KYOCERa

TASKalfa 3500i TASKalfa 4500i TASKalfa 5500i



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CAUTION

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

It may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for proper disposal.

ATTENTION

IL Y A UN RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACEE PAR UN MODELE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES UTILISEES SELON LES INSTRUCTIONS DONNEES.

Il peut être illégal de jeter les batteries dans des eaux d'égout municipales. Vérifiez avec les fonctionnaires municipaux de votre région pour les détails concernant des déchets solides et une mise au rebut appropriée.

Revision history

Revision	Date	Replaced pages	Remarks
1	July 25, 2011	Contents, 1-1-1 to 1-1-4,1-2-5,1-2-7,1-2-9,1-2-10, 1-2-12 to 1-2-16,1-2-18,1-2-22,1-2-23,1-2-24,1-2-27, 1-2-28,1-2-36,1-2-39,1-2-40,1-2-44,1-2-45,1-2-61, 1-2-68 to 1-2-99,1-3-2 to 1-3-8,1-3-15 to 1-3-21, 1-3-25,1-3-26,1-3-29,1-3-30,1-3-34,1-3-35,1-3-38, 1-3-39,1-3-42 to 1-3-44,1-3-47 to 1-3-50,1-3-52 to 1-3-56,1-3-67 to 1-3-71,1-3-73 to 1-3-76,1-3-78, 1-3-80 to 1-3-85,1-3-87,1-3-90,1-3-91,1-3-94, 1-3-95,1-3-101 to 1-3-103,1-3-105,1-3-127,1-3-129, 1-3-130,1-3-133,1-3-135,1-3-139 to 1-3-142, 1-3-146,1-3-148,1-3-149,1-3-154 to 1-3-156, 1-3-158,1-3-159,1-3-161,1-3-171,1-3-173,1-3-175, 1-3-176,1-3-178,1-4-3,1-4-5,1-4-7 to 1-4-16,1-4-20, 1-4-21,1-4-23 to 1-4-30,1-4-32 to 1-4-39,1-4-42 to 1-4-44,1-4-47,1-4-48,1-4-52 to 1-4-55,1-4-57,1-4-58, 1-4-60,1-4-62,1-4-64 to 1-4-66,1-4-68,1-4-70 to 1-4-78,1-4-81 to 1-4-85,1-5-6,1-5-9,1-5-10,1-5-22 to 1-5-25,1-5-27,1-5-29,1-5-30,1-5-32,1-5-36 to 1-5-38,1-5-41,1-5-43,1-5-46 to 1-5-48,1-5-62,1-5-66, 1-5-67,1-5-69,1-5-71 to 1-5-78,1-6-1,1-6-2,2-1-17, 2-1-18,2-1-21,2-2-1,2-2-9,2-3-20 to 2-3-22,2-3-39, 2-3-47,2-3-48,2-3-68,2-3-72 to 2-3-74,2-4-1,2-4-3 to 2-4-9	-
2	September 30, 2011	Contents, 1-2-18,1-2-27,1-2-28,1-2-36,1-2-59, 1-2-76,1-2-90,1-3-45,1-3-149,1-3-156,1-4-33, 1-4-35,1-4-38 to 1-4-41,1-4-58 to 1-4-60,1-5-23, 1-5-32,1-5-37,1-5-50,1-5-76,1-6-1 to 1-6-4,2-1-21, 2-2-9,2-4-1 to 2-4-7	-
3	April 12, 2013	Contents, 1-2-10,1-2-15,1-2-18,1-2-19,1-2-65, 1-2-67,1-3-5,1-3-13,1-3-29 to 1-3-32,1-3-62,1-3-130, 1-3-154,1-3-162 to 1-3-165,1-4-2 to 1-4-5,1-4-23 to 1-4-60,1-4-62 to 1-4-211,1-5-2,1-5-22 to 1-5-25, 1-5-27 to 1-5-30,1-5-43,1-5-87,1-5-88,1-6-2,2-4-7 to 2-4-9,2-4-15,2-4-17 to 2-4-35	-
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КУОСЕКА

Safety precautions

This booklet provides safety warnings and precautions for our service personnel to ensure the safety of their customers, their machines as well as themselves during maintenance activities. Service personnel are advised to read this booklet carefully to familiarize themselves with the warnings and precautions described here before engaging in maintenance activities.

Safety warnings and precautions

Various symbols are used to protect our service personnel and customers from physical danger and to prevent damage to their property. These symbols are described below:

- **ADANGER:** High risk of serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.
- **WARNING:** Serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.
- **CAUTION:** Bodily injury or damage to property may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

Symbols

The triangle (\triangle) symbol indicates a warning including danger and caution. The specific point of attention is shown inside the symbol.



General warning.

Warning of risk of electric shock.



Warning of high temperature.

⊘indicates a prohibited action. The specific prohibition is shown inside the symbol.



General prohibited action.



Disassembly prohibited.

indicates that action is required. The specific action required is shown inside the symbol.



General action required.



Remove the power plug from the wall outlet.



Always ground the copier.

1. Installation Precautions

WARNING

- Do not use a power supply with a voltage other than that specified. Avoid multiple connections to one outlet: they may cause fire or electric shock. When using an extension cable, always check that it is adequate for the rated current.
- Connect the ground wire to a suitable grounding point. Not grounding the copier may cause fire or electric shock. Connecting the earth wire to an object not approved for the purpose may cause explosion or electric shock. Never connect the ground cable to any of the following: gas pipes, lightning rods, ground cables for telephone lines and water pipes or faucets not approved by the proper authorities.



A CAUTION:

•	Do not place the copier on an infirm or angled surface: the copier may tip over, causing injury	\bigcirc
•	Do not install the copier in a humid or dusty place. This may cause fire or electric shock	\bigcirc
•	Do not install the copier near a radiator, heater, other heat source or near flammable material. This may cause fire.	\bigcirc
•	Allow sufficient space around the copier to allow the ventilation grills to keep the machine as cool as possible. Insufficient ventilation may cause heat buildup and poor copying performance	\bigcirc
•	Always handle the machine by the correct locations when moving it.	0
•	Always use anti-toppling and locking devices on copiers so equipped. Failure to do this may cause the copier to move unexpectedly or topple, leading to injury.	0
•	Avoid inhaling toner or developer excessively. Protect the eyes. If toner or developer is accidentally ingested, drink a lot of water to dilute it in the stomach and obtain medical attention immediately. If it gets into the eyes, rinse immediately with copious amounts of water and obtain medical attention.	0
•	Advice customers that they must always follow the safety warnings and precautions in the copier's instruction handbook.	0

2. Precautions for Maintenance

 Always 	s remove the power plug from the wall outlet before starting machine disassembly.	
-	s follow the procedures for maintenance described in the service manual and other related ires.	\bigcirc
	no circumstances attempt to bypass or disable safety features including safety mechanisms otective circuits.	\bigcirc
 Always 	s use parts having the correct specifications.	\bigcirc
when r	s use the thermostat or thermal fuse specified in the service manual or other related brochure replacing them. Using a piece of wire, for example, could lead to fire or other serious acci-	0
	the service manual or other serious brochure specifies a distance or gap for installation of a ways use the correct scale and measure carefully.	0
 Always 	s check that the copier is correctly connected to an outlet with a ground connection.	ł
	that the power cable covering is free of damage. Check that the power plug is dust-free. If it , clean it to remove the risk of fire or electric shock.	0
	attempt to disassemble the optical unit in machines using lasers. Leaking laser light may le eyesight.	
	e the charger sections with care. They are charged to high potentials and may cause electric if handled improperly.	
•		

•	Wear safe clothing. If wearing loose clothing or accessories such as ties, make sure they are safely secured so they will not be caught in rotating sections.	\triangle
	Use utmost caution when working on a powered machine. Keep away from chains and belts	•
•	Handle the fixing section with care to avoid burns as it can be extremely hot.	
•	Check that the fixing unit thermistor, heat and press rollers are clean. Dirt on them can cause abnormally high temperatures.	0

Do not remove the ozone filter, if any, from the copier except for routine replacement	\bigcirc
 Do not pull on the AC power cord or connector wires on high-voltage components when removing them; always hold the plug itself. 	\bigcirc
• Do not route the power cable where it may be stood on or trapped. If necessary, protect it with a cable cover or other appropriate item.	\bigcirc
• Treat the ends of the wire carefully when installing a new charger wire to avoid electric leaks	0
Remove toner completely from electronic components.	\triangle
Run wire harnesses carefully so that wires will not be trapped or damaged	0
 After maintenance, always check that all the parts, screws, connectors and wires that were removed, have been refitted correctly. Special attention should be paid to any forgotten connector, trapped wire and missing screws. 	0
Check that all the caution labels that should be present on the machine according to the instruction handbook are clean and not peeling. Replace with new ones if necessary.	0
 Handle greases and solvents with care by following the instructions below:	0
Never dispose of toner or toner bottles in fire. Toner may cause sparks when exposed directly to fire in a furnace, etc.	\bigcirc
Should smoke be seen coming from the copier, remove the power plug from the wall outlet immediately.	

3. Miscellaneous

WARNING

•	Never attempt to heat the drum or expose it to any organic solvents such as alcohol, other than the specified refiner; it may generate toxic gas.	\bigcirc
•	Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.	\bigcirc

•	Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock
	might occur.

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INSTALLATION GUIDE

DOCUMENT PROCESSOR
PAPER FEEDER
LARGE CAPACITY FEEDER
SIDE DECK
1000-SHEETS FINISHER
4000-SHEETS FINISHER
FINISHER ATTACHMENT KIT
CENTER-FOLDING UNIT
MAILBOX
PUNCH UNIT
INNER JOB SEPARATOR
100-SHEETS INNER JOB SEPARATOR
RIGHT JOB SEPARATOR
BANNER GUIDE
FAX System
DOCUMENT TABLE

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1-1-1 Specifications

Machine

Item		Specifications			
		35 ppm	45 ppm	55 ppm	
Туре		Desktop			
Printing	method	Electrophotography by semiconductor laser			
Origi	inals	Sheet, Book, 3-dimensional objects (maximum original size: A3/Ledge		ginal size: A3/Ledger)	
Original fe	ed system	Fixed			
b	Cassette	60 to 220 g/m ²			
Paper weight	MP tray	60 to 300 g/m ²			
Denertura	Cassette	Plain, Rough, Vellum, Recycled, Preprinted, Bond, Color (Colour) Prepunched, Letterhead, Thick, High Quality, Custom 1 to 8 (Duplex: Same as simplex)		. ,	
Paper type MP tray		Plain, Transparency (OHP film), Rough, Vellum, Labels, Recycled, Preprinted, Bond, Cardstock, Color (Colour), Prepunched, Letterhead, Thick, Coated, Envelope, High Quality, Custom 1 to 8			
	Cassette	A3, B4, A4, A4R, B5, B5R, A5R, Ledger, Legal, Letter, LetterR, StatementR, Oficio II, 12 × 18", Folio, 8K, 16K, 16KR			
Paper size	MP tray	A3, B4, A4, A4R, B5, ISO B5, B5R, A5R, B6R, A6R, Return postcard Postcards, Envelope DL, Envelope C5, Envelope C4, Envelope #10 (Commercial #10), Envelope #9 (Commercial #9), Envelope #6 (Commercial #6 3/4), Envelope Monarch, Youkei 2, Youkei 4, Ledge Legal, Letter, LetterR, ExecutiveR, StatementR, Oficio II, 12 × 18", F 8K, 16K, 16KR, Custom			
Zoom	Zoom level Manual mode : 25 to 400%, 1% increments Auto mode : Preset Zoom				
Copying speed		A4: 35 ppmLetter: 35 ppmA4R: 24 ppmLetterR: 24 ppmA3: 17 ppmLedger: 17 ppmB4: 21 ppmLegal: 21 ppmB5: 35 ppm	A4 : 45 ppm Letter : 45 ppm A4R : 31 ppm LetterR : 31 ppm A3 : 22 ppm Ledger : 22 ppm B4 : 27 ppm Legal : 27 ppm B5 : 45 ppm	A4 : 55 ppm Letter : 55 ppm A4R : 38 ppm LetterR : 38 ppm A3 : 27 ppm Ledger : 27 ppm B4 : 33 ppm Legal : 33 ppm B5 : 55 ppm	
First print time5.6 s or less4.7 s or less4.3 s or less(A4, feed from cassette)5.6 s or less4.7 s or less4.3 s or less		4.3 s or less			
Warm-up	Power on	23 s or less	23 s or less	23 s or less	
time (22 °C/71.6	Low Power	10 s or less	10 s or less	10 s or less	
°F, 60% RH)	Sleep	16 s or less	16 s or less	16 s or less	

