen the screw cup M3x6 screw to eliminate the tension on the tension pulley.

(4) Remove the feed belt.

(5) Remove the two screw bind M3x6 screws, and remove the feed motor from the machine.
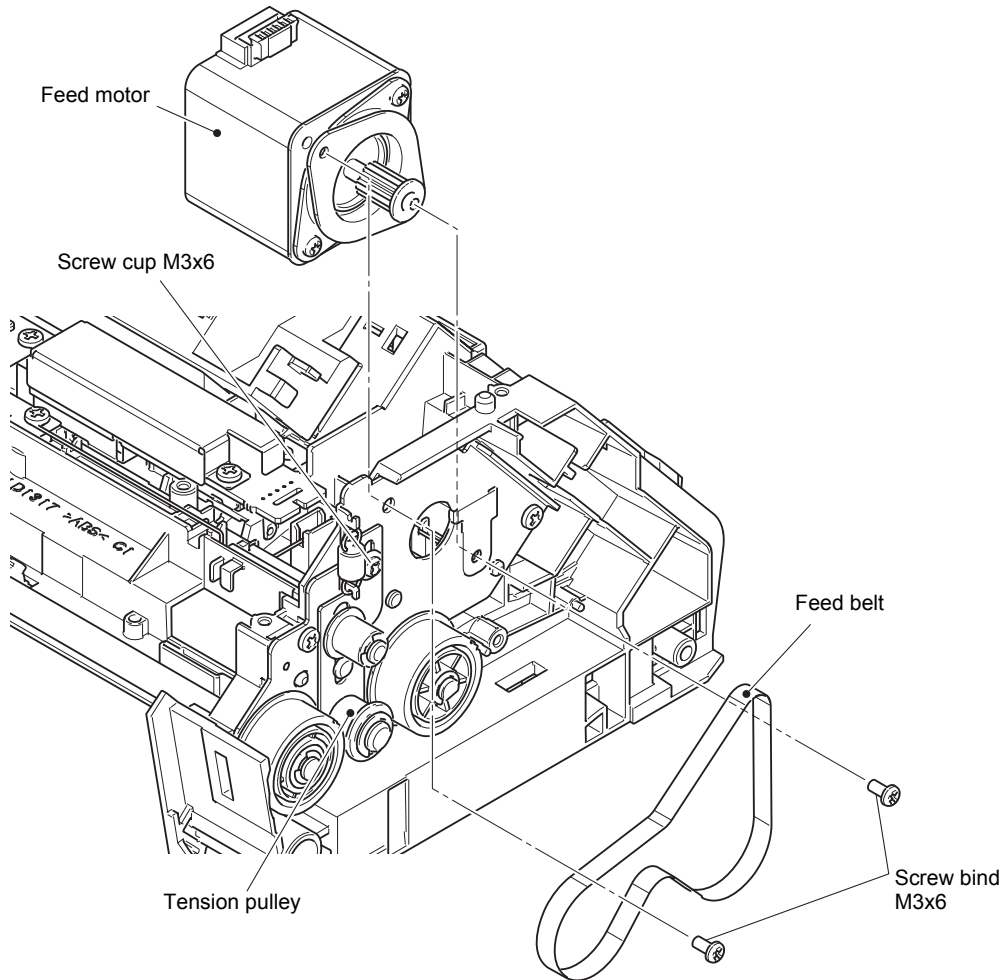
Fig. 3-50

Assembling Note:

• Hook the feed belt on each gear as shown in the figure below.
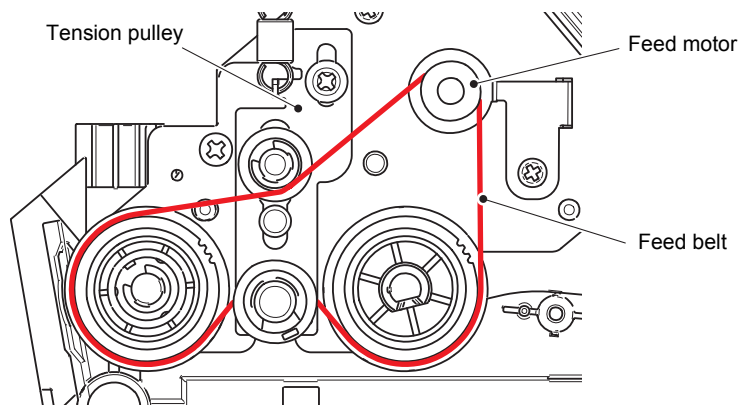
Fig. 3-51

9.19 Paper feed belt / Paper feed motor

(1) Release the paper feed motor harness from the securing fixtures.

(2) Remove the three taptite bind B M4x10 screws. Lift the plate and FG spring, then remove the paper feed motor unit from the machine.
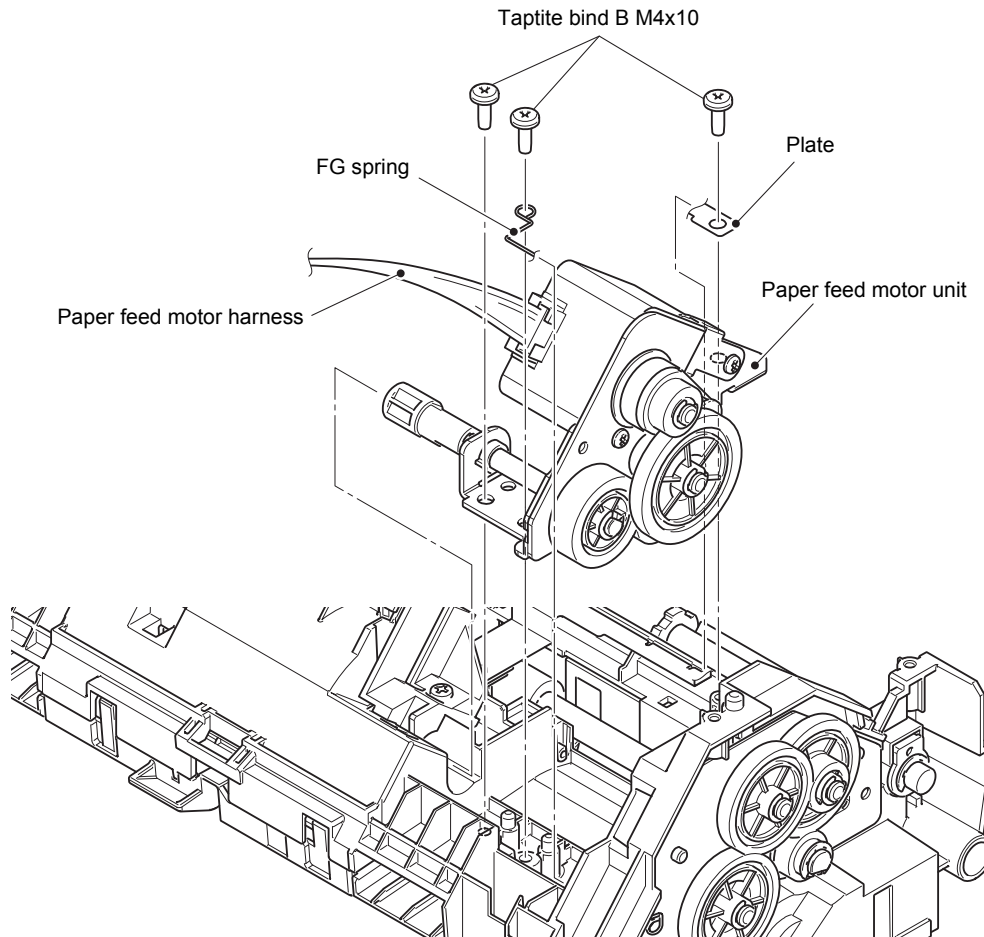
Fig. 3-52

HARNESS ROUTING: Refer to "2. Right side of the machine" and "3. Rear side of the machine".

(3) Remove the retaining ring E, and remove the gear.

(4) Remove the paper feed belt from the paper feed motor unit.

(5) Remove the two screw bind M3x6 screws, and remove the paper feed motor from the paper feed motor unit.

Fig. 3-53

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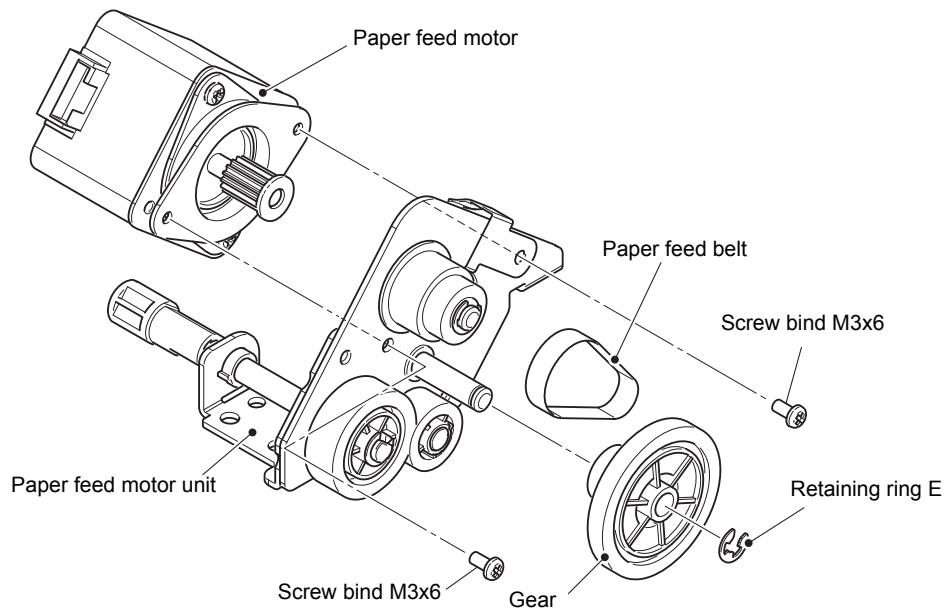
9.20 Multi feeding sensor PCB ASSY (Receive)

(1) Remove the taptite bind B M3x8 screw, and remove the multi feeding sensor harness guide from the machine.

(2) Open the multi feeding sensor harness guide, and remove it from the multi feeding sensor harness.
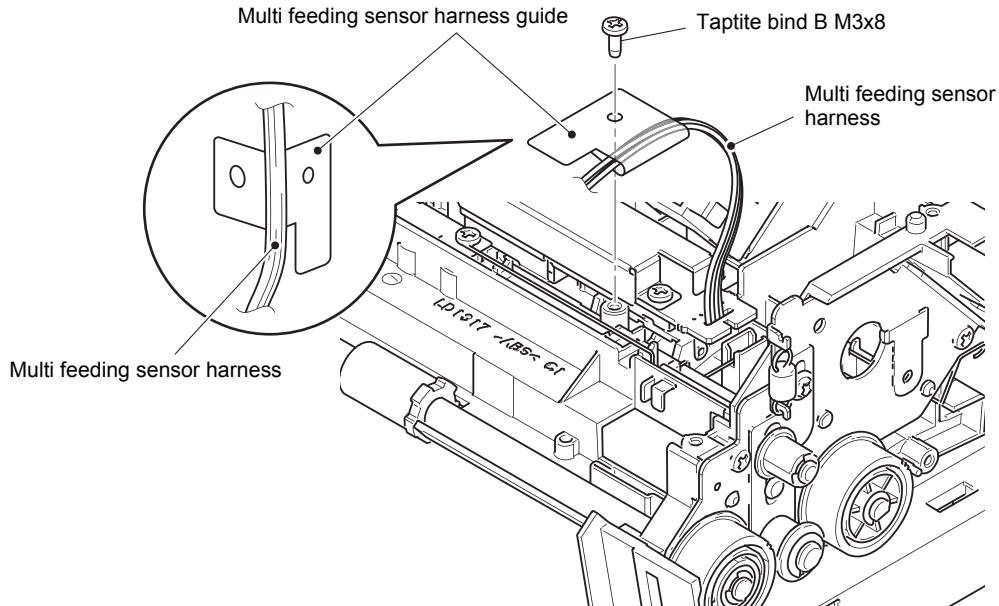
Fig. 3-54

HARNESS ROUTING: Refer to "3. Rear side of the machine".