ltem		Specifications		
		35 ppm	45 ppm	55 ppm
Cassette		550 sheets (64 g/m²) 500 sheets (80 g/m²)		
Paper capacity	MP tray	A4/Letter or less 165 sheets (64 g/m ²) 150 sheets (80 g/m ²) More than A4/Letter 55 sheets (64 g/m ²) 50 sheets (80 g/m ²)		
	Inner tray	250 sheets (80 g/m ²)		
Output tray capacity	with inner job separator	30 sheets (80 g/m ²)		
	with right job separator	70 sheets (80 g/m ²)		
Continuous copying		1 to 999 sheets		
Light	source	LED		
Scanning system		Flat bed scanning by CC	D image sensor	
Photoconductor a-Si (d		a-Si (drum diameter 40 n	าm)	
Image write system		Semiconductor laser		
Charging	Charging system Charger roller			
Developing system		Touch down developing system Developer: 2-component Toner replenishing: Automatic from the toner container and toner hopper		
Transfer system		Transfer belt and roller		
Separatio	Separation system Small diameter separation			
Cleaning system Counter blade, Cleaning roller				
Charge erasing system		Exposure by cleaning lamp (LED)		
Fusing system		Heat roller fusing Heat source: Halogen heaters Abnormally high temperature protection devices: thermostat		
CI	PU	PowerPC 750CL/600 MHz		
Main	Standard	1024 MB		
memory Maximum 2048 MB				
Hard Disk		160 GB (standard)		
Interface	Standard	USB Interface connector: 1 (Hi-Speed USB) USB port: 2 (Hi-Speed USB) Network interface: 1 (10 BASE-T/100 BASE-TX/1000 BASE-T)		D0 BASE-T)
	Option	Fax slot: 2 Network interface: 1 (10	BASE-T/100 BASE-TX/100	00 BASE-T)
Resolution 600 × 600 dpi				

ltem		Specifications		
116	;111	35 ppm 45 ppm 55 ppm		55 ppm
	Temperature	Ire 10 to 32.5 °C/50 to 90.5 °F		
Operating	Humidity	15 to 80% RH		
environment	Altitude	2,500 m/8,202 ft or less		
	Brightness	1,500 lux or less		
machine 668 × 767 × 747 mm Dimensions only 26 5/16 × 30 3/16 × 29 3/8"		/8"		
(W × D × H)	with paper feeder	668 × 767 × 1053 mm 26 5/16 × 30 3/16 × 41 7	/16"	
Space required (W × D)		977 × 767 mm (using MP tray) 38 7/16 × 30 3/16" (using MP tray)		
Weight 82 kg / 180.8 lb				
Power source 120 V AC, 60 Hz, more than 12.0 A 220 - 240 V AC, 50/60 Hz, more than 7.2 A				
Options		Document processor, Original cover, Paper feeder, Large capacity feeder, Side deck, 1000-sheet finisher, 4000-sheet finisher, Center-folding unit, Mailbox, Punch unit, Inner job separator, Right job separator, Key counter, Fax kit, Expansion memory, Internet fax kit (A), Data security kit, Printed document guard kit, Emulation option kit, Gigabit ethernet board, Document table, IC card reader holder and keyboard holder		

Printer

Item	Specifications	
Printing speed	Same as copying speed.	
Resolution	600 x 600 dpi	
Operating system	Windows XP, Windows Server 2003, Windows Vista, Windows 7, Windows Server 2008, Apple Macintosh OS 10.x	
Interface	USB interface connector: 1 (Hi-Speed USB) Network interface: 1 (10BASE-T/100BASE-TX/1000BASE-T)	
Page description language	PRESCRIBE	

Scanner

ltem		Specifications	
System requi	rements	CPU: 600 MHz or higher RAM: 128 MB or more	
Resoluti	on	600 dpi, 400 dpi, 300 dpi, 200 dpi, 200 ×100 dpi, 200 × 400 dpi	
File format		TIFF, JPEG, XPS, PDF (MMR/JPEG compression), PDF (high compression)	
Scanning speed (A4 landscape, 300 dpi,	Simplex	B/W : 80 images/min Color: 50 images/min	
Image quality: Text/Photo orig- inal)*1	Duplex	B/W : 160 images/min Color: 80 images/min	
Interfac	e	Ethernet (10 BASE-T/100 BASE-TX/1000 BASE-T)	
Network pro	otocol	TCP/IP	
Transmission system		PC transmission SMB Scan to SMB FTP Scan to FTP, FTP over SSL E-mail transmission SNTP Scan to E-mail TWAIN scan ^{*2} WIA scan ^{*3}	

*1 When using the dual scan document processor (except TWAIN and WIA scanning)

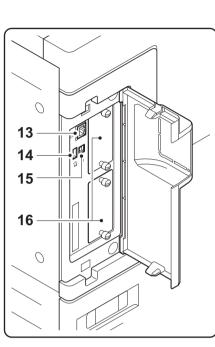
*2 Available operating system: Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008, Windows 7

*3 Available operating system: Windows Vista, Windows 7, Windows Server 2008

NOTE: These specifications are subject to change without notice.

1-1-2 Parts names

(1) Machine



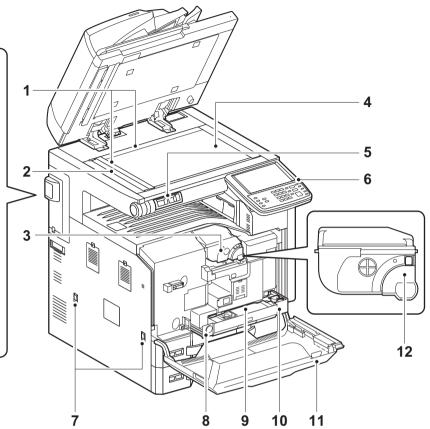


Figure 1-1-1

- 1. Original size indicator plate
- 2. Slit glass
- 3. Toner container
- 4. Platen (Contact glass)
- 5. Clip holder
- 6. Operation panel
- 7. Handles
- 8. Release button

- 9. Waste toner box
- 10. Waste toner tray
- 11. Front cover
- 12. Toner container release lever
- 13. Network interface connector
- 14. USB port
- 15. USB interface connector
- 16. Option interface

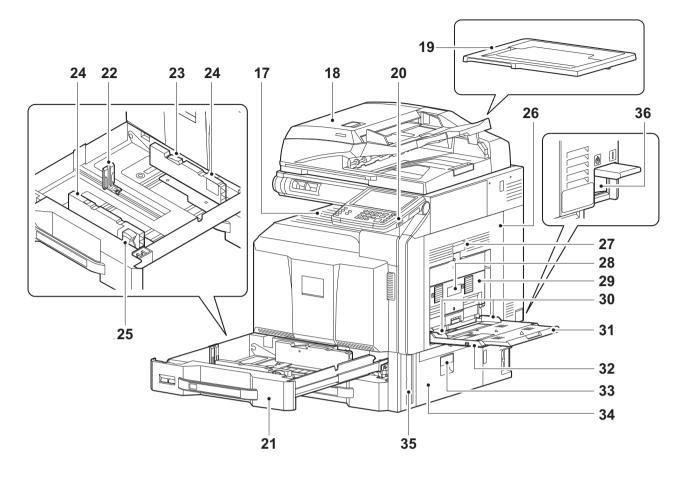


Figure 1-1-2

- 17. Inner tray
- 18. Document processor (option)
- 19. Original cover (option)
- 20. USB port
- 21. Cassettes
- 22. Paper length guide
- 23. Guide lock lever
- 24. Paper width guide
- 25. Paper width adjusting tab
- 26. Paper conveying unit

- 27. Paper conveying unit lever
- 28. Duplex cover lever
- 29. Duplex cover
- 30. MP paper width guide
- 31. MP support Tray
- 32. MP (Multi-Purpose) tray
- 33. Paper conveying cover lever
- 34. Paper conveying cover
- 35. Handle
- 36. Main power switch

(2) Option

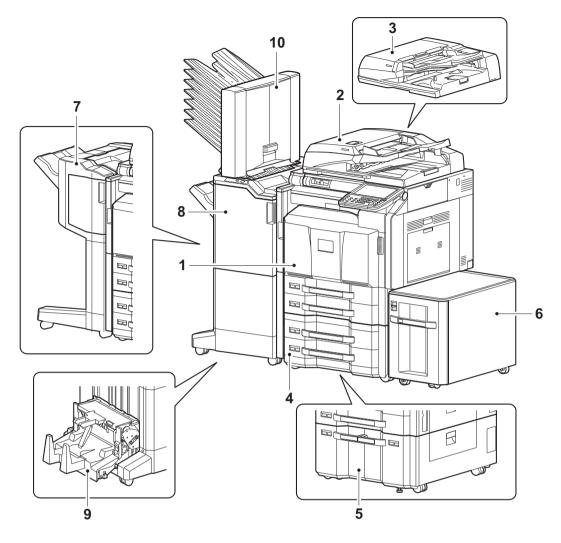
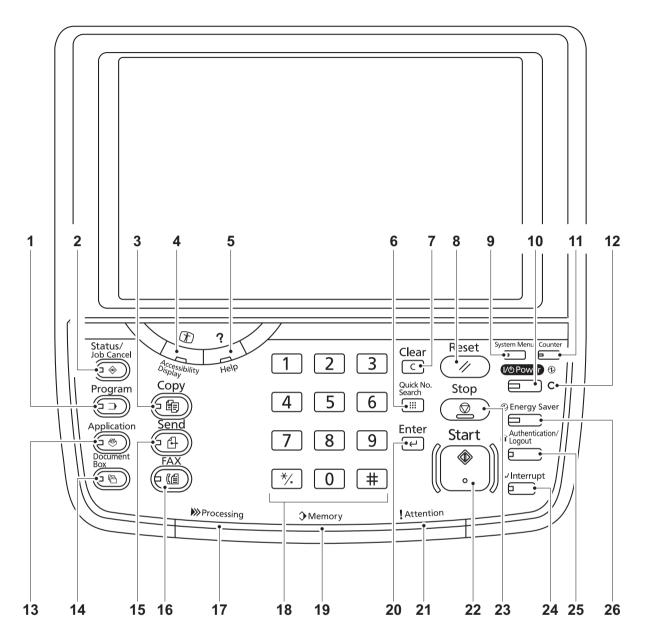


Figure 1-1-3

- 1. Machine
- 2. Document processor (dual scan DP)
- 3. Document processor (reversed DP)
- 4. Paper feeder
- 5. Large capacity feeder

- 6. Side deck
- 7. 1000-sheet finisher
- 8. 4000-sheet finisher
- 9. Center-folding unit
- 10. Mailbox

(3) Operation panel





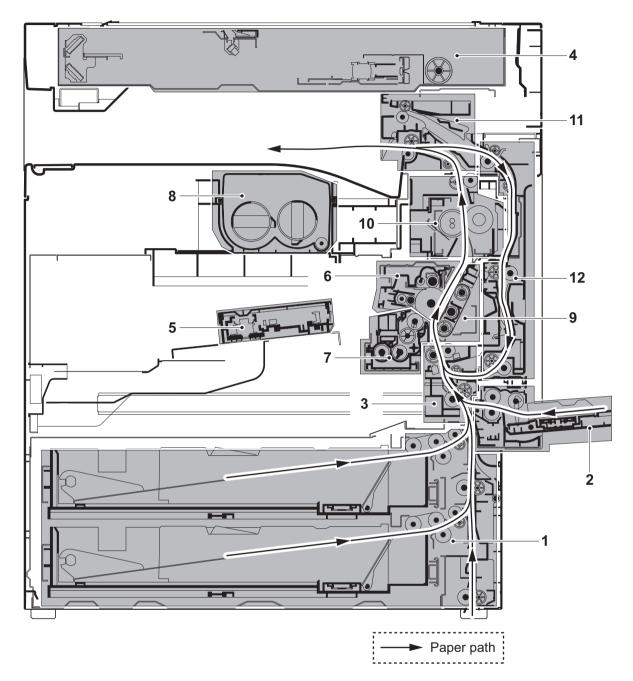
- 1. Program key
- 2. Status/Job cancel key
- 3. Copy key
- 4. Accessibility display key
- 5. Help key
- 6. Quick no. search key
- 7. Clear key
- 8. Reset key
- 9. System menu key

- 10. Power key
- 11. Counter key
- 12. Main power indicator
- 13. Application key
- 14. Document box key
- 15. Send key
- 16. FAX key*
- 17. Processing indicator
- 18. Numeric keys

- 19. Memory indicator
- 20. Enter key
- 21. Attention indicator
- 22. Start key
- 23. Stop key
- 24. Interrupt key
- 25. Authentication/Logout key
- 26. Energy saver key

*: Option

1-1-3 Machine cross section





- 1. Cassette paper feed section
- 2. MP tray paper feed section
- 3. Paper conveying section
- 4. Optical section
- 5. Laser scanner unit
- 6. Drum unit

- 7. Developer unit
- 8. Toner container section
- 9. Transfer/Separation sections
- 10. Fuser section
- 11. Eject/Feed shift sections
- 12. Duplex section

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1-2-1 Installation environment

- 1. Temperature: 10 to 32.5°C/50 to 90.5°F
- 2. Humidity: 15 to 80% RH
- 3. Power supply: 120 V AC, 12.0 A

220 - 240 V AC, 7.2 A

- 4. Power source frequency: 50 Hz \pm 2%/60 Hz \pm 2%
- 5. Installation location

Avoid direct sunlight or bright lighting. Ensure that the photoconductor will not be exposed to direct sunlight or other strong light when removing paper jams.