(3) Remove the two taptite bind B M3x8 screws. Lift the plate, then remove the multi feeding sensor shield plate and multi feeding sensor PCB ASSY (Receive) from the machine.
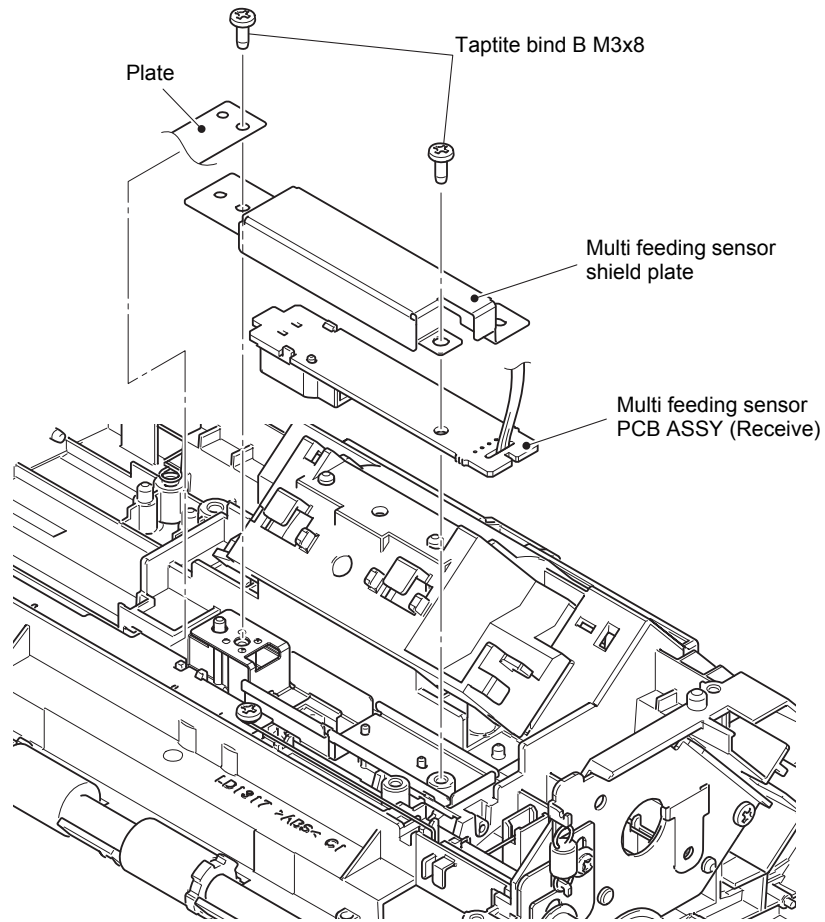
Fig. 3-55

CHAPTER 4   ADJUSTING AND UPDATING SETTINGS AS REQUIRED AFTER PARTS REPLACEMENT

1.   IF YOU REPLACE THE MAIN PCB ASSY

\<What to do after replacement\>

- Installing firmware (Sub3 Firm / Main Firm)
- Adjust touch panel
- Setting by country
- Initializing the EEPROM of the main PCB ASSY
- Setting serial number
- Setting multi feeding sensor threshold
- Check sensor operation
- Check multi feeding operation
- Checking operation after repair
- Resetting to factory shipping state

■ What you need to prepare

(1) One USB cable

(2) Create a temporary folder on the C drive of the computer (Windows® XP or higher).

(3) Service setting tool (BrUsbSn.zip)
Copy this file into the temporary folder created on the C drive.

(4) Download utility (Filedg32.exe)
Copy this file into the temporary folder created on the C drive.

(5) Maintenance driver (MaintenanceDriver.zip)
When the maintenance driver is not installed on the computer, copy this file into the temporary folder created on the C drive, and extract the copied file. Refer to "APPENDIX 3 INSTALLING THE MAINTENANCE PRINTER DRIVER" to install.

(6) Firmware

Main firmware: (E.g.) LZ5567_$.djf	LZ5567 : First six digits of the part number of the firmware $: Alphabetic character representing the revision version of the firmware
Sub3 firmware: (E.g.) LZ5613_□□□□.djf	LZ5613 : First six digits of the part number of the firmware □□□□ : Firmware release year and month (YYMM)

(7) Sheet for multi feeding sensor threshold setting (LD6340001)

(8) Multi feeding sensor threshold setting tool (brADSmt1.exe)
Copy this file into the temporary folder created on the C drive.

(9) USB flash memory

(10) Calibration sheet (LD1914001)

(11) Touch panel stylus

(12) Memory access tool (MemoryAccessTool.exe)

(13) Shipping tool (ShippingTool.exe)

(14) Scan limit sample

(15) Test chart DS-001 (LD1625001)

1.1 Installing Firmware (Sub3 Firm / Main Firm)

1.1.1 Checking firmware version

Check whether the firmware installed on the machine is the latest version. If it is the latest version, there is no need to install the firmware.
If it is not, be sure to install the firmware to the machine as described in "1.1.2 Installing firmware".

<How to check firmware version>

(1) Press and hold the [home] key for approximately five seconds while the machine is in the ready state.

(2) Press the blank field at the bottom.

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order to enter the maintenance mode.

(4) Press the [2] and [5] keys in this order.
The main firmware version information is displayed on the LCD.
Check the main firmware version.

(5) Press the [Start] key a few times to display "M**********:****".
The first "M" is fixed, the second and third digits indicate the year, fourth and fifth digits indicate the month. Compare the year and month with the latest firmware.

Ex: M1611271602:BD40

           └── 11: November
        └──── 16: 2016

1.1.2 Installing firmware

Firmware installation using USB flash memory

(1) Create and save a file for automatic firmware update (file name: "_@UPDOP0.8080") under the USB flash memory.

(2) Create the "FIRM" folder under the USB flash memory, and save the program file needed for firmware install (ex: LZ5567_$.djf) in the "FIRM" folder.

(3) Connect the USB flash memory to the USB flash memory port at the side of the machine while the machine is in the ready state. "Update OK?" is displayed on the LCD.

(4) Click the [OK] button. "Program Updating" appears on the LCD and the installation starts.

(5) When installing is completed, "Update Completed" is displayed on the LCD. Disconnect the USB flash memory and plug off then on again to restart. If multiple program files are saved in the USB flash memory, other installations start automatically after the restart. If the installation fails, "Update Fail:****" appears on the LCD. ("****" indicates the error code.) Refer to the remedy and eliminate the error. Then reboot the machine and start from the procedure (1).

Error display	Description	Remedy
Update Fail:0001	Memory full (Failed to secure the work area for update.)	Delete some data saved in the machine and install again.
Update Fail:0002	No folder is specified	Save the firmware in the root folder (just below the USB flash memory).
Update Fail:0003	Specified folder does not have a file	
Update Fail:0004	File access failure	Change the USB flash memory and install again.
Update Fail:0005	File data pursing error	Acquire the firmware from the data bank again.
Update Fail:0006	File name has exceeded the character limit	Shorten the file name to be less than 119 Byte.
Update Fail:0007	Unsupported DJF file detected	Acquire the firmware from the data bank again.

Firmware installation using PC

(1) Press and hold the [🏠] key. The following screen appears on the LCD.

```
1.Serial No

                      000G01-234567890
2.ROM Version

                      U1508091234:5678
3.Scan Page


```

Confidential

(2) Press the 4th blank box. The following screen appears on the LCD.

1	2	3	4	Stop	Start
5	6	7	8	∗	
《	9	0	SET	#	》

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The following display appears on the LCD, and the machine enters into maintenance mode.

■■MAINTENANCE■■■

1	2	3	4	Stop	Start
5	6	7	8	∗	
《	9	0	SET	#	》
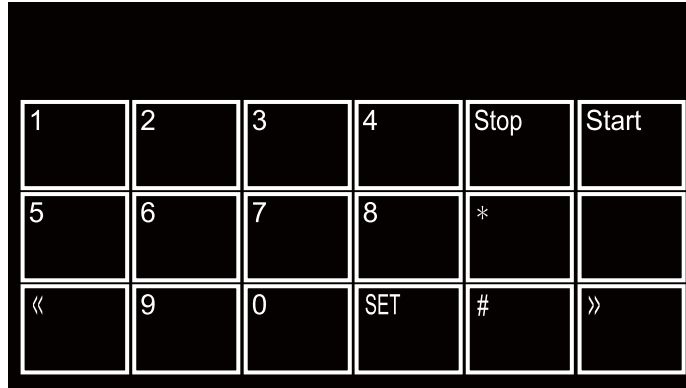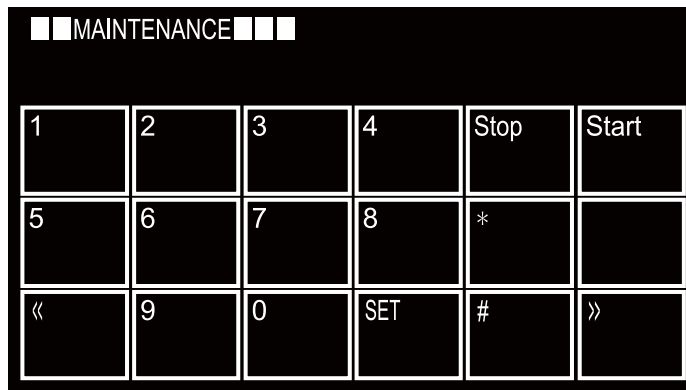
(4) Turn ON the power switch of the computer.

(5) Connect the machine to your computer using the USB cable.

(6) Open the temporary folder and double-click "Filedg32.exe" to start it, then select the "Brother Maintenance USB Printer".

(7) Drag and drop the Sub3 firmware (LZ5613_$.djf) in the same folder onto the "Brother Maintenance USB Printer" icon. The firmware file is loaded to the machine, and installing to the flash ROM starts.

(8) Back light of the LCD flashes randomly during the installation. When installing is completed, the machine restarts and returns to the ready state automatically. Do not disconnect the USB cable or turn OFF the power switch of the computer until installing is completed.

(9) Disconnect the USB cable, and unplug the AC power cord of the machine.

(10) Repeat the procedure (1) to (3).

(11) Connect the machine to your computer using the USB cable.

(12) Open the temporary folder and double-click "Filedg32.exe" to start it, then select the "Brother Maintenance USB Printer".

(13) Drag and drop the main firmware (LZ5567_$.djf) in the same folder onto the "Brother Maintenance USB Printer" icon. The firmware file is loaded to the machine, and installing to the flash ROM starts.

(14) Back light of the LCD flashes randomly during the installation. When installing is completed, the machine restarts and returns to the ready state automatically. Do not disconnect the USB cable or turn OFF the power switch of the computer until installing is completed.

(15) Unplug the AC power cord of the machine, and disconnect the USB cable.

1.2　Adjust Touch Panel

(1) Press the [6], and then the [1] key in the initial state of maintenance mode. The adjustment screen shown below appears on the LCD.
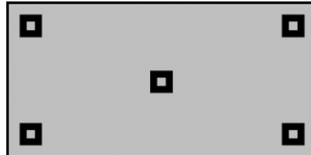
(2) Use a touch panel stylus and touch the mark at the upper left corner of the screen. The mark disappears when touched, then touch the mark at the lower left. Similarly touch the mark at the lower right, upper right, and center.

(3) When the center (5th mark) is touched, "OK" is displayed if the specified area was adjusted correctly. Then, the machine returns to the initial state of maintenance mode.

Note:

• Do not use any tools other than a touch panel stylus. In particular, never use a pointed tool (e.g. screwdriver). Using such a tool will damage the touch panel.

• Do not touch the touch panel with your fingers. The contact area of a finger is too large to adjust the touch panel precisely.

1.3　Setting by Country

(1) Check the country code to set in the country code table on page .

(2) Press the [7], and then the [4] key in the maintenance mode. The country code is displayed on the LCD.

(3) Enter the country code checked in (1).

(4) Press the [Start] key. The country code is set, and the machine returns to the initial state of maintenance mode.

1.4　Initializing the EEPROM of the Main PCB ASSY

(1) Press the [0], and then the [1] key in the initial state of maintenance mode. "PARAMETER INIT" is displayed on the LCD, and the EEPROM is initialized. The machine returns to the initial state of maintenance mode.

1.5 Setting Serial Number

The following procedures are not necessary if the serial number is set by referring to "1.3.15 Display machine log information (function code: 80)" in Chapter 5.

(1) Connect the machine to your computer using the USB cable in the initial state of maintenance mode.

(2) Extract the "brusbsn.zip" file that was copied into the temporary folder, and double-click "brusbsn.exe" to start it.
The screen shown on the right appears.

(3) Enter the model name in the BrUsbSn field "A" circled in red, and click the [Find a product] button. Check that the model name is displayed in the field "B" circled in red. If the model name is not displayed, click the [Find Next] button until it appears in the field "B" circled in red.

(4) Check that the "Brother Maintenance USB Printer" is set as a default printer. If not, set it as a default printer.
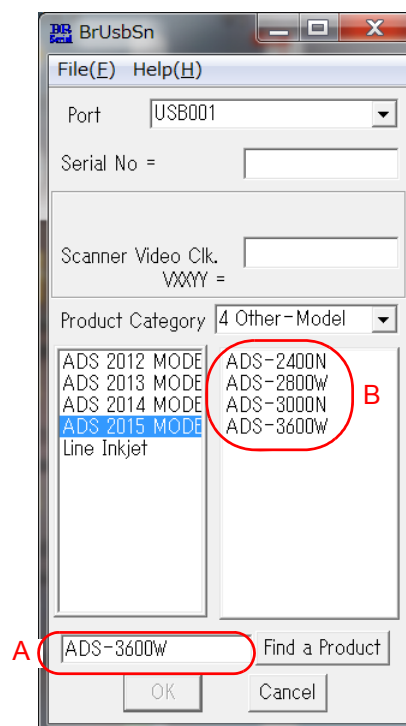
(5) Double-click the "MemoryAccessTool.exe" file. The following window appears.
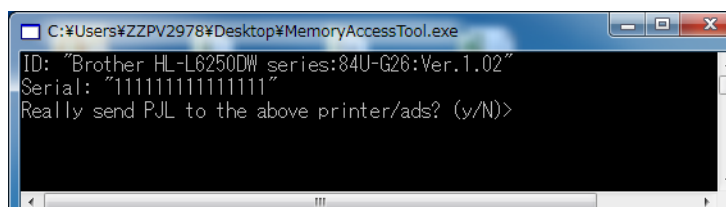
(6) Enter the [Y]. Memory writing is activated.

(7) In the [Port] field, select the port number assigned to the Brother Maintenance USB Printer.

(8) Enter the serial number (15 digits) of the machine in the [Serial No] field, and click the [OK] button.

(9) Check that the CHECK window appeared on the screen, and click the [Yes] button. The serial number is written to the machine.

(10) Press the [OK] button. Serial number is written.

Note:
• If the serial number has not been overwritten, repeat the procedures from the procedure (1).

1.6 Setting Multi Feeding Sensor Threshold

(1) Connect the machine to your computer using the USB cable in the initial state of maintenance mode.

(2) Double-click "brADSmt1.exe" that was saved into the computer to start it.

> **Note:**
> • For Windows® 8, right-click "brADSmt1.exe" to display the menu, and select "Run as an administrator" to start.
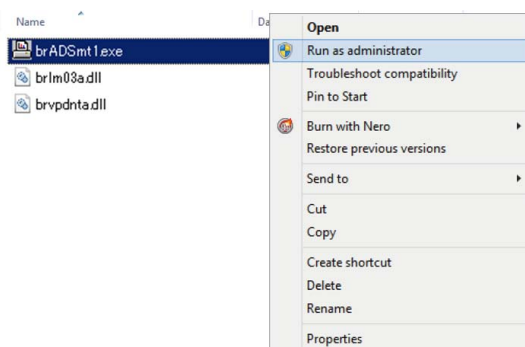
(3) Select the model name in the [Select model:] box, and click the [Start] button. The multi feeding sensor threshold is set.
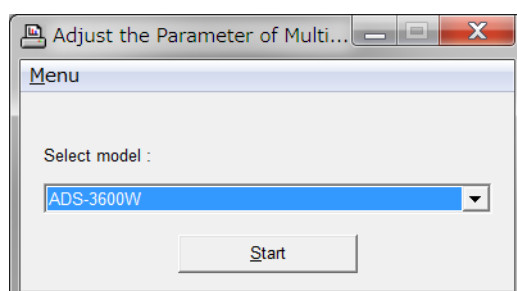
(4) Set the sheet for multi feeding sensor threshold setting in the ADF, and execute the maintenance mode function "Check ADF".
Refer to "1.3.2 ADF performance test (function code: 08)" in Chapter 5.

(5) Execute the maintenance mode function "Acquire white level data and set CIS scan area".
Refer to "1.3.12 Acquire white level data and set CIS scan area (function code: 55)" in Chapter 5.

(6) Click the [Yes] button. The multi feeding sensor threshold is calculated and stored in the EEPROM of the main PCB.
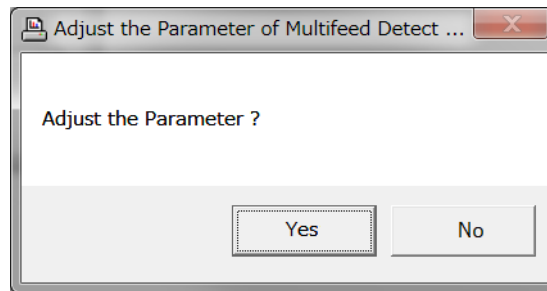
When the setting is completed normally, "OK" is displayed on the screen.
If any error is detected during setting, "ERROR" is displayed on the screen.
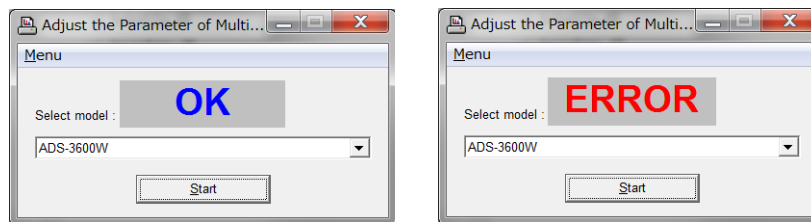
(7) Unplug the AC power cord of the machine.

1.7 Check Sensor Operation

(1) Check that the machine is in the initial state of maintenance mode.

(2) Press the [3], and then the [2] key. "ACDFDRJAJC**" is displayed on the LCD.

(3) Change the conditions subject to sensor detection and check that the display on the LCD changes depending on the sensor status. Check sensor function by operating each actuator.

(4) When all sensors are checked, press the [X] key to quit the sensor function check mode.

1.8 Check Multi Feeding Operation

(1) Check that the machine is in the initial state of maintenance mode.

(2) Set the document for multi feeding sensor threshold setting in the ADF unit.
"DOC. READY" is displayed on the LCD.

(3) Press the [0], and then the [8] key. Check that "ADF CHECK P.01" is displayed on the LCD and the machine ejects the document properly.

(4) When the document is ejected properly, press the [X] key to quit the sensor function check mode.

(5) Press the [9] key twice in the initial state of maintenance mode. The machine quits maintenance mode and returns to the ready state.
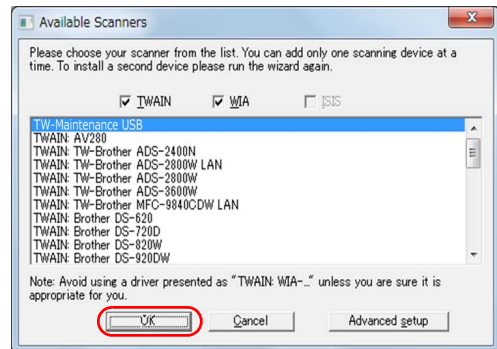
1.9 Checking Operation after Repair

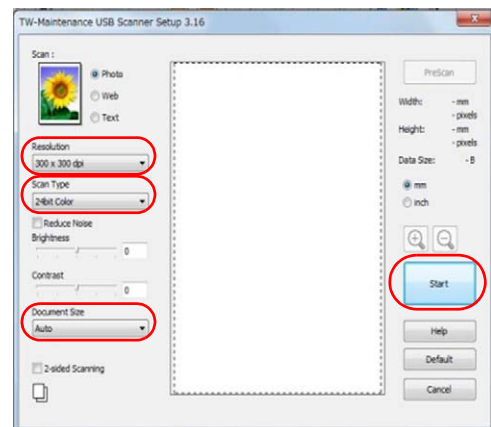Perform the steps below to check the machine's condition after repair or adjustment.

(1) Prepare two DS-001 (LD1625001) test charts and set them to the document tray so that both sides of the test chart can be scanned.

(2) Press and hold the [home] key for approximately five seconds while the machine is in the ready state.

(3) Press the blank field at the bottom.

(4) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order to enter the maintenance mode.

(5) Connect the machine to your computer using the USB cable.

(6) Start the PaperPort.

(7) Select the Desktop tag and click the [Select] button.

(8) Select "TW-Maintenance USB" and click the [OK] button.

(9) When the screen shown on the right appears during the scanning, choose:
Resolution: 600 dpi
Scan Type: 24bit Color
Document Size: Letter
and press the [Start] button to start scanning.

(10) After the scanning, compare the scanned data on the test chart which framed red in the figure below with the ones in the limit sample. If the result is worse than the limit sample, perform procedures in "Acquire white level data and set CIS scan area" again. And then wipe the first and second side CIS glass with a dry cleaning cloth four times in the same direction, and follow the instructions above again to scan.

If the problem persists, replace the CIS.

Test chart DS-001

Black band.bmp

OK limit

Black streak.bmp

OK limit

White band.bmp

OK limit

White streak.bmp

OK limit
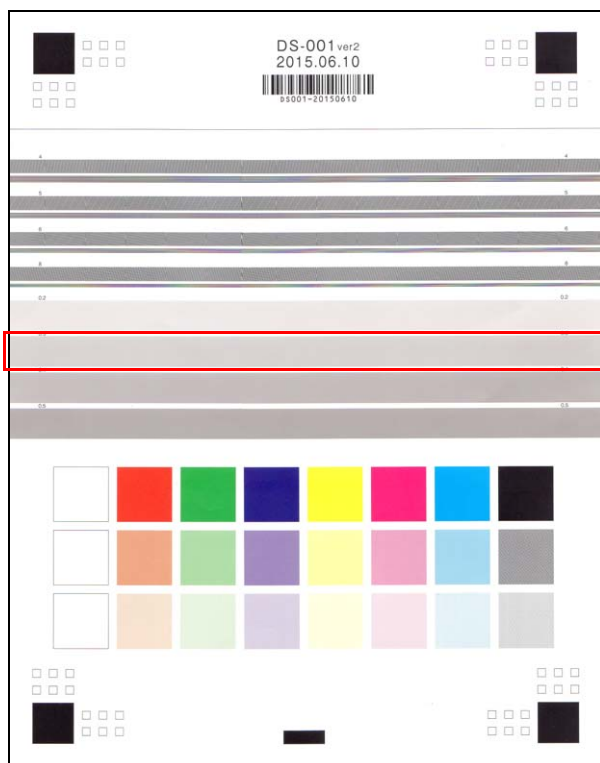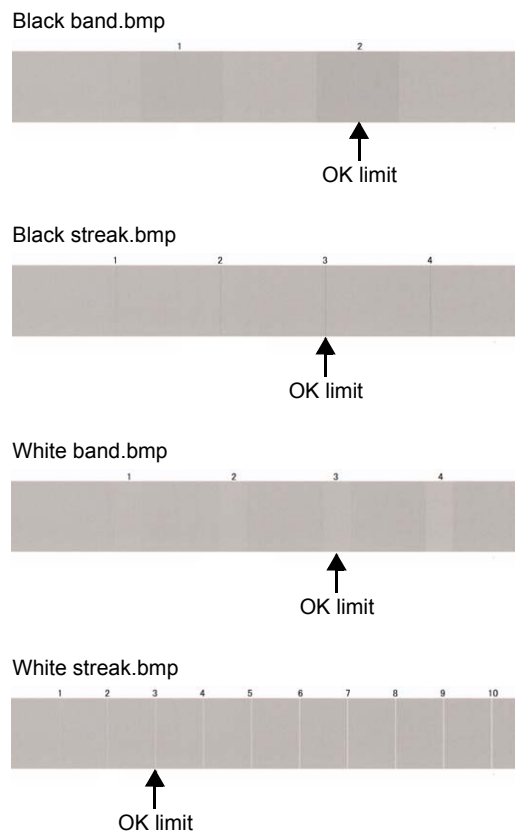
1.10 Resetting to Factory Shipping State

These procedures are for when the new main PCB ASSY for replenishment is used. They are not necessary for when the main PCB ASSY which has been used successfully in the market is used.

(1) Check that the machine is in the initial state of maintenance mode.

(2) Turn ON the power switch of the computer.

(3) Check that the "Brother Maintenance USB Printer" is set as a default printer. If not, set it as a default printer.

(4) Double-click the "ShippingTool.exe" file. The machine is reset to a factory shipping state.

(5) Unplug the AC power cord of the machine.
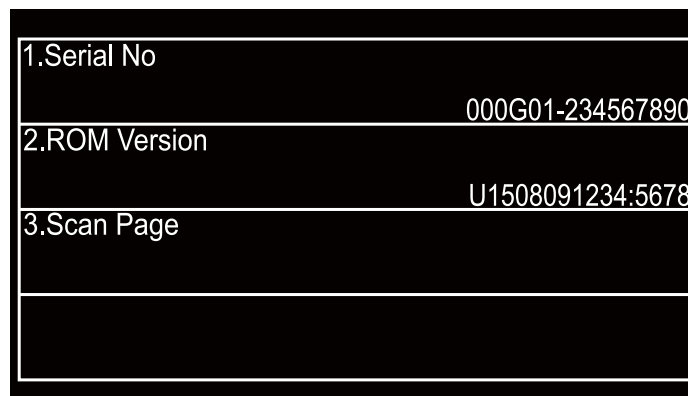
2. IF YOU REPLACE THE CIS UNIT

\<What to do after replacement\>

- Acquire white level data and set CIS scan area
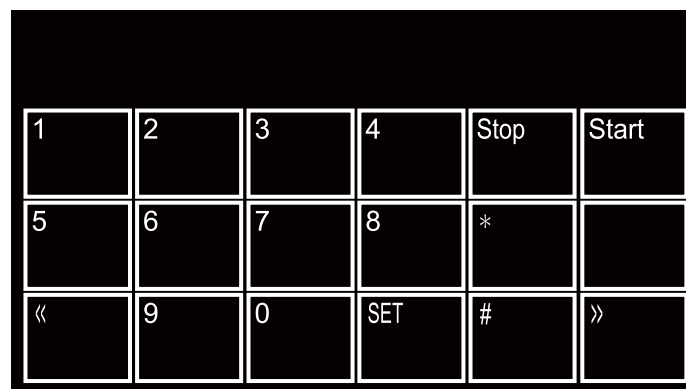- Checking operation after repair

■ What you need to prepare

(1) Calibration sheet (LD1914001)

(2) USB flash memory

(3) Scan limit sample

(4) Test chart DS-001 (LD1625001)
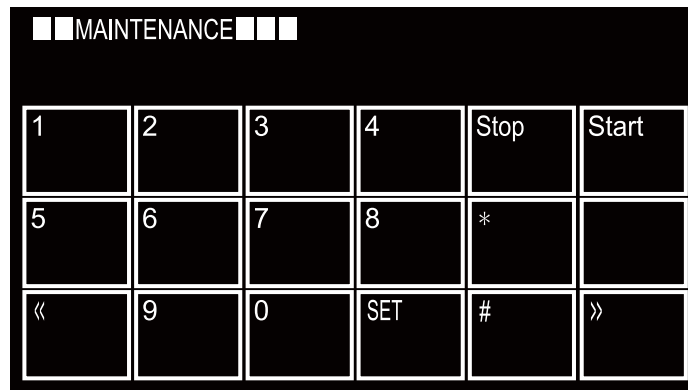
2.1 Acquire White Level Data and Set CIS Scan Area

(1) Wipe the first and second side CIS glass four times in the same direction with a cleaning cloth.