Avoid locations subject to high temperature and high humidity or low temperature and low humidity; an abrupt change in the environmental temperature; and cool or hot, direct air.

Avoid places subject to dust and vibrations.

Choose a surface capable of supporting the weight of the machine.

Place the machine on a level surface (maximum allowance inclination: 1°).

Avoid air-borne substances that may adversely affect the machine or degrade the photoconductor, such as mercury, acidic of alkaline vapors, inorganic gasses, NOx, SOx gases and chlorine-based organic solvents.

Select a well-ventilated location.

6. Allow sufficient access for proper operation and maintenance of the machine.

Machine front: 100 cm/39 3/8"

Machine rear : 10 cm/ 3 15/16"

Machine right: 35 cm/13 3/4"

Machine left : 30 cm/11 13/16"

Machine top : 40 cm/15 3/4"

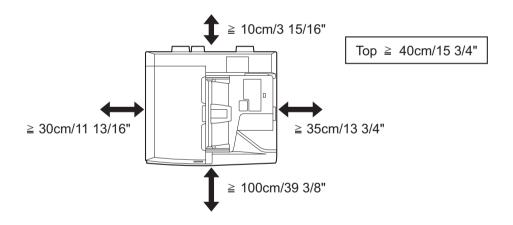
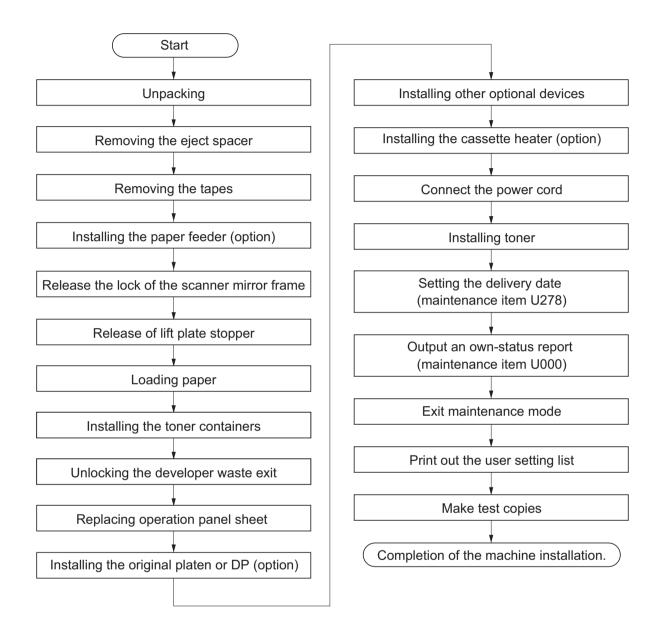


Figure 1-2-1

1-2-2 Unpacking and installation

(1) Installation procedure



Moving the machine

When moving the machine, pull out three carrying handles, and move with carrying handles and the handhold.

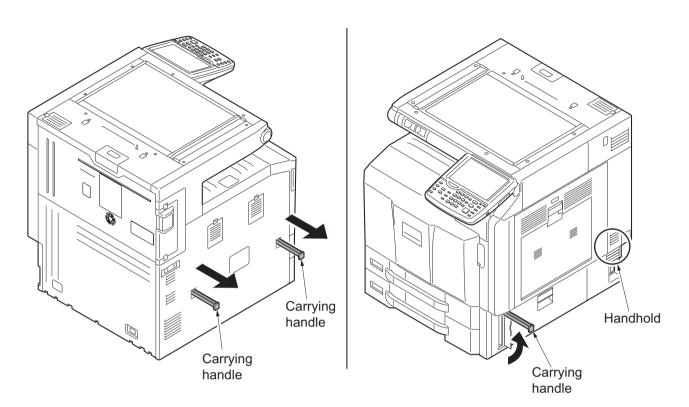
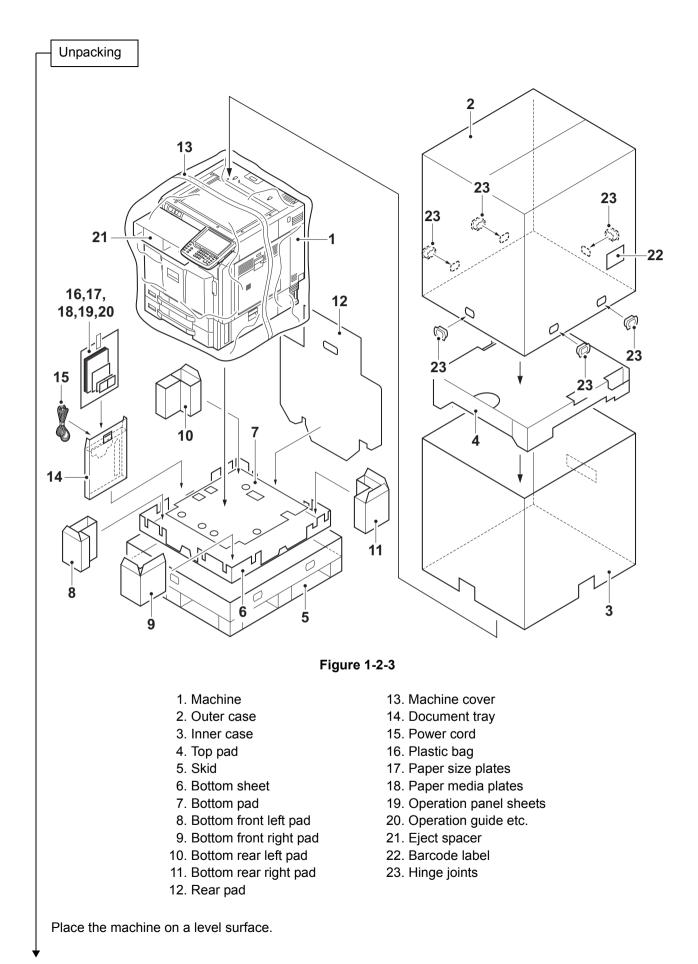
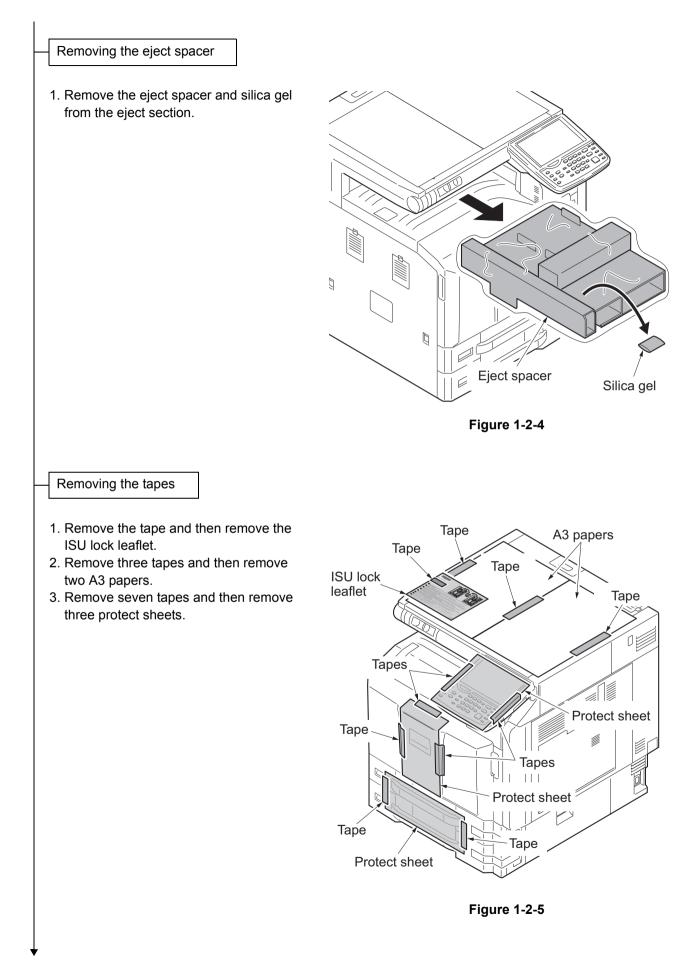
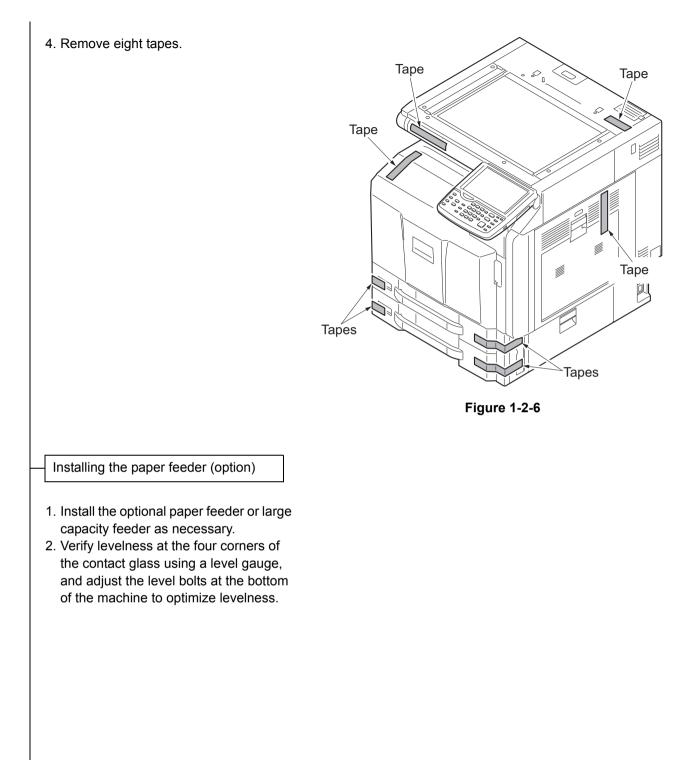


Figure 1-2-2







Release the lock of the scanner mirror frame

- 1. Remove the scanner lock cover.
- 2. Mount the scanner lock cover in the reverse manner to restore in the original location.
- *: Unless unlocking is performed, C3100 is caused.

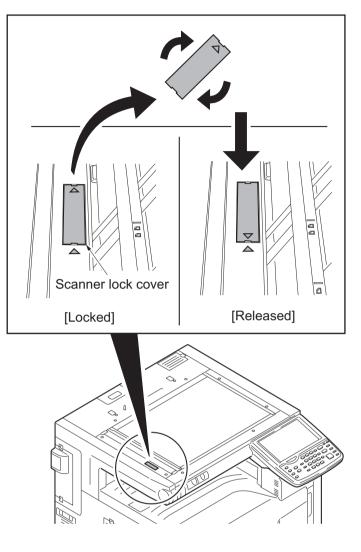
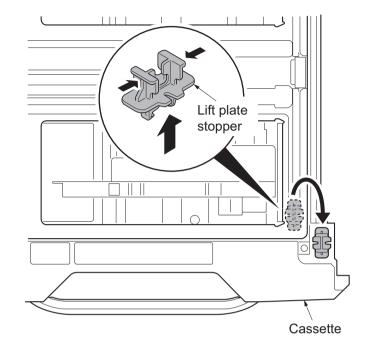


Figure 1-2-7

Release of lift plate stopper

- 1. Pull cassette 1 and 2 out.
- 2. Remove the lift plate stopper from each cassette and attach it to the storage location.

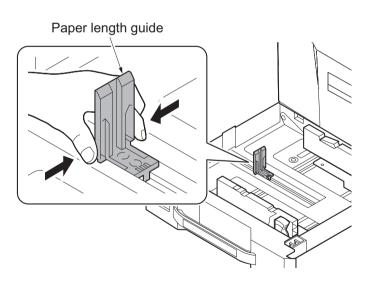
When moving the machine, attach the lift plate in original position.





Loading paper

1. Squeeze the ends of the bottom of the paper length guide and move the guide to fit the length of the paper.





- 2. Press the guide lock lever to release the lock.
- 3. Grasp the paper width adjusting tab and move the paper width guides to fit the paper.

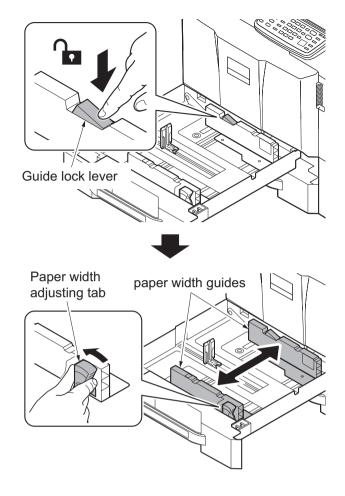
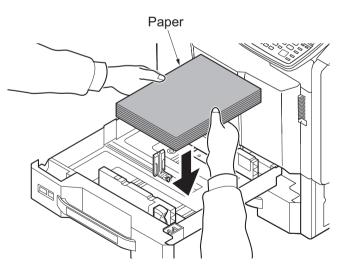


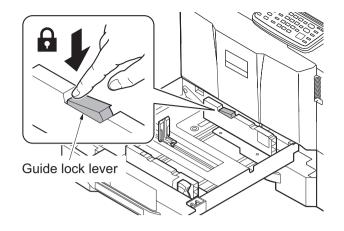
Figure 1-2-10

- 4. Align the paper flush against the right side of the cassette.
- *: Before loading the paper, be sure that it is not curled or folded.
- *: Ensure that the loaded paper does not exceed the level indicated.
- *: Make sure that the paper length guide and the paper width guides are correctly abut with the paper. Be sure to remove spaces between the guides and the paper.





5. Press the guide lock lever to lock.





- 6. Insert the paper size plate and the paper media plate.
- 7. Gently push the cassette back in.

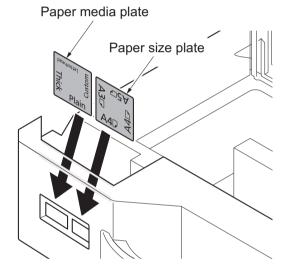


Figure 1-2-13

Installing the toner containers

- 1. Open the front cover.
- 2. Hold the toner container vertically and hit the upper part about 5 times. Invert the toner container so that the other end is up, and hit in the same way.
- 3. Shake the toner container in a wide vertical curve like motion about 5 times.

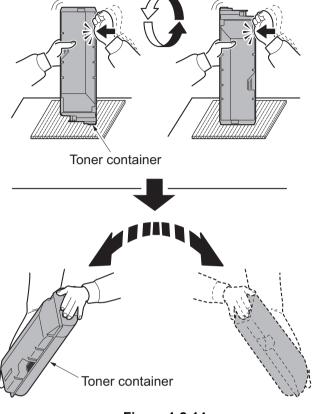
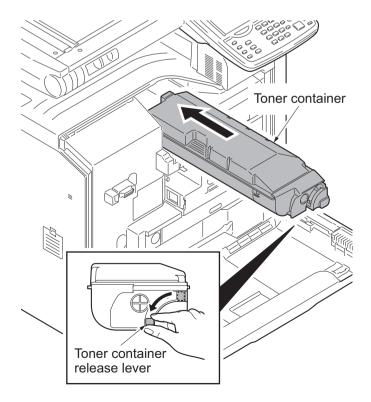


Figure 1-2-14

- 4. Install the toner container.
- 5. Turn down the toner container release lever to lock the toner container.





Unlocking the developer waste exit

Caution

To ease setup, the device was shipped with the developer unit already replenished with developer. Therefore, to prevent developer from spilling during shipping, a developer shutter is equipped with the developer unit.

To disengage the shutter, use the following procedure: Note that if the shutter is not completely disengaged and retained in place, the developer in the developer unit may clog at the outlet causing a damage to the developer unit.

- 1. Remove the tape and then remove the set up leaflet.
- *: The setup leaflet must be affixed in position before dispatching the machine.
- 2. Press the fixing pin and rotate.
- *: Fully insert the fixing pin with keeping the protrusions vertical and rotate it by 90 degrees clockwise. Make sure that the protrusions are then horizontal.

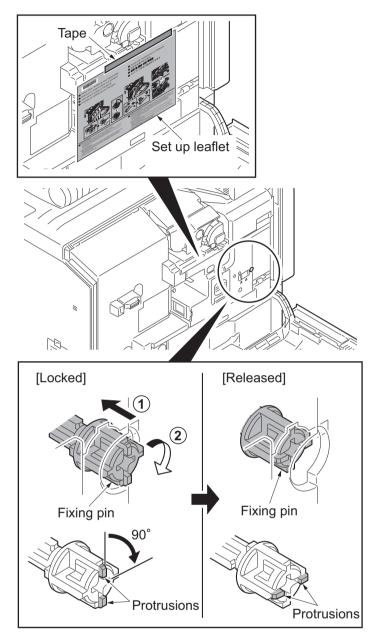
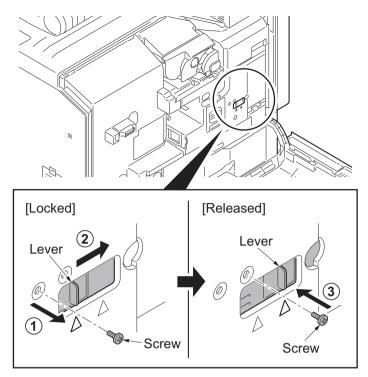


Figure 1-2-16

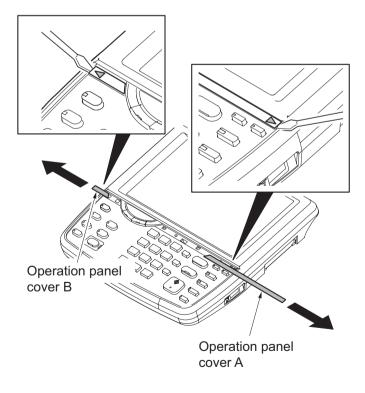
- 3. Remove a screw and slide the lever right wards.
- 4. Fix the lever using the screw previously removed at the right screw hole and unlock the developer waste exit.
- *: When the device is shipped again or removed, use the reverse procedure to lock in the developer waste exit. Failure to observe this caution could result in deteriorated print quality and/or C call (7460).



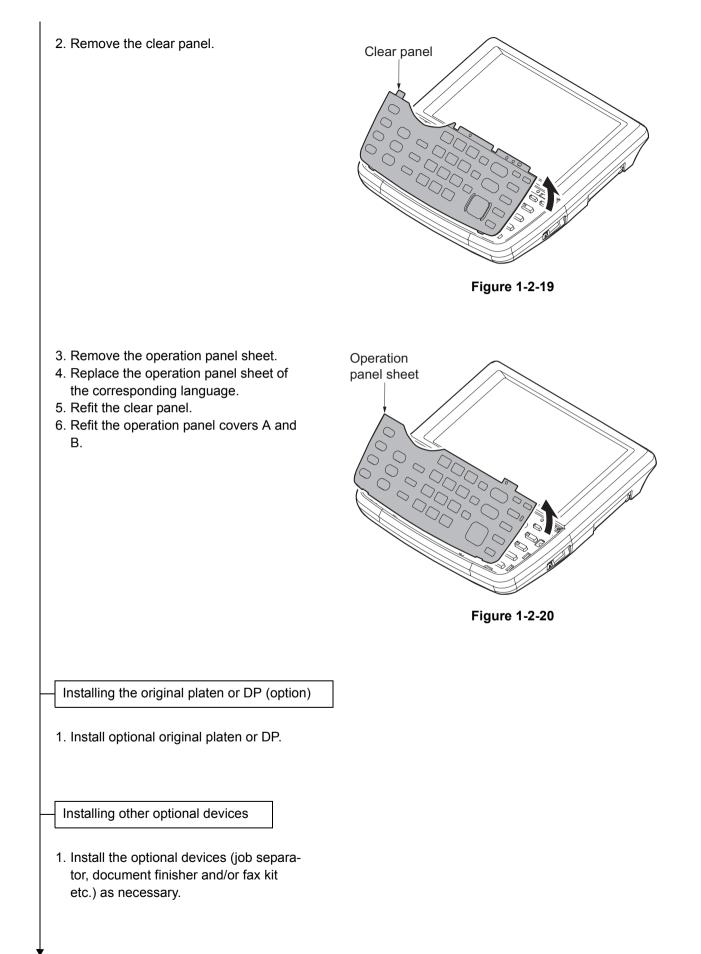


Replacing operation panel sheet

1. Insert a flat-head screwdriver and slide the operation panel covers A and B to remove them.







Installing the cassette heater (option)

1. Install the optional cassette heater as necessary (see page 1-2-64).

Connect the power cord

1. Connect the power cord to the power cord connector on rear lower of the machine.

2. Connect the power plug to the wall outlet.

Installing toner

- 1. Turn the main power switch on. Toner installation is started.
- The drive chain is disengaged when toner installation is completed. Run maintenance mode U132 if [Add Toner] remains displayed even after the drive chain is disengaged (see page 1-3-77).

Adjusting the image

- Performing calibration
 (see the operation guide,U464 Setting the ID correction operation performing calibration)
 Press [Adjustment/Maintenance] and then [Next] of [Calibration].
 Press [Execute] to perform calibration. When completed, press [OK].
- *: Perform the high alitutude settings when a leakage is developed on images in a high alitude installation, such as in Mexico City. U140 - AC Calb - High Altitude

2. Adjusting the halftone automatically (see page 1-3-138)

Load the cassette with multiple sheets of A4 or Letter paper.

Enter the maintenance mode by entering 10871087 using the numeric keys.

Enter 410 using the numeric keys and press the start key.

Press [Normal Mode] and then press the start key. A test patterns 1 and 2 are outputted.

Place the output test pattern 1 as the original.

Place approximately 20 sheets of white paper on the test pattern 1 and set them.

Press the start key. Adjustment is made.

Place the output test pattern 2 as the original.

Place approximately 20 sheets of white paper on the test pattern 2 and set them.

Press the start key. Adjustment is made.

[Finish] is displayed in [Phase] when normally completed.

Press the stop key twice to exit.

Setting the delivery date (maintenance item U278)
 Enter the maintenance mode by entering 10871087 using the numeric keys. Enter 278 using the numeric keys and press the start key. Select [Today]. Press the start key. The delivery date is set. Press the stop key to exit.
Output an own-status report (maintenance item U000)
 Enter 000 using the numeric keys and press the start key. Select [Maintenance] and press the start key. A status report is output. Press the stop key to exit.
Exit maintenance mode 1. Enter 001 using the numeric keys and press the start key. The machine exits the maintenance mode.
Print out the user setting list
1. Select [Report Print] to output the user various setting reports.
Make test copies
 Place an original and make test copies. *: If paper is fed skewed, perform the adjustment of skewed paper in the cassette (see page 1-5-87).

Completion of the machine installation

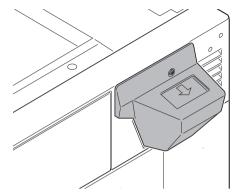
(2) Setting initial copy modes

Factory settings are as follows:

Maintenance item No.	Contents	Factory setting
U253	Switching between double and single counts	DBL(A3/Ledger)
U260	Selecting the timing for copy counting	Eject
U285	Setting service status page	On
U323	Setting abnormal temperature and humidity warning	On
U325	Setting the paper interval	Off/1
U326	Setting the black line cleaning indication	On/8
U327	Setting the cassette heater control	Off
U343	Switching between duplex/simplex copy mode	Off

1-2-3 Installing the key counter (option)

(1) Installing directly on the device



Key counter installation requires the following parts:

Parts	Quantity	Part.No.
Key counter	1	3025418011
Key counter set	1	302A369709
Key counter wire	1	302K946AJ0
M4 nut	2	3CY06030

*: 120V model is unnecessary.(default setting)

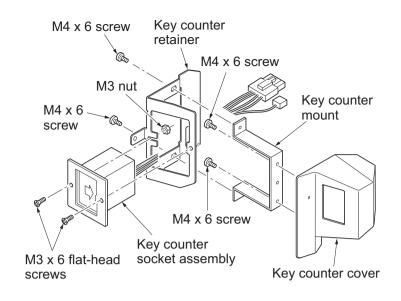
Supplied parts of key counter set (302A369709):

Parts	Quantity	Part.No.
Key counter socket assembly	1	3029236241
Key counter cover retainer	1	302GR03010
Key counter retainer	1	302GR03020
Key counter cover	1	3066060011
Key counter mount	1	3066060041
Edging	2*	7YZM210006++H01
Band	1*	M21AH010
M3 x 8 tap-tight P screw	1*	5MBTPB3008PW++R
M4 x 10 tap-tight P screw	2*	5MBTPB4010PW++R
M4 x 10 tap-tight S screw	2*	5MBTPB4010TW++R
M3 x 6 bronze flat-head screw	2	7BB003306H
M4 x 20 tap-tight S screw	2	7BB100420H
M3 nut	1	7BC1003055++H01
M3 x 8 bronze binding screw	1*	B1B03080
M4 x 30 tap-tight S screw	1*	B1B54300
M4 x 6 chrome TP screw	5	B4A04060
M4 x 10 chrome TP screw	2*	B4A04100

*:Not used in this model.

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Fit the key counter socket assembly to the key counter retainer using two screws and nut.
- 3. Fit the key counter mount to the key counter cover using two screws.
- 4. Fit the key counter retainer to the key counter mount using two screws.





- *: For the 120V model, proceed to step 26.
- 5. Pull the paper conveying unit out.
- 6. Remove two screws and then remove the ISU right cover.
- 7. Remove the screw and five hooks and then remove the right upper cover.