(2) Press and hold the [home] key. The following screen appears on the LCD.

```
1.Serial No
                        000G01-234567890
2.ROM Version
                        U1508091234:5678
3.Scan Page


```

(3) Press the 4th blank box. The following screen appears on the LCD.

1	2	3	4	Stop	Start
5	6	7	8	＊	
《	9	0	SET	#	》

(4) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The following display appears on the LCD, and the machine enters into maintenance mode.

(5) Open the front cover and set it on the gray tape of the first side CIS unit so that the white part of the calibration sheet overlaps with it.

Longer side
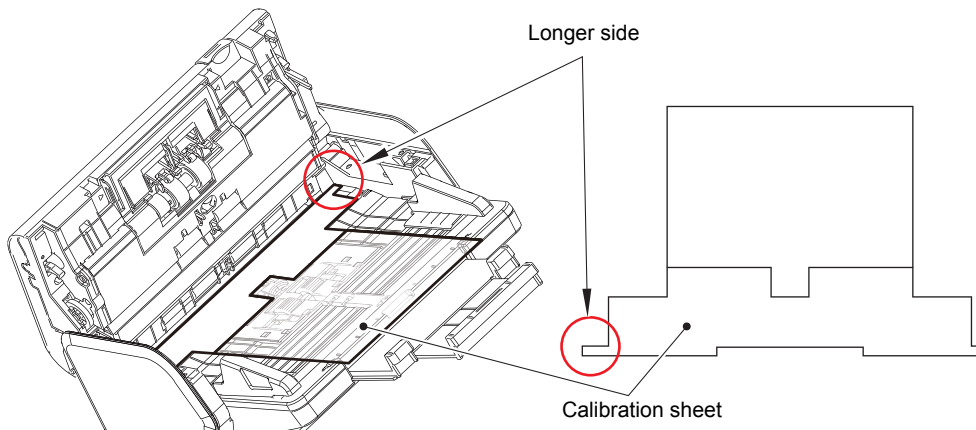
Calibration sheet

(6) Close the front cover.

(7) Press the [5] key twice. "Press Start" is displayed on the LCD.

(8) Press the [Start] key.

(9) Once "Clear CS and Press Start Key" is displayed on the LCD, open the front cover and remove the calibration sheet.

(10) Close the front cover and press the [Start] key. The machine saves the scanning compensation data to EEPROM and returns to the initial state of maintenance mode.

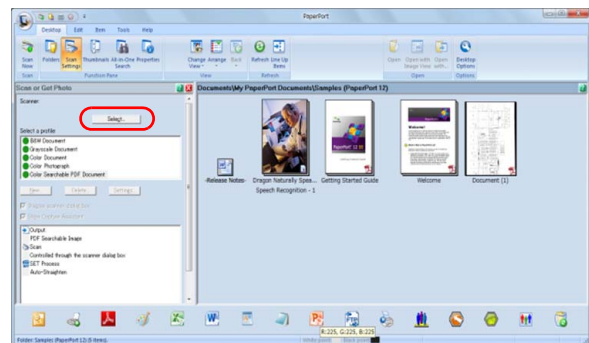(11) Wipe the first and second side CIS glass four times in the same direction with a cleaning cloth again.

Note:

• Keep the calibration sheet in the black bag to prevent a dirt and a change of color when it is not used. The machine cannot acquire scanning compensation data correctly when it's dirty or discolored.
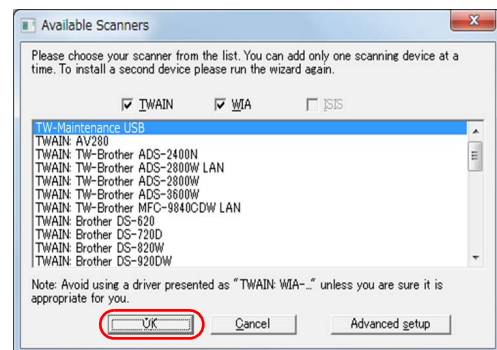
Confidential

2.2   Checking Operation after Repair

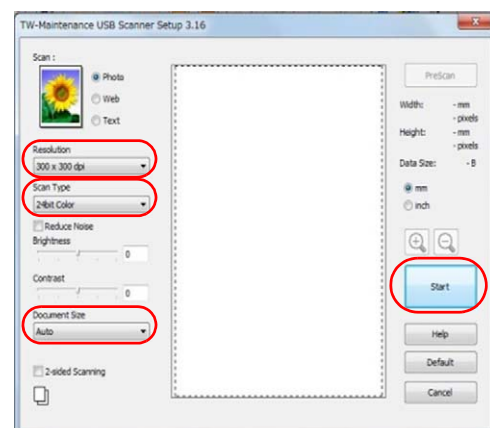Perform the steps below to check the machine's condition after repair or adjustment.

(1) Prepare two DS-001 (LD1625001) test charts and set them to the document tray so that both sides of the test chart can be scanned.

(2) Press and hold the [home icon] key for approximately five seconds while the machine is in the ready state.

(3) Press the blank field at the bottom.

(4) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order to enter the maintenance mode.

(5) Connect the machine to your computer using the USB cable.

(6) Start the PaperPort.

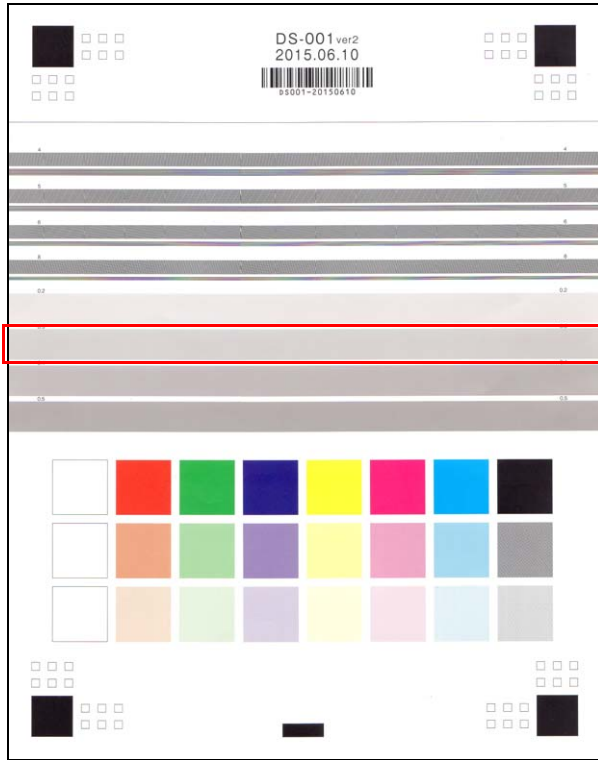(7) Select the Desktop tag and click the [Select] button.

(8) Select "TW-Maintenance USB" and click the [OK] button.

(9) When the screen shown on the right appears during the scanning, choose:
Resolution: 600 dpi
Scan Type: 24bit Color
Document Size: Letter
and press the [Start] button to start scanning.

Confidential

(10) After the scanning, compare the scanned data on the test chart which framed red in the figure below with the ones in the limit sample. If the result is worse than the limit sample, perform procedures in "Acquire white level data and set CIS scan area" again. And then wipe the first and second side CIS glass with a dry cleaning cloth four times in the same direction, and follow the instructions above again to scan.
If the problem persists, replace the CIS.

Test chart DS-001

Black band.bmp

OK limit

Black streak.bmp

OK limit

White band.bmp

OK limit

White streak.bmp

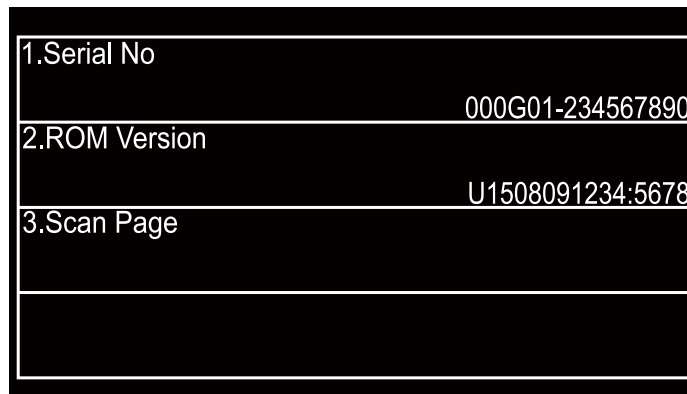OK limit

3. IF YOU REPLACE THE MULTI FEEDING SENSOR

<What to do after replacement>

- Setting multi feeding sensor threshold
- Check multi feeding operation
- Checking multi feeding sensor operation

■ What you need to prepare
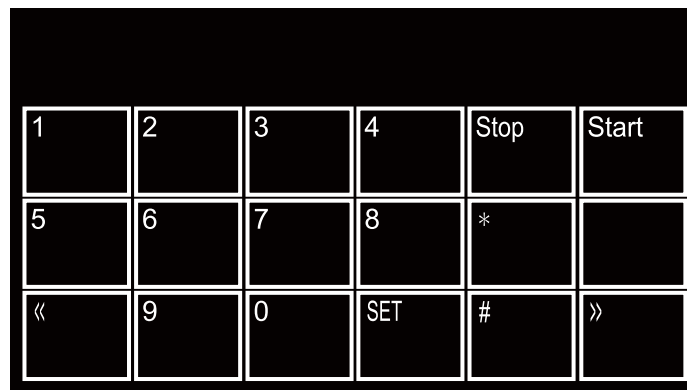
(1) Sheet for multi feeding sensor threshold setting (LD6340001)

(2) Multi feeding sensor threshold setting tool (brADSmt1.exe)
Copy this file into the temporary folder created on the C drive.
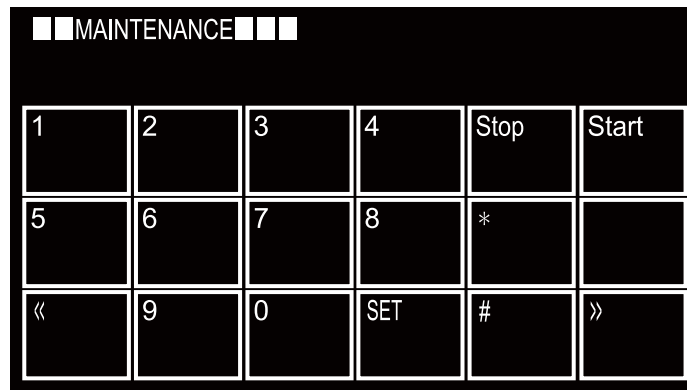
3.1 Setting Multi Feeding Sensor Threshold

(1) Press and hold the ⌂ key. The following screen appears on the LCD.

```
1.Serial No
                          000G01-234567890
2.ROM Version
                          U1508091234:5678
3.Scan Page


```

(2) Press the 4th blank box. The following screen appears on the LCD.

| 1	2	3	4	Stop	Start
5	6	7	8	*	
«	9	0	SET	#	»

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The following display appears on the LCD, and the machine enters into maintenance mode.

■■MAINTENANCE■■■					
1	2	3	4	Stop	Start
5	6	7	8	*	
«	9	0	SET	#	»

(4) Connect the machine to your computer using the USB cable.

(5) Select the model name in the [Select model:] box, and click the [Start] button. The multi feeding sensor threshold is reset.

Adjust the Parameter of Multi...
Menu

Select model :

ADS-3600W

Start
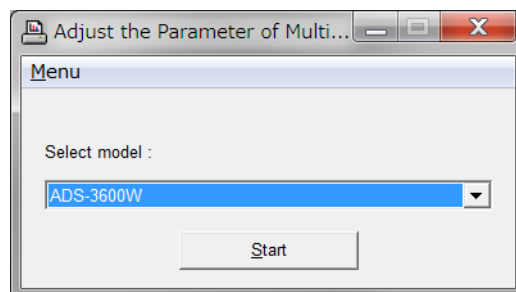
(6) After the following screen is appeared, set the sheet for multi feeding sensor threshold setting in the ADF, and execute the maintenance mode function "Check ADF".
Refer to "1.3.2 ADF performance test (function code: 08)" in Chapter 5.

Adjust the Parameter of Multifeed Detect ...

Adjust the Parameter ?

Yes   No
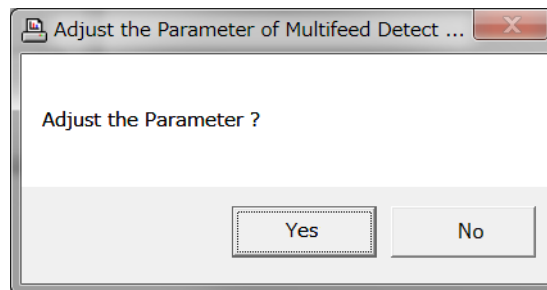
(7) Execute the maintenance mode function "Acquire white level data and set CIS scan area".
Refer to "1.3.12 Acquire white level data and set CIS scan area (function code: 55)" in Chapter 5.

(8) Click the [Yes] button on the screen of step (6). The multi feeding sensor threshold is calculated and stored in the EEPROM of the main PCB.
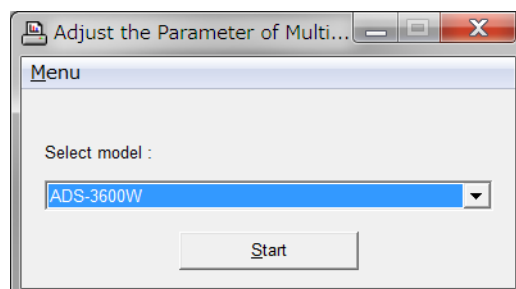
Adjust the Parameter of Multi...
Menu

Select model :

ADS-3600W

Start

When the setting is completed normally, "OK" is displayed on the screen.
If any error is detected during setting, "ERROR" is displayed on the screen.
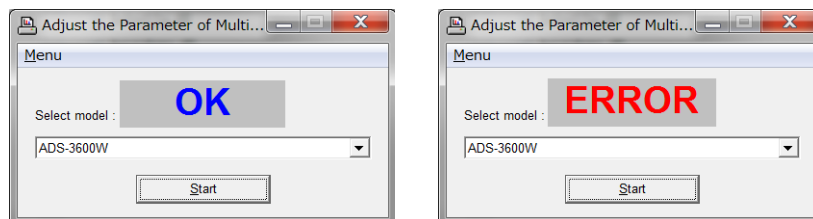
(9) Unplug the AC power cord of the machine.

3.2 Check Multi Feeding Operation

(1) Press and hold the [home] key for approximately five seconds while the machine is in the ready state. Data display screen appears.

(2) Press the blank field at the bottom. Key input screen appears.

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order to enter the maintenance mode.

(4) Set the document for multi feeding sensor threshold setting in the ADF unit.
"DOC. READY" is displayed on the LCD.

(5) Press the [0], and then the [8] key. Check that "ADF CHECK P.01" is displayed on the LCD and the machine ejects the document properly.

(6) When the document is ejected properly, press the [X] key to quit the sensor function check mode.

(7) Press the [9] key twice in the initial state of maintenance mode. The machine quits maintenance mode and returns to the ready state.

3.3 Checking Multi Feeding Sensor Operation

Perform the steps below to check the machine's condition after repair or adjustment.

(1) Set the sheet for multi feeding sensor threshold setting in the ADF, and execute the maintenance mode function "Check ADF" (function code: 08). (To check that a normal document is ejected correctly.)

4. IF YOU REPLACE THE PANEL ASSY

\<What to do after replacement\>

- Adjusting touch panel (function code: 61)
- Checking LCD operation (function code: 12)
- Checking control panel operation (function code: 13)

■ What you need to prepare

(1) Touch panel stylus

4.1 Adjusting Touch Panel

(1) Press and hold the [⌂] key. The following screen appears on the LCD.

```
1.Serial No
                              000G01-234567890
2.ROM Version
                              U1508091234:5678
3.Scan Page


```

(2) Press the 4th blank box. The following screen appears on the LCD.

1	2	3	4	Stop	Start
5	6	7	8	＊	
《	9	0	SET	#	》

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The following display appears on the LCD, and the machine enters into maintenance mode.
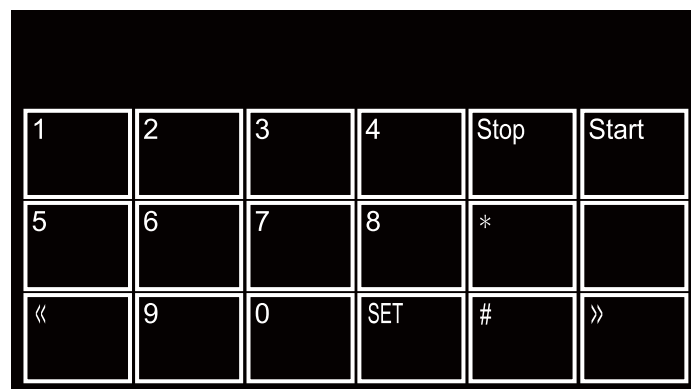
■■MAINTENANCE■■■					
1	2	3	4	Stop	Start
5	6	7	8	*	
《	9	0	SET	#	》
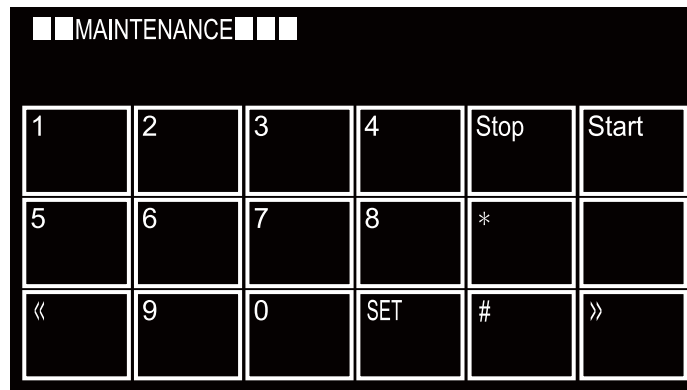
(4) Press the [6], and then the [1] key. The following adjustment screen appears on the LCD.

(5) Use the touch panel stylus and touch the mark in the upper left corner of the screen. When the touched mark has disappeared, touch the next mark. Touching sequence: upper left, lower left, lower right, upper right and center.
When the center (5th mark) is touched, [OK] is displayed if the specified area was adjusted correctly. The following screen appears consecutively, and the machine returns to the initial state of maintenance mode in three seconds.
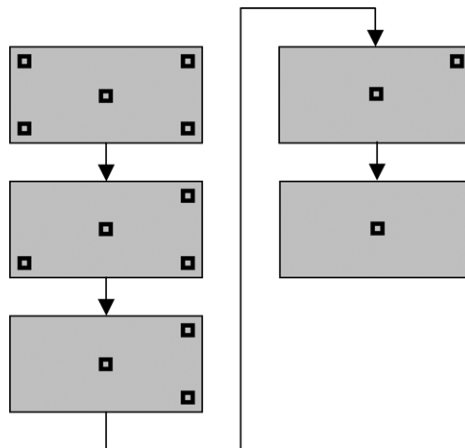
4.2   Checking LCD Operation

(1) Press the [1], and then the [2] key in the initial state of maintenance mode. The LCD check display appears on the LCD. Refer to "1.3.4 Check LCD operation (function code: 12)" in Chapter 5.

(2) The LCD display changes each time the ⟲ key is pressed.
Check that there is no problem on the LCD display.

(3) Press the ✕ key, and the machine returns to the initial state of maintenance mode.

4.3   Checking Control Panel Operation

(1) Press the [1], and then the [3] key in the initial state of maintenance mode. "00" is displayed on the LCD.

(2) Press the keys on the control panel according to the numbers provided on the figure in "1.3.5 Check control panel key operation (function code: 13)" in Chapter 5.

(3) If the button operation is normal, the machine returns to the initial state of maintenance mode when the last key is pressed.

(4) Press the [9] key twice to return the machine to the ready state.

5. IF YOU REPLACE THE PICK UP ROLLER / REVERSE ROLLER

<What to do after replacement>

• Resetting pick up roller / reverse roller counters

5.1 Resetting Pick Up Roller / Reverse Roller Counters

Refer to the User's Guide to reset the pick up roller or reverse roller counters.

CHAPTER 5   SERVICE FUNCTIONS

1.   MAINTENANCE MODE

Maintenance mode is exclusively designed for checking, setting, and adjusting the machine using the keys on the control panel. These buttons allow you to execute sensor operation check, log information and error code display, or worker switch (WSW) setting.

1.1   How to Enter Maintenance Mode

1.1.1   Method of entering maintenance mode for service personnel

<Operating Procedure>

(1) Press and hold the [home] key for approximately five seconds while the machine is in the ready state. The display shown on the right appears on the LCD.

1.Serial No
000G01-234567890
2.ROM Version
U1508091234:5678
3.Scan Page

(2) Press the blank field at the bottom. The display shown on the right appears on the LCD.

1	2	3	4	Stop	Start
5	6	7	8	*	
《	9	0	SET	#	》

(3) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The display shown on the right appears on the LCD, and the machine enters into maintenance mode.

(4) To select any of the maintenance mode functions shown in the list, use the keypad to enter the maintenance mode function code to be executed.

■■MAINTENANCE■■■

1	2	3	4	Stop	Start
5	6	7	8	*	
《	9	0	SET	#	》

1.1.2 Method of entering end-user accessible maintenance mode

The maintenance mode functions should only be accessed by service personnel. However, end users are allowed to use some of these functions under the guidance of service personnel over the phone. End users can only use the functions shaded in the table on the "1.2 List of Maintenance Mode Functions". (function code: 10, 12, 18, 25, 45, 54, 61, 80, 82, 91)

<Operating Procedure>

(1) Press and hold the 🏠 key for approximately five seconds while the machine is in the ready state. The display shown on the right appears on the LCD.

1.Serial No	
	000G01-234567890
2.ROM Version	
	U1508091234:5678
3.Scan Page	

(2) Press the blank field at the bottom. The display shown on the right appears on the LCD.

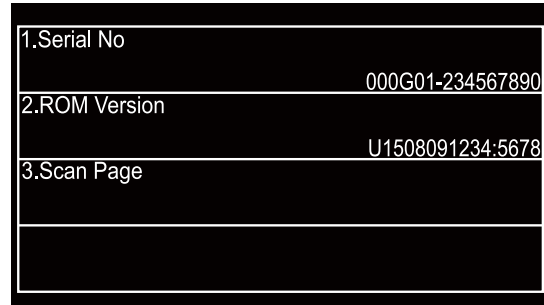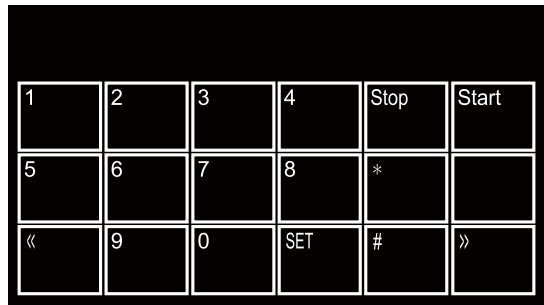(3) Press the [*], [0], and [#] keys on the LCD in this order. The machine enters to the ready state to accept function code entry, so press the function code you want to execute.

(4) Each time the selected maintenance mode function is completed, the machine returns to the ready state automatically.

1	2	3	4	Stop	Start
5	6	7	8	∗	
《	9	0	SET	#	》

1.2 List of Maintenance Mode Functions

Function code	Function	Refer to:
01	Initialize EEPROM parameters	5-4
08	ADF performance test	5-5
10	Set worker switches (WSW)	5-6
12	Check LCD operation	5-7
13	Check control panel key operation	5-8
18	Save NetConfig data	5-8
25	Display software version	5-9
32	Check sensor operation	5-11
45	Change USB No. return value	5-12
54	Fine-tune scanning position	5-13
55	Acquire white level data and set CIS scan area	5-14
61	Adjust touch panel	5-16
74	Setting by country	5-17
80	Display machine log information	5-18
82	Display machine error code	5-19
91	Initialize EEPROM parameters	5-4
99	Quit maintenance mode	—

* The maintenance mode functions shaded in the table can be used by end users.

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1.3   Details of Maintenance Mode Functions

1.3.1   Initialize EEPROM parameters (function code: 01, 91)

<Function>

This function is used to initialize the setting values for operation parameters, user switches, and worker switches (WSW) registered in the EEPROM. Entering function code 01 initializes most EEPROM areas. Entering function code 91 initializes only the specified areas as shown in the table below.

Data item	Function code: 01	Function code: 91
Counter information	Areas not to be initialized	Areas not to be initialized
Error history		
MAC address		
Worker switches	Areas to be initialized	Areas to be initialized
User switches (items initialized when "Factory Reset" is executed)		
Function settings except user switches (settings not subject to "Factory Reset")		
LAN setting		

<Operating Procedure>

(1) Press the [0] and [1] keys in this order in the initial state of maintenance mode to display "PARAMETER INIT" (or press the [9] and [1] keys as appropriate) on the LCD.

(2) When initializing parameters is completed, the machine returns to the initial state of maintenance mode.

Note:
• Function code: 01 is for service personnel. Function code: 91 is for user support.

1.3.2 ADF performance test (function code: 08)

\<Function\>

This function is used to test the performance of the automatic document feeder (ADF). The scanned pages of documents fed by the ADF are counted and the result is displayed on the LCD.

\<Operating Procedure\>

(1) Set the documents in the ADF unit. "DOC. READY" is displayed on the LCD.

(2) Press the [0], and then the [8] key in the initial state of maintenance mode.
"ADF CHECK P.**" is displayed on the LCD, and the documents are ejected while the scanned pages are counted. (** indicates the current count of the scanned pages.)

(3) When the ☒ key is pressed, the machine returns to the initial state of maintenance mode.

Note:

- If the front cover is open, "Close the ADF cover" is displayed on the LCD. Close the front cover, and perform this function again.

- If no document is set in ADF, "NO DOCUMENT" is displayed on the LCD and the machine returns to the ready state of maintenance mode.

1.3.3 Set worker switches (WSW) (function code: 10)

\<Function\>

Worker switches shown in the table below can be used to set functions to satisfy various requirements. The switch setting can be changed using the keys on the control panel.

Worker switches are factory set to conform with the laws and regulations of the country the machine is shipped to. Do not change these settings unless necessary.

List of worker switches

WSW No.	Selector	Function
WSW17	5	Change time display method (American: MM/DD/YY or European: DD/MM/YY)
WSW42	1	Fix Device ID model name
WSW44	5	Scan to E mail Server concurrent transmission
WSW47	8	Change USB High-Speed/Full-Speed
WSW59	1	Change ON/OFF setting for USB serial number sending
	3 to 7	Change PrFILE2 text code set
WSW60	2 and 3	Touch panel repeat start time and interval setting
WSW63	3	Change time display method (Japanese: YY/MM/DD or others)

* Refer to the separate manual for details of worker switches.