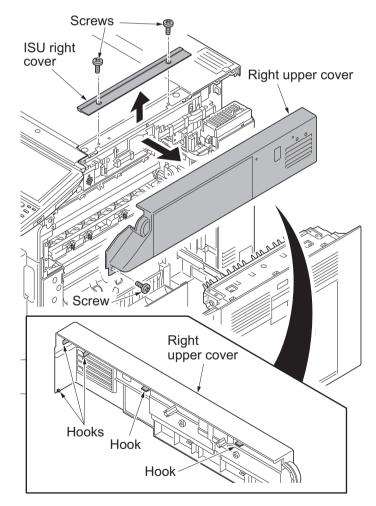
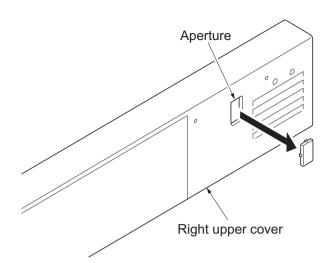


Figure 1-2-22

8. Cut out the aperture plate on the right upper cover using nippers.





9. Remove eight screws and then remove the rear upper cover.

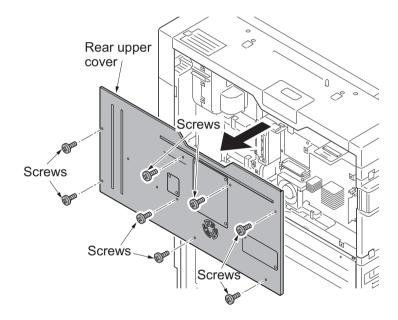


Figure 1-2-24

- 10. Release seven wire saddles on the controller box.
- 11. Remove the wire holder.

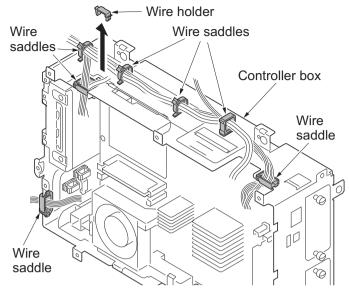


Figure 1-2-25

12. Remove the following connectors that connected to the main PWB from the outside of the control box. YC25

YC11 YC30 YC24 YC3 (FFC connector with a lock) YC17 (BK) YC21 (WH) YC12

*: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting down the lock lever

(see figure a).

*: When connecting an FFC furnished with the protrusions at both ends, address the side with a blue-colored tape towards the locking lever, insert the FFC into the connector until the protrusions are recessed, and raise the lock lever to lock the FFC (see figure b).

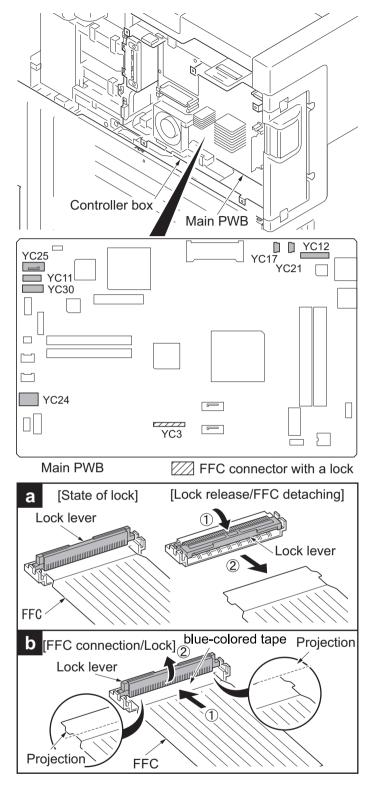


Figure 1-2-26

- 13. Remove five screws.
- 14. Unhook two hooks and then remove the controller box.

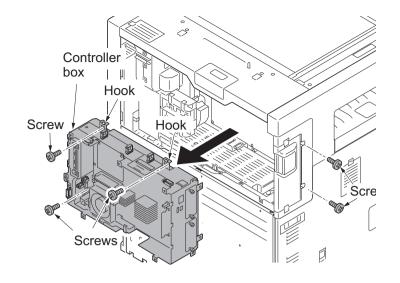


Figure 1-2-27

15. Connect the connector of the key counter wire to the connector YC24 on the engine PWB.

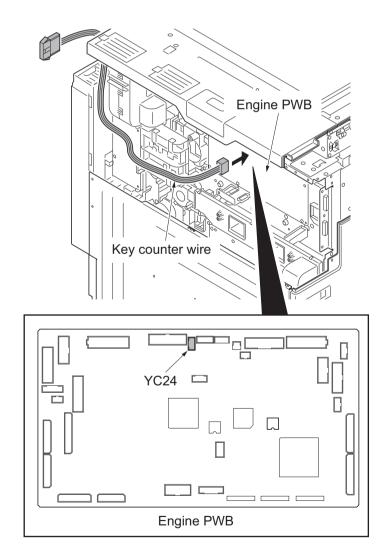


Figure 1-2-28

- 16. Remove two wire holders.
- 17. Route the key counter wire through the wire guide and fix it at the wire holders.

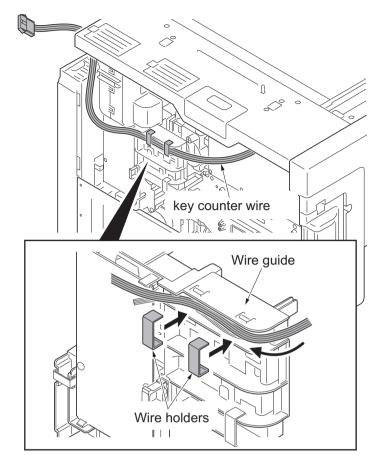


Figure 1-2-29

- 18. Release three wire saddles.
- 19. Remove the wire holder.
- 20. Route the key counter wire through the three wire saddles and wire guide and fix it at the wire holder.
- 21. Refit the controller box.
- 22. Refit the left upper cover and the rear upper cover.

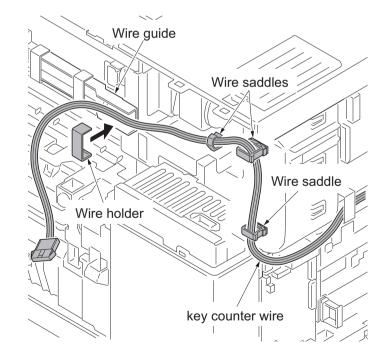
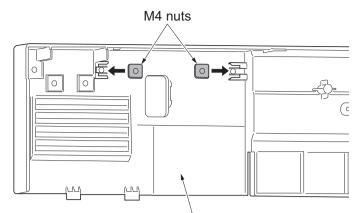


Figure 1-2-30

23. Mount two M4 nuts at the back of the right upper cover.



Right upper cover



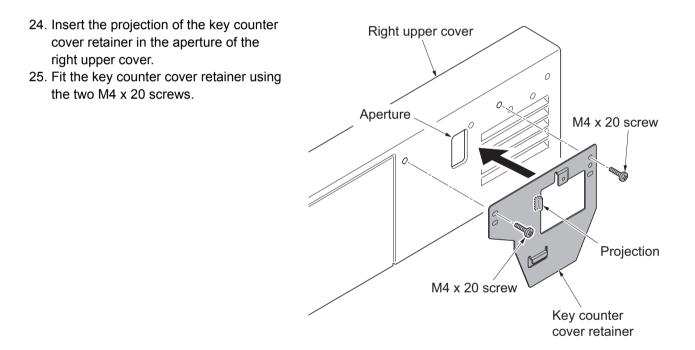
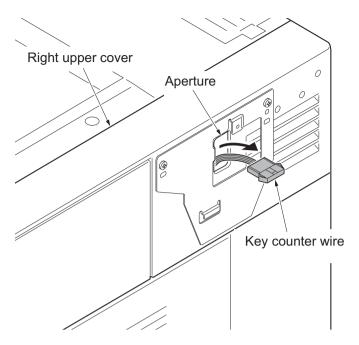


Figure 1-2-32

- 26. Pass the connector of the key counter wire through the aperture in the right upper cover.
- 27. Refit the right upper cover.
- 28. Refit the ISU right cover.
- 29. Close the paper conveying unit.





- 30. Connect the key counter signal cable to the key counter wire.
- 31. Fit the key counter cover to the machine using the M4 x 6 screw.
- 32. Insert the key counter into the key counter socket assembly.
- 33. Turn the main power switch on and enter the maintenance mode.
- 34. Run maintenance item U204 and select [Key-Counter] (see page 1-3-95).
- 35. Exit the maintenance mode.
- 36. Check that the message requesting the key counter to be inserted is displayed on the touch panel when the key counter is pulled out.
- 37. Check that the counter counts up as copies are made.

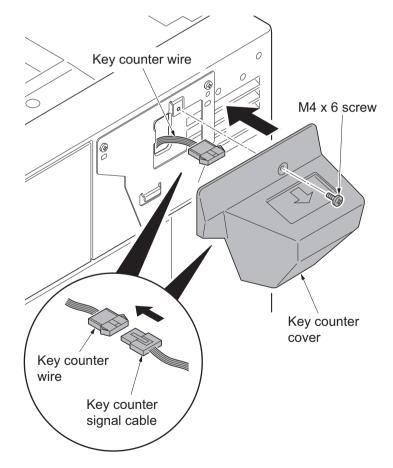
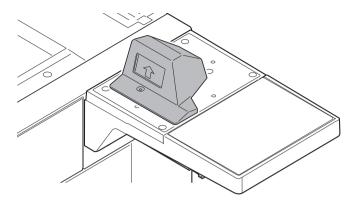


Figure 1-2-34

(2) Mounting on the document table



Key counter installation requires the following parts:

Parts	Quantity	Part.No.
Key counter	1	3025418011
Key counter set	1	302A369709
Key counter wire	1	302K946AJ0
Document table	1	1902H70UN2 (option)

Supplied parts of key counter set (302A369709):

Parts	Quantity	Part.No.
Key counter socket assembly	1	3029236241
Key counter cover retainer	1	302GR03010
Key counter retainer	1	302GR03020
Key counter cover	1	3066060011
Key counter mount	1	3066060041
Edging	2*	7YZM210006++H01
Band	1*	M21AH010
M3 x 8 tap-tight P screw	1*	5MBTPB3008PW++R
M4 x 10 tap-tight P screw	2*	5MBTPB4010PW++R
M4 x 10 tap-tight S screw	2*	5MBTPB4010TW++R
M3 x 6 bronze flat-head screw	2	7BB003306H
M4 x 20 tap-tight S screw	2	7BB100420H
M3 nut	1	7BC1003055++H01
M3 x 8 bronze binding screw	1*	B1B03080
M4 x 30 tap-tight S screw	1*	B1B54300
M4 x 6 chrome TP screw	5	B4A04060
M4 x 10 chrome TP screw	2*	B4A04100

*:Not used in this model.

Supplied parts of document tablet (1902H70UN2):

Parts	Quantity	Part.No.
Tray stay	1	-
Tray mount	1	-
Tray cover	1	302LC04601
Tray lower cover	1	302LC04710
Tray retainer	1	-
Sheet	2*	302LC04660
Pin	2	303NS24410
M4 nut	2	3CY06030
M4 x 8 screw	7	7BB180408H
M4 x 14 screw	2	7BB607414H

*: Sheet x1 is not used.

Procedure

- 1. Perform steps 1 through 25 as explained in (1) Installing directly on the device.
- 2. Mount two M4 nuts at the back of the right upper cover.
- 3. Fit the tray stay to the right upper cover using two M4 x 14 screws.

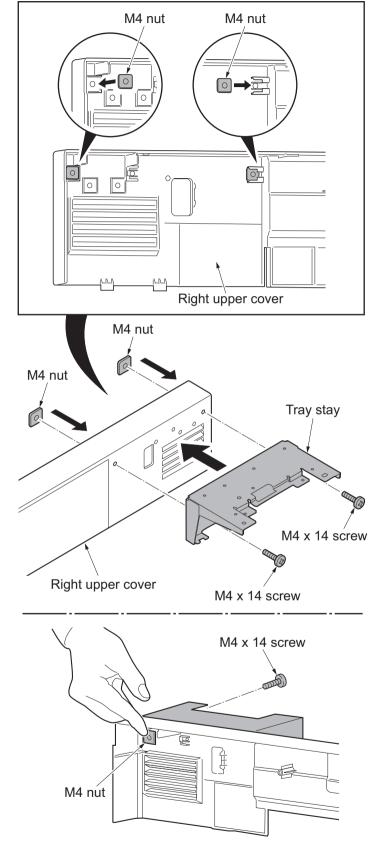
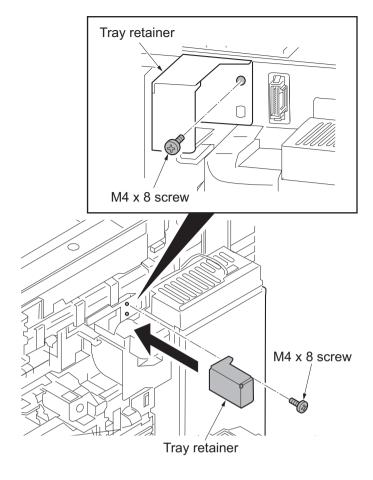


Figure 1-2-35

*: Secure the screws making sure that the nuts do not fall.

- 4. Fit the tray retainer to the machine using the M4 x 8 screw.
- *: The procedure described above is not required if an optional right job separator has been installed.





- 5. Pass the connector of the key counter wire through the aperture in the right upper cover.
- 6. Refit the right upper cover.
- 7. Refit the ISU right cover.
- 8. Close the paper conveying unit.