* Worker switches not on the list can be typed but nothing happens even if the value is changed.

\<Operating Procedure\>

(1) Press the [1], and then the [0] key in the initial state of maintenance mode. "WSW00" is displayed on the LCD.

(2) Enter the worker switch number that you want to change the setting.
The display shown below appears on the LCD. The "Selector No.1" flashes.

```
        Selector No.1        Selector No.8
             ↓                    ↓
WSWXX = 0 0 0 0 0 0 0 0
```

(3) Press the [◀] or [▶] key to flash the desired selector, and change the setting by pressing the [1] or [0] key.

(4) When changing the setting is completed, press the [SET] key. The new selector setting value is stored in the EEPROM, and the LCD returns to the ready state for worker switch number entry ("WSW00").

(5) When all switch setting is completed, press the ☒ key to return the machine to the initial state of maintenance mode.

Note:

• To cancel operation and return to the initial state of maintenance mode, press the ☒ key.

• If there is no entry for one minute or longer on the 2-digit worker switch number selection, the machine returns to the initial state of maintenance mode automatically.

1.3.4 Check LCD operation (function code: 12)

\<Function\>

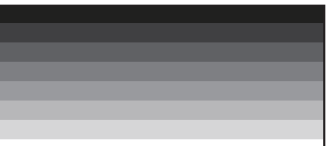This function is used to check that the LCD on the control panel is operating normally.

\<Operating Procedure\>
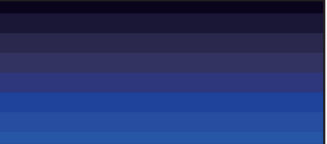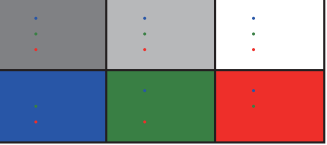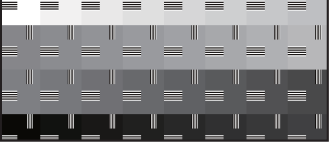
(1) Press the [1], and then the [2] key in the initial state of maintenance mode. Displays shown in the table below appear on the LCD.

(2) Pressing the [home] key switches the display A to B. Each press of the [back] key cycles through the displays as shown in the table below.

When the [back] key is pressed on display 7, the LCD returns to display 1.

(3) When the [X] key is pressed, the machine returns to the initial state of maintenance mode, regardless of the display status.

\<Display A-1\> Complete white		\<Display B-1\> Gradation white	
\<Display A-2\> Complete black		\<Display B-2\> Gradation red	
\<Display A-3\> Complete red		\<Display B-3\> Gradation green	
\<Display A-4\> Complete green		\<Display B-4\> Gradation blue	
\<Display A-5\> Complete blue		\<Display B-5\> Image data screen	
\<Display A-6\> Complete gray		\<Display B-6\> Gray/Color pattern 1 Bright spot 1	
\<Display A-7\> Stroke detection screen		\<Display B-7\> Gray/Color pattern 1 Bright spot 2	

1.3.5 Check control panel key operation (function code: 13)

\<Function\>

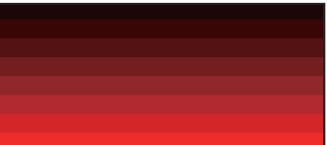This function is used to check that the keys on the control panel operate normally.

\<Operating Procedure\>

(1) Press the [1], and then the [3] key in the initial state of maintenance mode. "00" is displayed on the LCD.

(2) Press the keys on the control panel according to the numbers provided in the figure below.
Each time the key is pressed, the corresponding number is displayed on the LCD in decimal notation. Check that the number displayed on the LCD matches the number assigned to the key that has been pressed. If the keys are pressed in the incorrect order, "INVALID OPERATE" is displayed on the LCD. Press the ☒ key, and then press the correct key.

(3) If the key operation is normal, the machine returns to the initial state of maintenance mode when the last key is pressed. To cancel the operation and return to the initial state of maintenance mode, press the ☒ key.

■ **Order of pressing keys**

1.3.6 Save NetConfig data (function code: 18)

\<Function\>

This function is used to save NetConfig data to the USB flash memory.

\<Operating Procedure\>

(1) Press the [1], and then the [8] key in the initial state of maintenance mode. "NETCONFIG" is displayed on the LCD.

(2) Insert the USB flash memory into the USB terminal.

(3) Press the [SET] key. "SAVE TO USB" is displayed on the LCD.

(4) Press the [SET] key. "USB SAVING" is displayed on the LCD, and NetConfig data is saved to the USB flash memory.

(5) "MAINTENANCE" is displayed on the LCD, and the machine returns to the ready state of maintenance mode.

Create a folder named "NetConfig" in the USB flash memory and save the file as txt file.

1.3.7 Display software version (function code: 25)

\<Function\>

This function is used to check the firmware creation date and check sum information.

\<Operating Procedure\>

(1) Press the [2], and then the [5] key in the initial state of maintenance mode. "TOTAL:Ver *" is displayed on the LCD.

(2) Pressing the [Start] key changes the display as shown in the table below.

(3) When the [✕] key is pressed, the machine returns to the ready state.

LCD	Description
TOTAL: Ver1.00 (A) [*1]	Main Firmware Version information ((A): Revision information)
NET : Ver1.00	Network Version information
i1512312359:1234	I-FAX Version information (Display only. It is not supported by this model.)
B1508071049:5708 [*1]	Boot Program creation date
U1512271600:7B0A [*1]	Main Firmware creation date
D1512312359:1234	Demo Firmware Data creation date (Display only. It is not supported by this model.)
M1512271602:BD40 [*1]	Sub3 version information
ROM Check Sum	Check sum self-diagnosis function [*2]

[*1] How to display the check sum information
You can check the check sum information by pressing the [SET] key while each version is displayed. When the [SET] key is pressed again, the LCD returns to the version display.

[*2] There are two types of check sum information that can be checked with this function. This function checks if these two types of check sum information match each other.
When the [OK] or [SET] key is pressed while "ROM Check Sum" is displayed, check is automatically conducted for each ROM of each software part. When the check sum matches, "OK" is displayed on the LCD. When all ROMs result in OK, "ROM Check Sum OK" is displayed at the end, and the operation is finished. When the check sum of any ROM does not match, "NG" is displayed, and the operation stops.

1.3.8 Acquire machine log information (function code: 31)

\<Function\>

This function saves log information of the machine to USB flash memory.

\<Operating Procedure\>

(1) Insert the USB flash memory into the USB flash memory port.

(2) Press the [3], and then the [1] key in the initial state of maintenance mode. "BRSUPPLY WRITING" is displayed on the LCD, and log file is saved to the USB flash memory. The machine returns to the initial state of maintenance mode.

Log file is named as:
"BRSUPPLY_(fifteen digits of the serial number)_(ten digits of the date and time).

Ex) When the serial number is "E75166M5G123456",
and the acquisition date and time is "December.31.2015 12:00",
the file name is "BRSUPPLY_ E75166M5G123456_1512311200".

■ **Maintenance information**

```
STATUS="DATAEND"
① LAS_MODEL_CODE="8WD-504:Ver.A"
② LAS_MODEL_NAME="Brother ADS-3600W"
③ LAS_BRMODELCODE="8WD50499904"
④ LAS_RVERSION="A"
⑤ LAS_MACHINE_SN="E75166G5G001563"
⑥ LAS_PCBM_SN="926000000243"
⑦ LAS_ADF_SN="・・・・・・・・・・・・"
⑧ LAS_MEMORY_SIZE="536870912"
⑨ LAS_DEFAULT_PAPER_SIZE="A4"
⑩ LAS_FIRST_PRINTDATE="--/--/--"
⑪ LAS_PAGE_COUNT_MONTHLY="1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0"
⑫ LAS_SECURE_FUNCTION_LOCK="OFF"
⑬ LAS_NETWORK_CONNECTION="WLAN"
⑭ LAS_SCANPAGE_ADF="286"
⑮ LAS_SCANSXPAGE_ADF="26"
⑯ LAS_SCANDXPAGE_ADF="260"
⑰ LAS_SCANNERPAGE="286"
⑱ LAS_JAMCOUNT_ADF="11"
⑲ LAS_JAMCOUNT_ADSX="0"
⑳ LAS_JAMCOUNT_ADDX="11"
㉑ LAS_SENSORLOG_ADF="1:00000000, 2:00007EC0, 3:00000000, 4:00000000, 5:00000000, 6:00000000, 7:000000
㉒ LAS_ERRORHISTORY_PAGE_ME="1:A200:Document Jam:0:::151028153400, 2:A300:Document Jam:0:::16010100010
㉓ LAS_ERRORHISTORY_DATE_COMM="1:, 2:, 3:"
㉔ LAS_TOTALTIME_POWER_ON="68"
㉕ LAS_POWER_ON_COUNT="90"
```

1	Model code	14	Total pages scanned
2	Model name	15	Total pages of single side scanning
3	Model code / Country code	16	Total pages of duplex scanning
4	Main firmware version	17	Total pages scanned
5	Serial number	18	Total paper jams
6	Main PCB serial number	19	Total paper jams of single side scanning
7	ADF unit serial number*	20	Total paper jams of duplex scanning
8	ROM size	21	Sensor log*
9	Default document size*	22	Machine error log (last ten errors)
10	First PC-Print date*	23	Communication error log (last three errors)
11	Total pages printed by month*	24	Total power distribution time
12	Secure function lock status	25	The number of times that the power is turned ON
13	Network connection status		

* Not used for this product.

1.3.9 Check sensor operation (function code: 32)

\<Function\>

This function is used to check that sensors are operating normally.

\<Operating Procedure\>

(1) Press the [3], and then the [2] key in the initial state of maintenance mode. The sensor operating conditions defined in the table below are applied, and "ACDFDRJAJC**" is displayed on the LCD.

(2) Change the conditions subject to sensor detection and check that the display on the LCD changes depending on the sensor status. For example, feed the paper through the document detection sensor, or open the top/front cover.

(3) When the [X] key is pressed, this operation is finished, and the machine returns to the initial state of maintenance mode.

The table below summarizes the displays on the LCD, sensor names and detection status.

LCD	Sensor name	Detection status (displayed / not displayed)
AC	Front cover sensor	Front cover closed / Front cover open
DF	Document detection sensor	Document set / No document
DR	Document scanning position sensor	Document set / No document
JA	Paper feed jam sensor	Document set / No document
JC	Eject jam sensor	Document set / No document

■ **Location of sensors**

Confidential
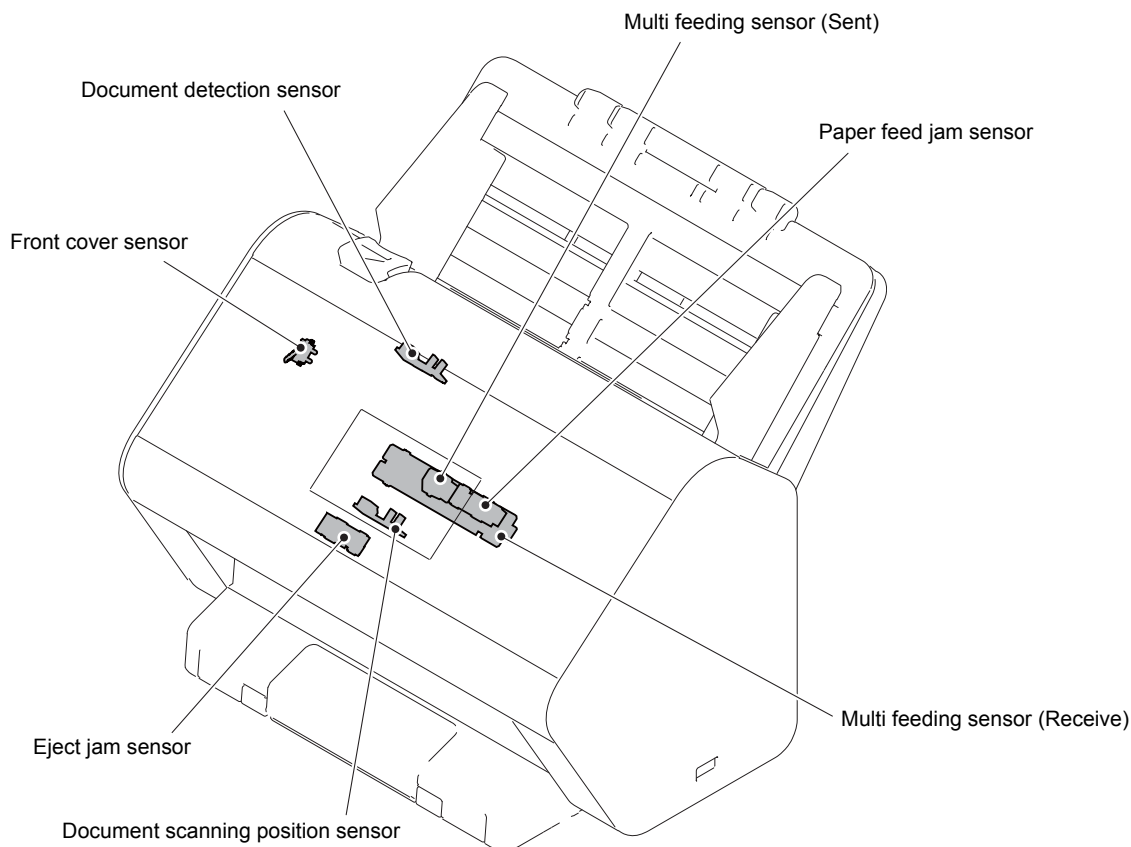
1.3.10 Change USB No. return value (function code: 45)

<Function>

When the operating system (OS) installed on the computer is Windows Vista$^{®}$, and the machine is connected to this computer using USB2.0FULL, the OS may not be able to obtain the USB device serial number depending on the computer and USB device. If the serial number cannot be obtained, the number of devices increases each time the device is connected to the computer. To avoid this problem, setting this function to "USBNo.=ON" can fix the USB No. return value to "0".