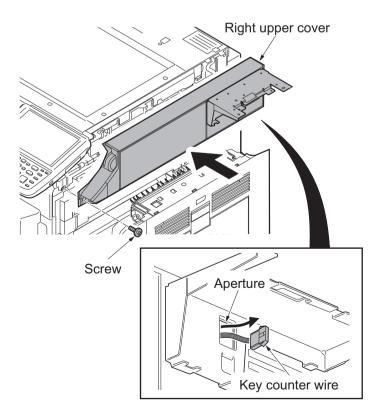


Figure 1-2-37

9. Snap in the tray mount to the tray stay and fix using two M4 x 8 screws.

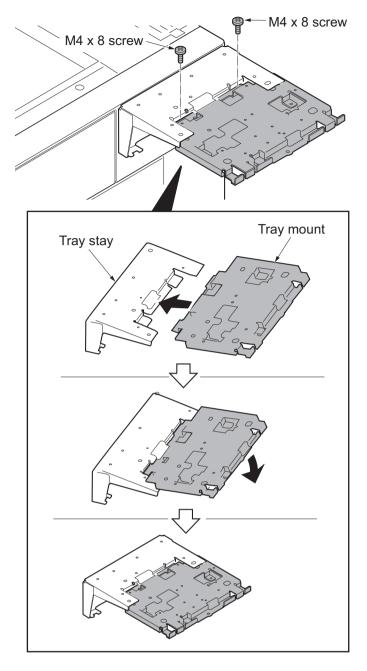


Figure 1-2-38

- 10. Cut out the aperture plate on the tray cover using nippers.
- 11. Fit the tray cover to the tray stay using four M4 x 8 screws.

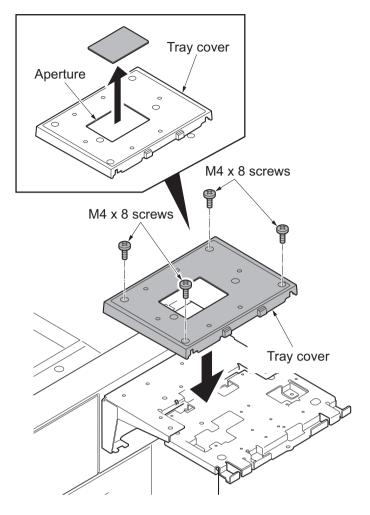


Figure 1-2-39

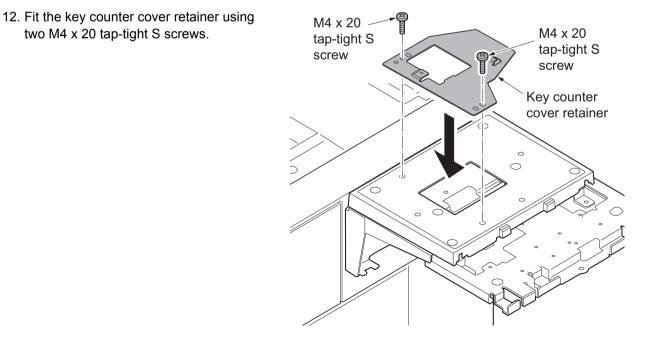


Figure 1-2-40

- 13. Pass the key counter signal cable through the aperture in the document table.
- 14. Fit the key counter cover to the document table using the M4 x 6 screw.
- 15. Connect the key counter signal cable to the key counter wire.

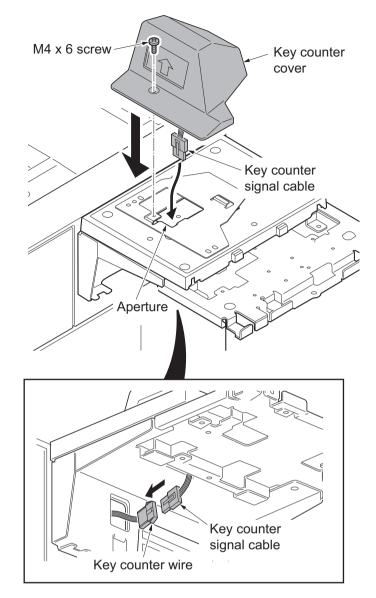


Figure 1-2-41

16. Fit the tray lower cover. Install the key counter signal cable and key counter wire so that they are held behind the tray lower cover.

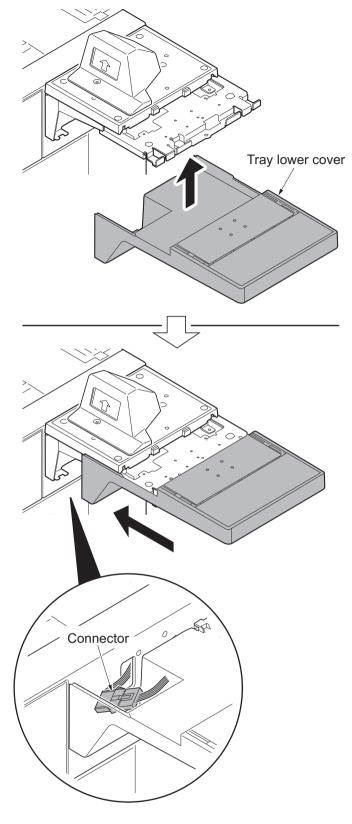
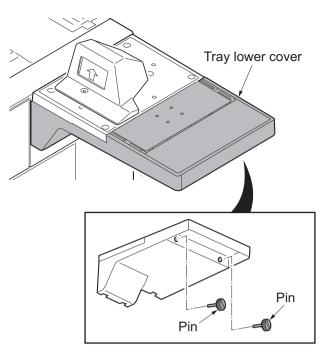


Figure 1-2-42

17. Secure the tray lower cover with two pins.





- 18. Adhere the sheet onto right side of the document table.
- 19. Insert the key counter into the key counter socket assembly.
- 20. Turn the main power switch on and enter the maintenance mode.
- 21. Run maintenance item U204 and select [Key-Counter] (see page 1-3-95).
- 22. Exit the maintenance mode.
- 23. Check that the message requesting the key counter to be inserted is displayed on the touch panel when the key counter is pulled out.
- 24. Check that the counter counts up as copies are made.

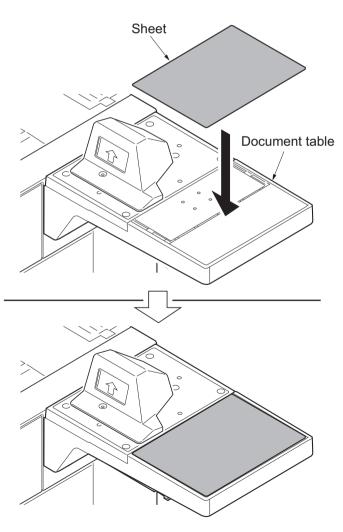


Figure 1-2-44

1-2-4 Installing the key card MK-2 (option for japan only)

Parts	Quantity	Part.No.
Key card MK-2	1	8J272002 (option)
MK-2 mount	1	Supplied with MK-2
M4 x 16 screw	2*	
Document table	1	1902H70UN2 (option)
M4 x 20 tap-tight S screw	2	7BB100420H

Key card installation requires the following parts:

Supplied parts of document tablet (1902H70UN2):

Parts	Quantity	Part.No.
Tray stay	1	-
Tray mount	1	-
Tray cover	1	302LC04601
Tray lower cover	1	302LC04710
Tray retainer	1 *1	-
Sheet	2 * ²	302LC04660
Pin	2	303NS24410
M4 nut	2	3CY06030
M4 x 8 screw	7	7BB180408H
M4 x 14 screw	2	7BB607414H

*1: Not used in this model.

*2: Sheet x1 is not used.

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Pull the paper conveying unit out.
- 3. Remove two screws and then remove the ISU right cover.
- 4. Remove the screw and five hooks and then remove the right upper cover.

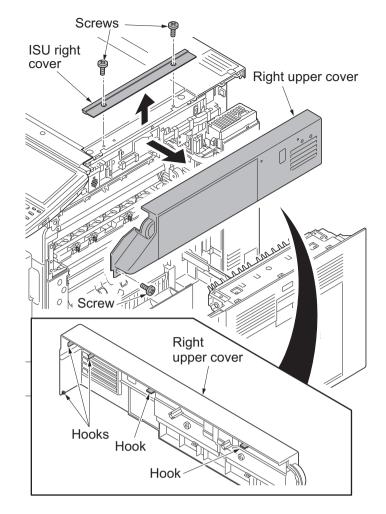


Figure 1-2-45

5. Remove eight screws and then remove the rear upper cover.

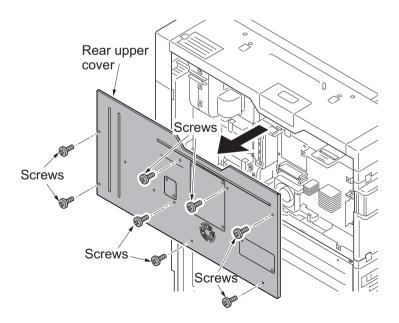


Figure 1-2-46

- 6. Release seven wire saddles on the controller box.
- 7. Remove the wire holder.

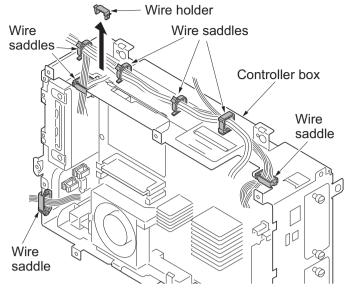


Figure 1-2-47

 Remove the following connectors that connected to the main PWB from the outside of the control box. YC25

YC11 YC30 YC24 YC3 (FFC connector with a lock) YC17 (BK) YC21 (WH) YC12

- *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting up the lock lever (see figure a).
- *: When connecting an FFC furnished with the protrusions at both ends, address the side with a blue-colored tape towards the locking lever, insert the FFC into the connector until the protrusions are recessed, and raise the lock lever to lock the FFC (see figure b).

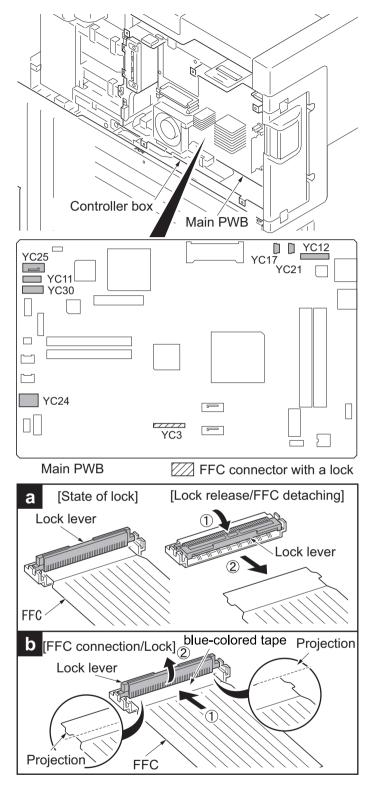


Figure 1-2-48

- 9. Remove five screws.
- 10. Unhook two hooks and then remove the controller box.

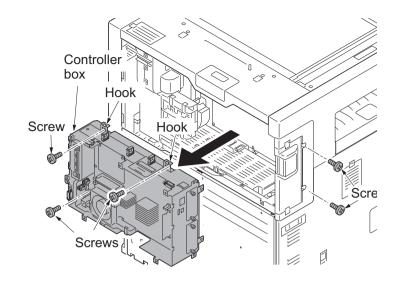


Figure 1-2-49

11. Cut out the aperture plate on the right upper cover using nippers.

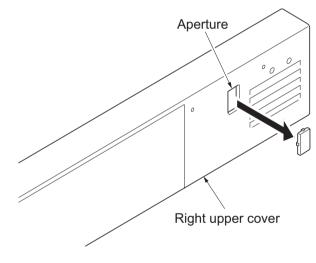


Figure 1-2-50

- 12. Mount two M4 nuts at the back of the right upper cover.
- 13. Fit the tray stay to the right upper cover using two M4 x 14 screws.

nuts do not fall.