LCD	Description
USBNo. = ON	Returns the serial number of the machine. (Default)
USBNo. = OFF	Returns "0".

The setting currently selected is marked with "*" at the end of the display.

<Operating Procedure>

(1) Press the [4], and then the [5] key in the initial state of maintenance mode. "USBNo." is displayed on the LCD.

(2) Press the [SET] key. "USBNo.=ON*" is displayed on the LCD.

(3) Press the [▲] or [▼] key to select "USBNo.=OFF" when fixing the serial number return value to "0" or "USBNo.=ON" when not fixing it, and press the [SET] key. "Accepted" is displayed on the LCD, and the machine returns to the initial state of maintenance mode.

(4) Turn OFF the power switch.

Note:

• The mode is applied after the power switch is turned OFF and then ON again.

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1.3.11 Fine-tune scanning position (function code: 54)

<Function>

This function is used to adjust the scanning start/end positions.

<Operating Procedure>

(1) Press the [5], and then the [4] key in the initial state of maintenance mode.
"SCAN START ADJ" is displayed on the LCD.
After two seconds, "▲ Main ▼ SUB" is displayed on the LCD.

(2) To adjust the sub scanning, press the [▼] key.
To adjust the main scanning, press the [▲] key.

(3) "▲ : FRONT ▼ : BACK" is displayed on the LCD.
Press [▼] key to adjust the first side.
Press [▲] key to adjust the second side.

(4) Press the [▲] key to adjust the compensation level in the positive direction or press the
[▼] key to adjust it in the negative direction.
(Compensation levels for sub scanning can be adjusted in 41 levels from +20 to -20.)
(Compensation levels for main scanning can be adjusted in 41 levels from +20 to -20.)

(5) When adjusting is completed, press the [SET] key. "ACCEPTED" is displayed on the
LCD, and the machine returns to the initial state of maintenance mode.
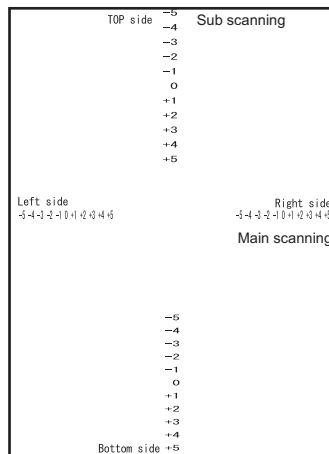
1.3.12 Acquire white level data and set CIS scan area (function code: 55)

<Function>

This function is used to save the scanning compensation data in EEPROM when the acquired data is within the standard. When it is not within the standard, it shows error.

<Operating Procedure>

(1) Wipe the first and second side CIS glass four times in the same direction with a cleaning cloth.

(2) Open the front cover and set it on the gray tape of the first side CIS unit so that the white part of the calibration sheet overlaps with it.

Longer side
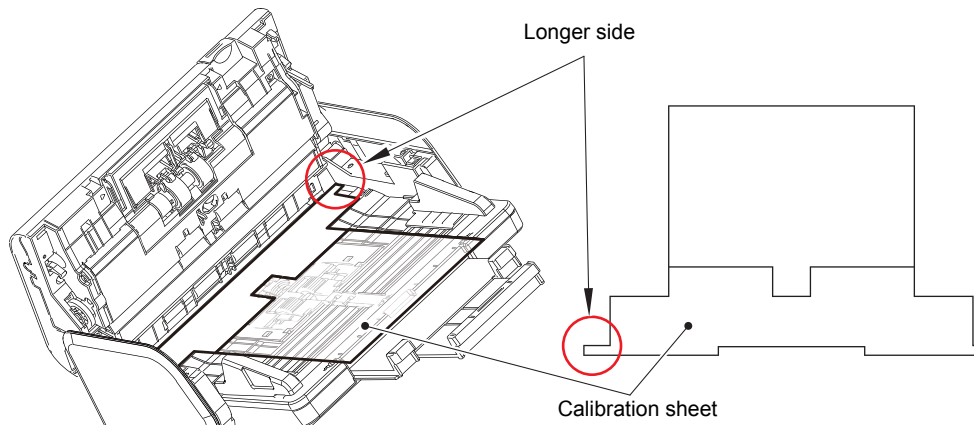
Calibration sheet

(3) Close the front cover.

(4) Press the [5] key twice in the maintenance mode. "Press START" is displayed on the LCD.

(5) Press the [Start] key.

(6) Once "Clear CS and Press Start Key" is displayed on the LCD, open the front cover and remove the calibration sheet.

(7) Close the front cover and press the [Start] key. The machine saves the scanning compensation data to EEPROM and returns to the initial state of maintenance mode.

(8) Wipe the first and second side CIS glass four times in the same direction with a cleaning cloth again.

(9) Turn OFF the power of the machine to finish it.

Note:

- If any error occurs on this operation, press the [Stop] key and return the machine to the initial state of maintenance mode. Then refer to the table below and start again from the procedure (1).

- Even no error is displayed, calibration sheet may be dirty or discolored if something is wrong on the scanned image after function code 55 was executed. In this case, replace the calibration sheet with a new one and operate the procedures again from (1).

Error display	Cause	Remedy
No Document	Calibration sheet is not set.	Set the calibration sheet.
Cover is Open	Front cover is open.	Close the front cover properly.
CS ERR U	Dirt on the second side CIS or calibration sheet (detected that the data acquired on the second side CIS was out of normal range)	Clean the second side CIS or calibration sheet.

Error display	Cause	Remedy
CS ERR L	Dirt on the first side CIS or calibration sheet (detected that the data acquired on the first side CIS was out of normal range)	Clean the first side CIS or calibration sheet.
CS ERR UL	Dirt on the first and second side CIS or calibration sheet (detected that the data acquired on the first and second side CIS was out of normal range)	Clean the first and second side CIS or calibration sheet.
Doc Set Pos ERR	Calibration sheet is set to the wrong position	Reset the calibration sheet.
GT ERR U	Dirt on the second side CIS or gray tape (detected that the data acquired on the gray tape of the second side CIS was out of normal range)	Clean the second side CIS unit. Or replace the second side CIS.
GT ERR L	Dirt on the first side CIS or gray tape (detected that the data acquired on the gray tape of the first side CIS was out of normal range)	Clean the first side CIS unit. Or replace the first side CIS.
GT ERR UL	Dirt on the first and second side CIS or calibration sheet (detected that the data acquired on the gray tape of the first and second side CIS was out of normal range)	Clean the first and second side CIS. Or replace the first and second side CIS.
REMOVE DOCUMENT	Calibration sheet is not removed	Remove the calibration sheet.

1.3.13 Adjust touch panel (function code: 61)

<Function>

This function is used to adjust the detection area on the touch panel.

Note:

• This adjustment requires a touch panel stylus with a thin tip. A commercially available stylus designed for electronic dictionaries or personal digital assistance (PDA) can be used. If one is not available at hand, order a "STYLUS" from Brother's parts list.

<Operating Procedure>

(1) Press the [6], and then the [1] key in the initial state of maintenance mode. The adjustment screen shown below appears on the LCD.

(2) Use a touch panel stylus and touch the center on the mark at the upper left corner of the screen. The mark disappears when touched, then touch the mark at the lower left. Similarly touch the mark at the lower right, upper right and center.

Note:

• Do not use any tools other than a touch panel stylus. In particular, never use a pointed tool (e.g. screwdriver). Using such a tool will damage the touch panel.

• Do not touch the touch panel with your fingers. The contact area of a finger is too large to adjust the touch panel precisely.

• If no operation is performed for one minute or the ⊠ key is pressed, the machine returns to the initial state of maintenance mode.
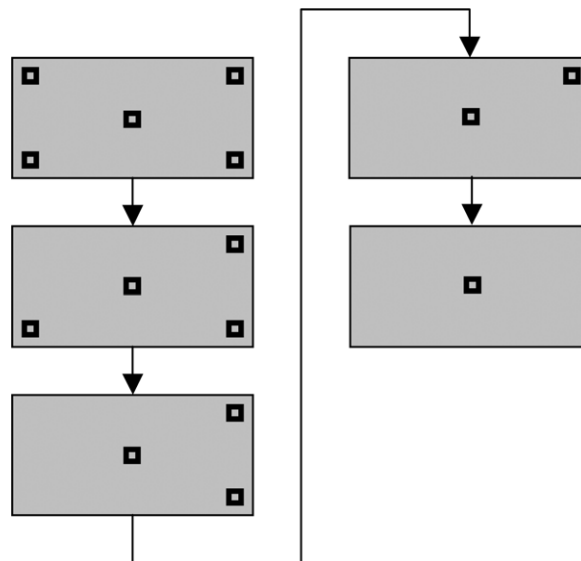
(3) When the center (5th mark) is touched, "OK" is displayed if the specified area was adjusted correctly. The machine returns to the initial state of maintenance mode.

Note:

• If "NG" is still displayed on the LCD even after this operation is repeated two to three times, check the connection of the touch panel harness. If the LCD keep displaying "NG" even there is no problem, replace the panel unit.

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1.3.14 Setting by country (function code: 74)

\<Function\>

This function is used to customize the machine according to language, function settings, and worker switch settings.

\<Operating Procedure\>

(1) Press the [7], and then the [4] key in the initial state of maintenance mode. The country code currently set is displayed on the LCD.

(2) Enter the country code (four digits) you want to set.

(3) Press the [Start] key to save the new setting, and "PARAMETER INIT" is displayed on the LCD. The machine then returns to the initial state of maintenance mode.

> **Note:**
> • If there is no entry for one minute or longer, the machine returns to the initial state of maintenance mode automatically, regardless of the display status.

\<Country code list\>

Country	ADS-2800W	ADS-3600W
Argentina	0036	0136
Brazil	0042	0142
Canada	0001	0101
Chile	0036	0136
China	0020	0120
EEU-General	0003	0103
Germany	0003	0103
Gulf	0041	0141
India	0040	—
Korea	0044	0144
Oceania	0006	0106
Pan-Nordic	0003	0103
Russia	0003	0103
Singapore/Asia	0040	0140
Taiwan	0023	0123
United Kingdom	0004	0104
U.S.A.	0001	0101

This code list is current as of August 2015. Please contact Brother for the latest information.

1.3.15 Display machine log information (function code: 80)

\<Function\>

This function is used to display the log information on the LCD.

\<Operating Procedure\>

(1) Press the [8], and then the [0] key in the initial state of maintenance mode.
"MACERR_01:****" is displayed on the LCD. ("****" indicates error code)

(2) Pressing the [Start] key displays the next item.
Pressing the [◀] key returns to the previous item.

(3) When the [✕] key is pressed, the machine returns to the initial state of maintenance mode.

Display information

LCD	Description
MACERR_##:0000	Machine error log (last ten errors) [*1]
USB:G1234567890	Serial number [*2]
MAC:008077112233	MAC address
PCB:911309123456	Main PCB serial number
POWER:00000375	Total power distribution time (hour)
PWRCNT:00000001	The number of times that the power is turned ON
SCN_PG:00000001	Number of scanned pages
ADTL_PG:00000001	Total scanned pages of ADSX_PG and ADDX_PG
ADSX_PG:00000001	ADF single-side scanned pages
ADDX_PG:00000001	ADF duplex scanned pages (duplex scanning models only)
ADSX_JAM:000000	Document jams that have occurred in ADF single-side scanning
ADDX_JAM:000000	Document jams that have occurred in ADF duplex scanning
COMERR#:00000000	Communication error log (past three errors) [*4] (models with fax only)
DEVSTATUS__##:00	Log for design analysis [*3]

[*1] 01 to 10 will be displayed for "##" in chronological order. Pressing the [SET] key while the machine error log is displayed shows "DATE:00000000 (date of the error)" on the LCD.

[*2] The serial number can be changed according to the steps below.

1) While the serial number is displayed, press the [9], [4], [7], and [5] keys in this order. The cursor appears on the first digit of the serial number and edit mode is entered.

2) Use the keypad to enter the first digit of the serial number. Press the [▶] key and the second digit starts to flash. Enter the second digit to the 15th digit similarly.

\<Entry method of alphanumeric characters\>

See the table below and press the corresponding key until the desired character is displayed.

Keypad	Assigned characters
2	2 → A → B → C
3	3 → D → E → F
4	4 → G → H → I
5	5 → J → K → L
6	6 → M → N → O
7	7 → P → Q → R → S
8	8 → T → U → V
9	9 → W → X → Y → Z

3) Press the [SET] key to save the new serial number. The machine returns to the initial state of maintenance mode.

[*3] 01 to 10 will be displayed for "##" in chronological order.

[*4] Pressing the [SET] key while the communication error is displayed shows "DATE:0000000000" and the date of replacement on the LCD.

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1.3.16 Display machine error code (function code: 82)

\<Function\>

This function is used to display the latest error code on the LCD.

\<Operating Procedure\>

(1) Press the [8], and then the [2] key in the initial state of maintenance mode. "MACHINE ERR XXXX" is displayed on the LCD.