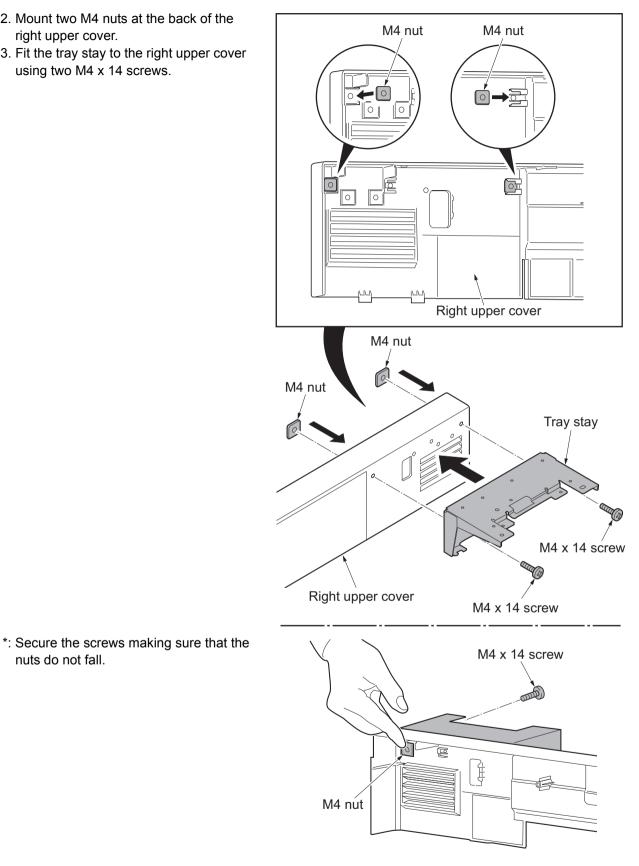
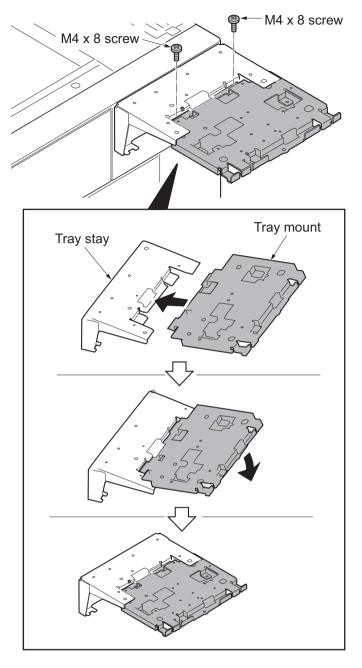


Figure 1-2-51

14. Snap in the tray mount to the tray stay and fix using two M4 x 8 screws.





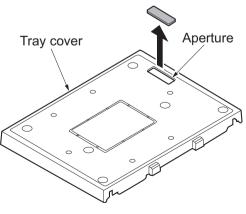


Figure 1-2-53

15. Cut out the aperture plate on the tray cover using nippers.

16. Pass the MK-2 signal cable through the aperture in the tray cover, tray stay and right upper cover.

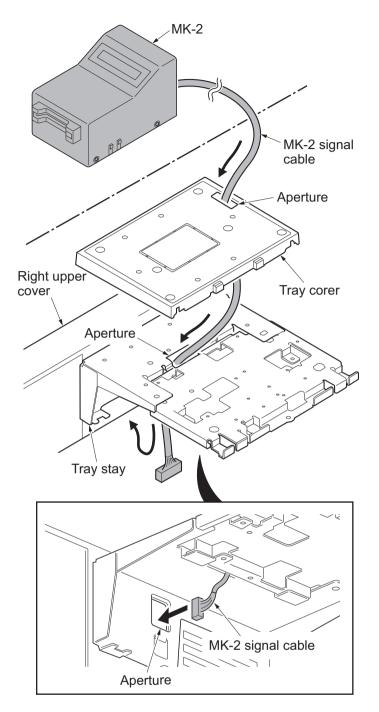


Figure 1-2-54

- 17. Connect the connector of the MK-2 signal cable to the connector YC25 on the engine PWB.
- 18. Remove the screw from the machine.
- 19. Fix the MK-2 signal cable to the ground terminal with the screw that was removed.

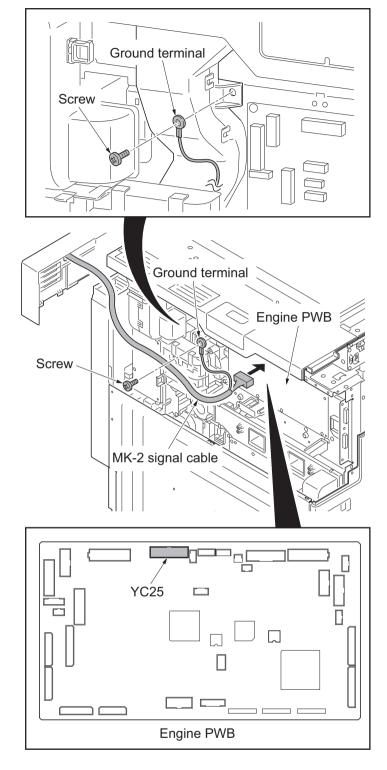


Figure 1-2-55

- 20. Remove three wire holders.
- 21. Route the MK-2 signal cable through the wire guide and fix it at three wire holders.
- *: Dress the MK-2 signal wire away from the scanner motor and fix.
- 22. Refit the controller box.
- 23. Refit the left upper cover and the rear upper cover.

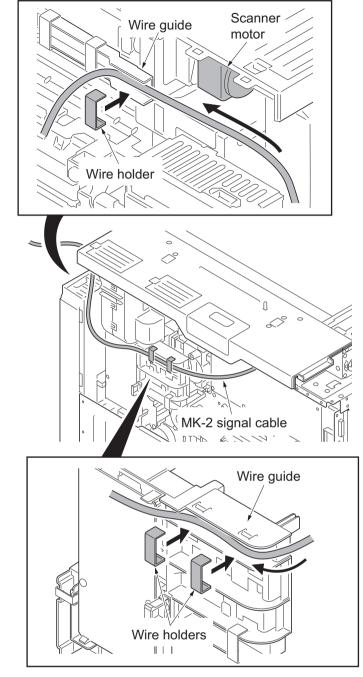


Figure 1-2-56

- 24. Fit the tray retainer to the machine using the M4 x 8 screw.
 - *: The procedure described above is not required if an optional right job separator has been installed.

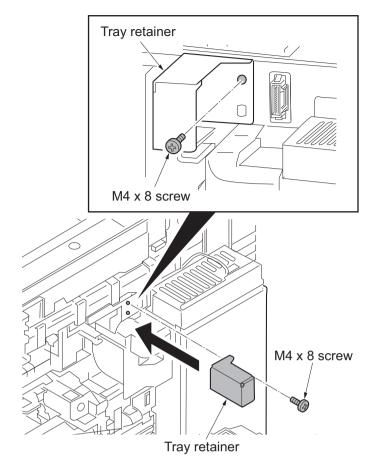


Figure 1-2-57

- 25. Refit the right upper cover.
- 26. Refit the ISU right cover.
- 27. Close the paper conveying unit.
- 28. Fit the tray cover to the tray stay using four M4 x 8 screws.

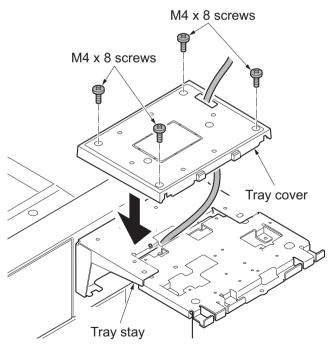
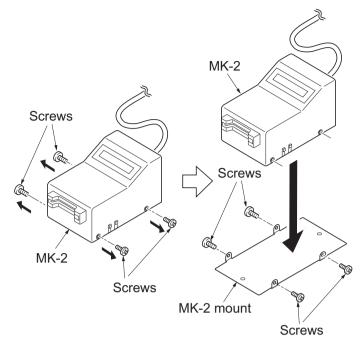


Figure 1-2-58

29. Remove the four screws securing the MK-2 cover; attach the MK-2 mount to the MK-2, and secure using the four screws.





30. Fit the MK-2 to the document table using two M4 x 20 tap-tight S screws.

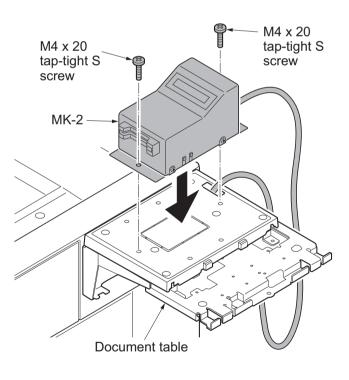


Figure 1-2-60

- 31. Fit the tray lower cover.
- 32. Secure the tray lower cover with two pins.

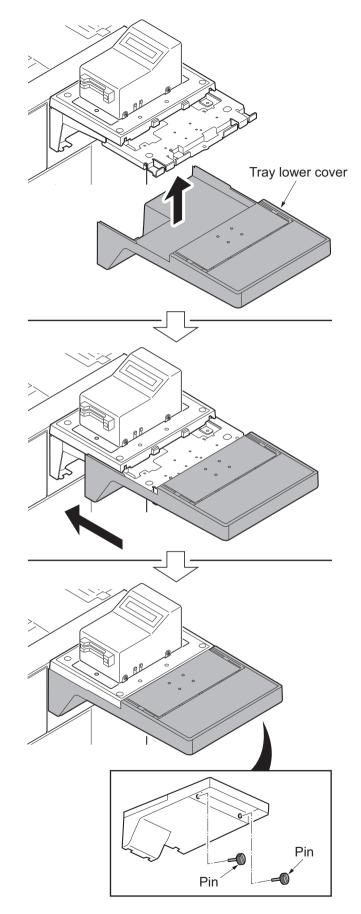


Figure 1-2-61

- 33. Adhere the sheet onto right side of the document table.
- 34. Turn the main power switch on and enter the maintenance mode.
- 35. Run maintenance item U204 and select [Key-Card] (see page 1-3-95).
- 36. Exit the maintenance mode.

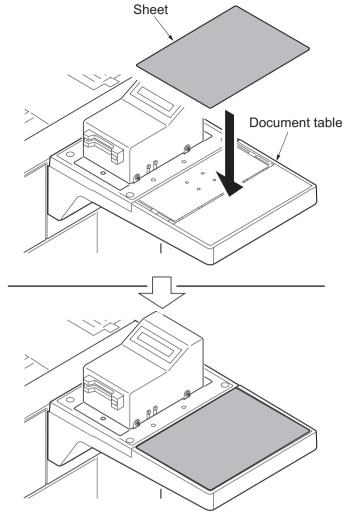


Figure 1-2-62

1-2-5 Installing the KMAS (option for japan only)

KMAS installation requires the following parts:

Using the PHS module

Parts	Quantity	Part.No.
PHS module	1	HM000080 (option)
PHS signal cable	1	023CK200 (option)
KMAS interface PWB	1	023CK000 (option)
M3 x 16 bronze binding screw	2	B3323160
Ferrite core	1	2A027770
Clamp	1	M2105910
KMAS wire set	1	302K994610

Supplied parts of KMAS wire set (302K994610):

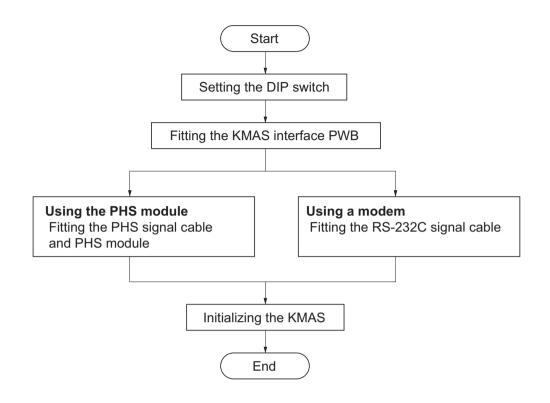
Parts	Quantity	Part.No.
KMAS wire	1	302K946AG0
Spacer A	1	7YZM510009++H01
Spacer B	3	7YZM510011++H01

Using a modem

Parts	Quantity	Part.No.
RS-232C signal cable	1	303CK60011
RS-232C relay cable	1	303CK60041
KMAS interface PWB	1	023CK000 (option)

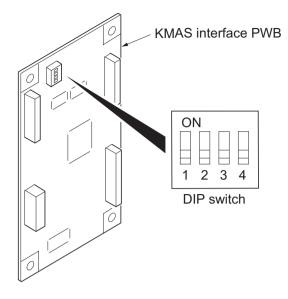
Procedure

To fix KMAS, perform the following procedure:



Setting the DIP switch

1. Configure DIP switches 1 to 4 on the KMAS interface board as follows:





DIP SW No.	Description	Remarks
1	PHS module/modem switching ON: Use modem OFF: Use PHS module	
2	Modem outgoing switching ON: Pulse OFF: Tone	This is required when modem is used.
3	Communication speed switching with the device ON: 9600bps OFF: 19200bps	Set to OFF.
4	Communication log when automatically notifying service calls Switching messages ON: Message is fixed OFF: Normal message is used	When ON, the message is "Call a service representative." When OFF, the message will vary depend- ing on communication status. To setup the system with automatic accounting only, ON may be set.