(2) When the ☒ key is pressed, the machine returns to the initial state of maintenance mode.

1.3.17 Quit maintenance mode (function code: 99)

\<Function\>

This function is used to quit the maintenance mode, restart the machine, and return it to the ready state. Also forcefully close the fuser unit error.

\<Operating Procedure\>

(1) Press the [9] key twice in the initial state of maintenance mode. The machine quits maintenance mode and returns to the ready state.

CHAPTER 6 WIRING DIAGRAM

1. WIRING DIAGRAM

LCD

Panel PCB

CN4 21
20 D17
19 D16
18 D15
17 D14
16 D13
15 D12
14 D11
13 D10
12 GND
11 FMARK
10 IOVCC
9 VCC
8 GND
7 RESET
6 CS
5 RS
4 GND
3 WR
2 RD
1 LED+
LED-

Main PCB

CN12 25 VDD5.3
24 POWER_ON
23 TE
22 INT
21 VDD3
20 SDA
19 S0V
18 SCL
17 S0V
16 MAIN_TXD
15 MAIN_RXD
14 RST
13 S0V
12 DATAON
11 DATA0P
10 S0V
9 DATAIN
8 DATA1P
7 S0V
6 CLKN
5 CLKP
4 S0V
3 VDD3
2 S0V
1 VDD24

Wireless LAN

8 CN17 WLAN_CMD
7 SDIO_DATA2
6 WLAN_CLK
5 SDIO_DATA3
4 SDIO_DATA1
3 SDIO_DATA0
2 VDD3
1 S0V

Document scanning position sensor

Document detection sensor

6 CN7 LED_3.3V
5 SGND
4 SEN_REAR
3 LED_VCC
2 SGND
1 SEN_FRONT

Duplex Scanning Speed 100 ipm model only

Eject jam sensor

Paper feed jam sensor

6 CN3 LED_3.3V
5 SGND
4 JAM_SEN_C
3 LED_3.3V
2 SGND
1 JAM_SEN_B

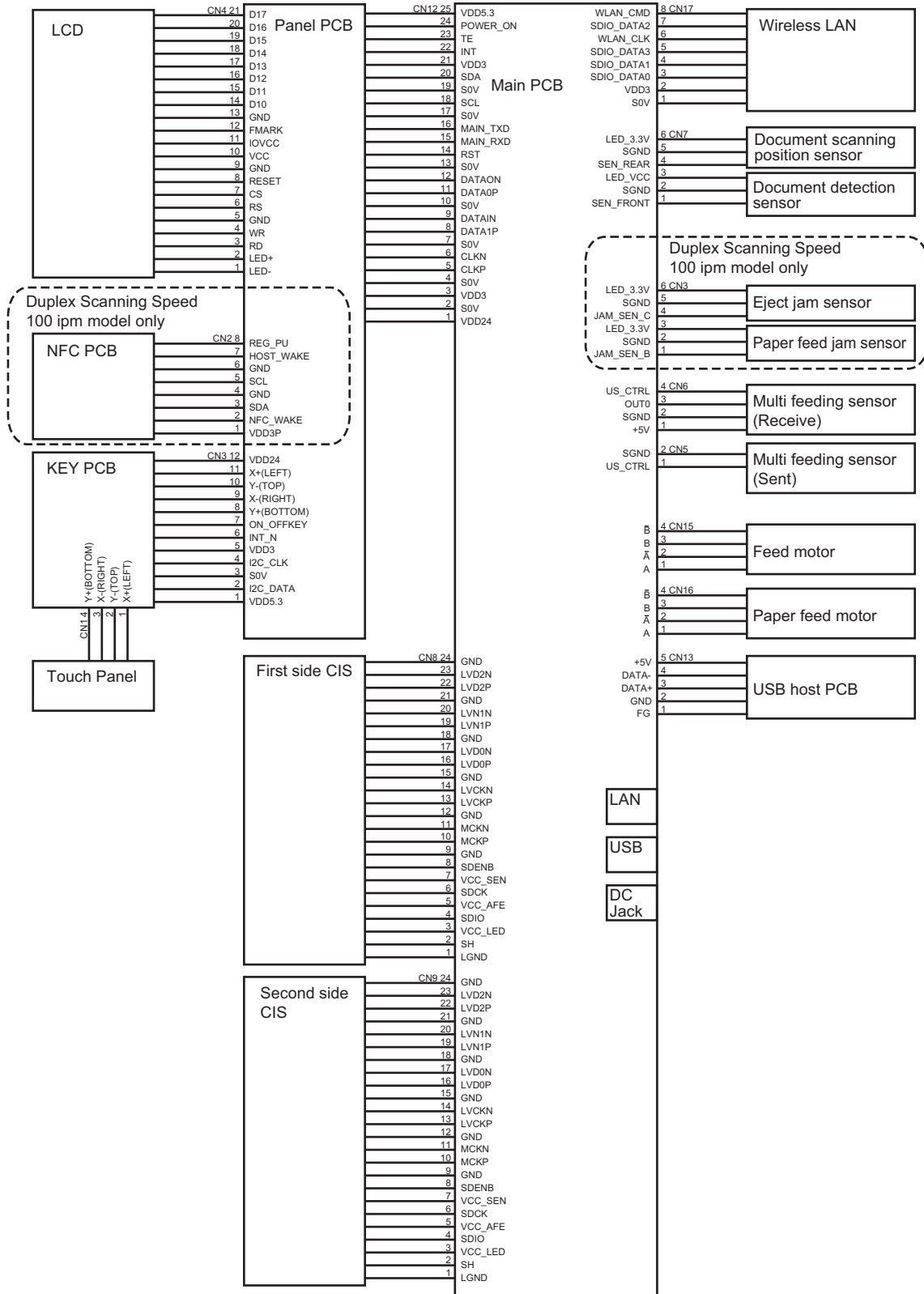Duplex Scanning Speed 100 ipm model only

NFC PCB

CN2 8 REG_PU
7 HOST_WAKE
6 GND
5 SCL
4 GND
3 SDA
2 NFC_WAKE
1 VDD3P

Multi feeding sensor (Receive)

4 CN6 US_CTRL
3 OUT0
2 SGND
1 +5V

Multi feeding sensor (Sent)

2 CN5 SGND
1 US_CTRL

KEY PCB

CN3 12 VDD24
11 X+(LEFT)
10 Y-(TOP)
9 X-(RIGHT)
8 Y+(BOTTOM)
7 ON_OFFKEY
6 INT_N
5 VDD3
4 I2C_CLK
3 S0V
2 I2C_DATA
1 VDD5.3

Feed motor

4 CN15 B̄
3 B
2 Ā
1 A

Paper feed motor

4 CN16 B̄
3 B
2 Ā
1 A

Touch Panel

CN1 4 Y+(BOTTOM)
3 X-(RIGHT)
2 Y-(TOP)
1 X+(LEFT)

USB host PCB

5 CN13 +5V
4 DATA-
3 DATA+
2 GND
1 FG

First side CIS

CN8 24 GND
23 LVD2N
22 LVD2P
21 GND
20 LVN1N
19 LVN1P
18 GND
17 LVD0N
16 LVD0P
15 GND
14 LVCKN
13 LVCKP
12 GND
11 MCKN
10 MCKP
9 GND
8 SDENB
7 VCC_SEN
6 SDCK
5 VCC_AFE
4 SDIO
3 VCC_LED
2 SH
1 LGND

LAN

USB

DC Jack

Second side CIS

CN9 24 GND
23 LVD2N
22 LVD2P
21 GND
20 LVN1N
19 LVN1P
18 GND
17 LVD0N
16 LVD0P
15 GND
14 LVCKN
13 LVCKP
12 GND
11 MCKN
10 MCKP
9 GND
8 SDENB
7 VCC_SEN
6 SDCK
5 VCC_AFE
4 SDIO
3 VCC_LED
2 SH
1 LGND

CHAPTER 7 PERIODICAL MAINTENANCE

1. PERIODICAL MAINTENANCE PARTS

There are no parts that must be replaced periodically.

APPENDIX 1 SERIAL NUMBERING SYSTEM
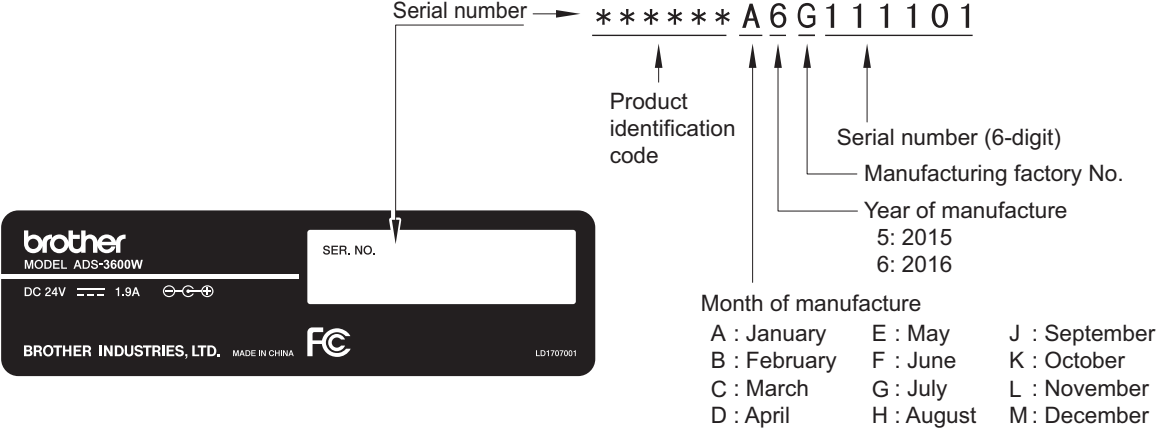
■ **Serial number label (1 location)**

<How to Read>

Serial number ⟶ ＊＊＊＊＊＊ A 6 G 1 1 1 1 0 1

Product identification code

Serial number (6-digit)

Manufacturing factory No.

Year of manufacture
5: 2015
6: 2016

Month of manufacture

A : January	E : May	J : September
B : February	F : June	K : October
C : March	G : July	L : November
D : April	H : August	M : December

MODEL ADS-3600W

SER. NO.

DC 24V ⎓ 1.9A

BROTHER INDUSTRIES, LTD. MADE IN CHINA

LD1707001

Fig. App. 1-1

<Location>
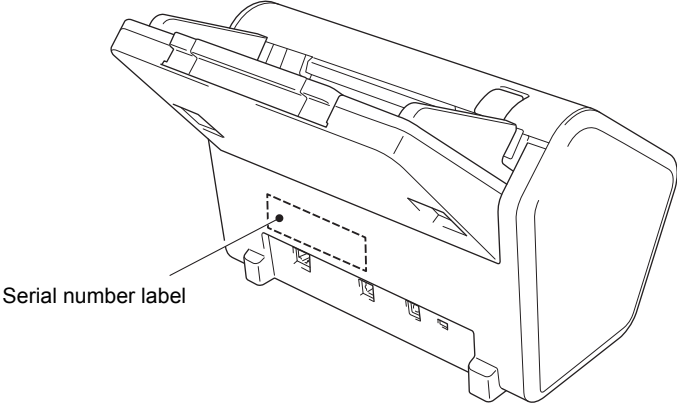

Serial number label

Fig. App. 1-2

APPENDIX 2 DELETING USER SETTING INFORMATION

Initializes setting values registered in EEPROM including operation parameter and user switch.

<Operation Procedure>

(1) Press the [ ] key.

(2) Press the [▲] or [▼] key to display "Initial Setup" on the LCD, and press the [Reset] box.

(3) Press the [Factory Reset] box.

(4) Press and hold the [Yes] key. The EEPROM is initialized, and the machine returns to the ready state.

Confidential

APPENDIX 3 INSTALLING THE MAINTENANCE PRINTER DRIVER

To identify multiple terminals connected to the computer via USB, the computer needs to configure the corresponding number of virtual USB devices using a driver or software. If you connect multiple machines to your computer, the same number of virtual USB devices will be automatically configured on your computer. To prevent an unlimited number of virtual USB devices from being configured, use the unique driver installation procedure described below to enable your computer to identify multiple terminals via one single virtual USB device.

\<Operating Procedure\>

(1) Check that the AC power cord of the machine is unplugged. When the machine is connected to the computer, disconnect the USB cable.

(2) Turn ON the power switch of the computer.

(3) Press and hold the [⌂] key. The four boxes appear on the LCD.

(4) Press the 4th box with no display. The display of numeric keys and others appear on the LCD.

(5) Press the [*], [2], [8], [6], and [4] keys on the LCD in this order. The machine enters into the initial state of maintenance mode.

(6) Double-click "maintenance.exe" for the maintenance driver stored in the temporary folder to execute it.

(7) The Device Driver Installation Wizard startup window appears. Click the [Next].

(8) The WHQL alert window appears three times. Click the [Continue Anyway] on each window to continue installation.

(9) The Device Driver Installation Wizard completion window appears. Click the [Finish].

(10) Connect the machine to your computer using the USB cable.

(11) The Found New Hardware Wizard startup window appears. Select "Install the software automatically" and click the [Next].

(12) The WHQL alert window appears. Click the [Continue Anyway].

(13) When the driver is installed successfully, the Found New Hardware Wizard completion window appears. Click the [Finish].

(14) Repeat steps (11) to (13) three times to complete the unique driver installation procedure.

(15) Disconnect the USB cable, and unplug the AC power cord of the machine.