Fitting the KMAS interface PWB

2. Remove seven screws and then remove the rear upper cover.

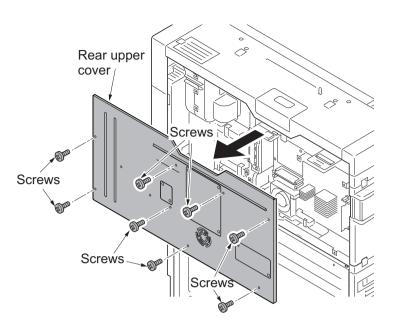


Figure 1-2-64

3. Attach one spacer A and three spacers B to the side of the controller box.

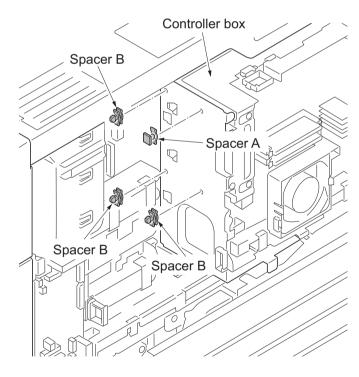


Figure 1-2-65

4. Insert the KMAS interface PWB to three spacers B.

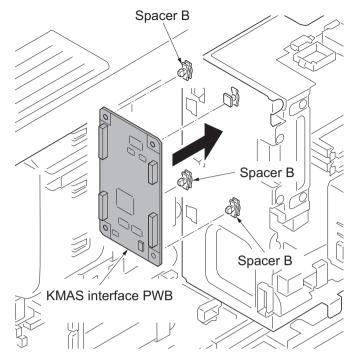


Figure 1-2-66

- 5. Connect the connector of the KMAS wire to the connector YC1 on the KMAS PWB.
- 6. Connect the connector of the KMAS wire to controller fan motor, YC7 and YC23 on the main PWB.

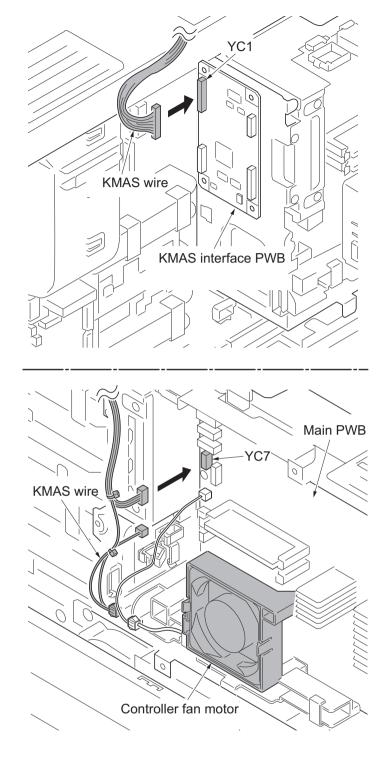


Figure 1-2-67

7. Pass the KMAS wire through the edging of the controller box and wire saddle and then fasten the KMAS wire.

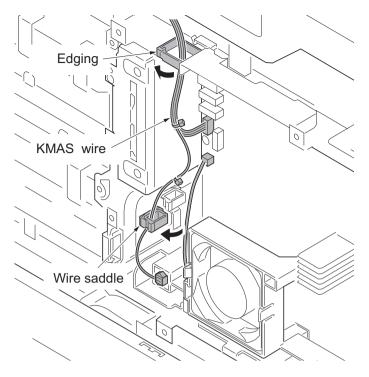


Figure 1-2-68

Fitting the PHS signal cable and PHS module

- 8. Remove two screws and then remove the lid from the rear upper cover.
- 9. Pass the PHS signal cable through the aperture in the rear upper cover.
- 10. Secure the PHS signal cable to rear upper cover with two screws.

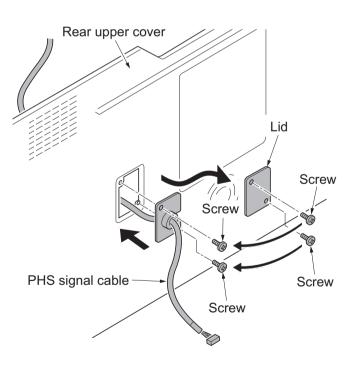


Figure 1-2-69

- 11. Connect the connector of the PHS signal cable to the connector YC2 on the KMAS interface PWB.
- 12. Refit the rear upper cover.

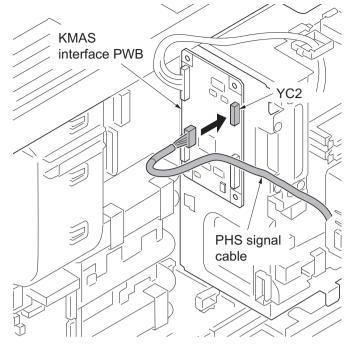


Figure 1-2-70

13. Fit the PHS module to rear upper cover using two M3 x 16 screws. Rear upper cover PHS module PHS module M3 x 16 screws

Figure 1-2-71

- 14. Wrap the PHS signal cable around the ferrite core a turn.
- 15. Connect the connector of the PHS signal cable to PHS module.
- 16. Fit the clamp to PHS signal cable.
- 17. After using alcohol to clean the rear upper cover, adhere the clamp to rear upper cover.

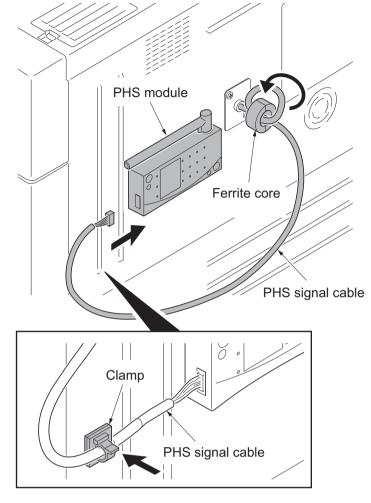


Figure 1-2-72

Fitting the RS-232C signal cable

- By referring to the instructions given to fix the PHS signal wire, insert the connector at the end of the RS-232C relay cable to the YC3 connector on the KMAS interface PWB.
 If the wire length is short, use a RS-232C extension cable.
- 2. Connect the RS-232C signal cable to the modem.

Initializing the KMAS

- 1. Turn the main power switch on and enter the maintenance mode.
- Run maintenance item U202 and Performs [Init/Set TEL No.] (see page 1-3-93).
- 3. Exit the maintenance mode.

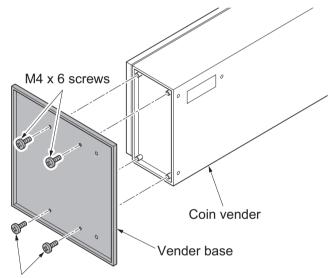
1-2-6 Installing the coin vender (option for japan only)

Parts	Quantity	Part.No.
Coin vender	1	1905H99JP0 (option)
Vender wire	1	
Vender base	1	Supplied with coin vender
M4 x 6 screw	4	
Ferrite core	1	
Clamp	1	
Vender signal cable	1	302K946AE0

Coin vender installation requires the following parts:

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Fit the vender base to coin vender using four M4 x 6 screws.



M4 x 6 screws

Figure 1-2-73

3. Remove seven screws and then remove the rear upper cover.

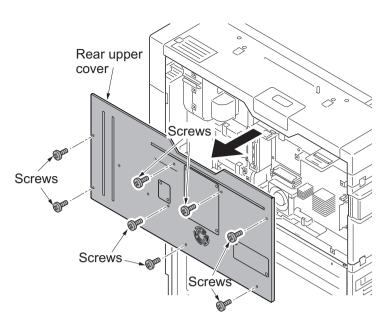


Figure 1-2-74

- 4. Remove eight screws.
- 5. Release two hanging parts and then remove the rear lower cover.

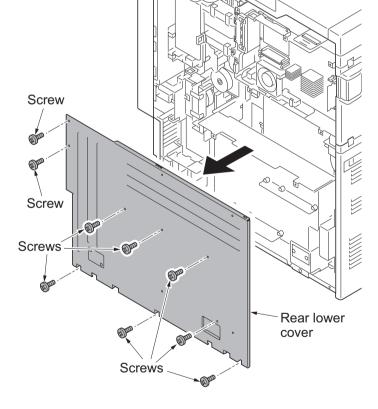


Figure 1-2-75

6. Remove two screws and then remove the lid.

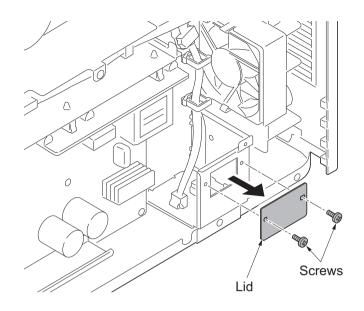


Figure 1-2-76

- 7. Connect the connector of the vender signal cable to the connector YC23 on the engine PWB.
- 8. Pass the vender signal cable through nine wire saddles and then fasten the cable.

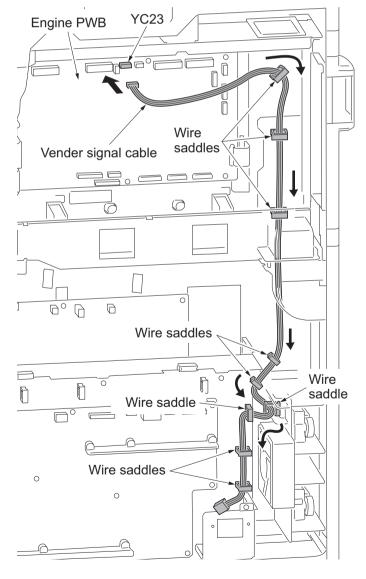


Figure 1-2-77

- 9. Pass the vender wire through the aperture in the IF mount.
- 10. Secure the vender wire with two screws removed in step 6.
- 11. Secure the ground terminal of the vender wire to rear frame with the screw.
- 12. Connect the connector of the vender wire to connector of the vender signal cable.

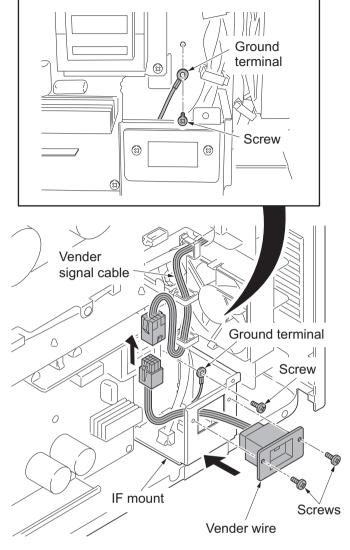


Figure 1-2-78

Vender wire

Figure 1-2-79

- 13. Refit the rear lower and upper covers.
- 14. Connect the signal cable of coin vender to connector of the vender wire.

- 15. Fit the ferrite core to signal cable of coin vender.
- 16. Fit the clamp to signal cable of coin vender.
- 17. Remove a screw from the coin vender and fix the coin vender with a clamp.

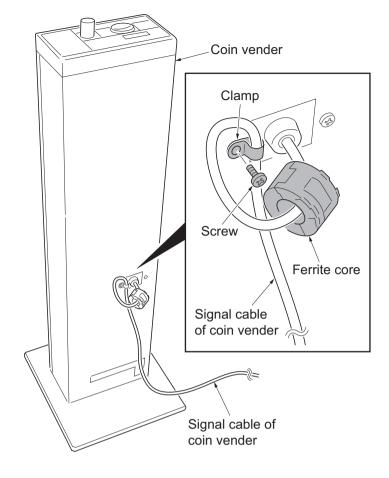


Figure 1-2-80

18. Affix the price size decal at the right side of the coin vender operation panel.

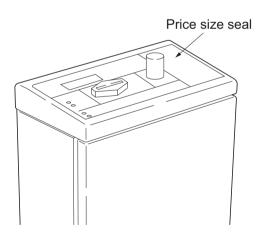


Figure 1-2-81

- 19. Turn the main power switch on and enter the maintenance mode.
- 20. Run maintenance mode U206 and activate 'Coin vender is installed.' Continue configuring the coin vender required (see page 1-3-96).
- 21. Exit the maintenance mode.

1-2-7 Installing the cassette heater (option)

Parts	Quantity	Part.No.
Cassette heater set (120V)	1	302K994931
Cassette heater set (240V)	1	302K994941

Cassette heater installation requires the following parts:

Supplied parts of cassette heater set (302K994931):

Parts	Quantity	Part.No.
Cassette heater (120V)	1	302H794620
Wire saddle	3	7YZM610001++H01
Caution label	1	302KP34220
Cover Connector	1	303NF04140
M3 x 8 tap-tight S screw	2	7BB700308H
M4 x 8 tap-tight S screw	1	7BB700408H

Supplied parts of cassette heater set (302K994941):

Parts	Quantity	Part.No.
Cassette heater (240V)	1	302H794610
Wire saddle	3	7YZM610001++H01
Caution label	1	302KP34220
Cover Connector	1	303NF04140
M3 x 8 tap-tight S screw	2	7BB700308H
M4 x 8 tap-tight S screw	1	7BB700408H

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Pull the cassette 1 forward.
- 3. Draw out Cassette 1 by releasing the release lever.

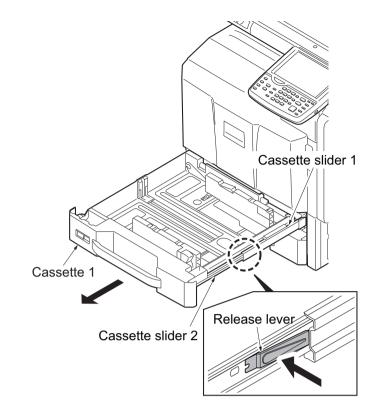


Figure 1-2-82

- 4. Pull the cassette 2 forward.
- 5. Draw out Cassette 2 by releasing the release lever.

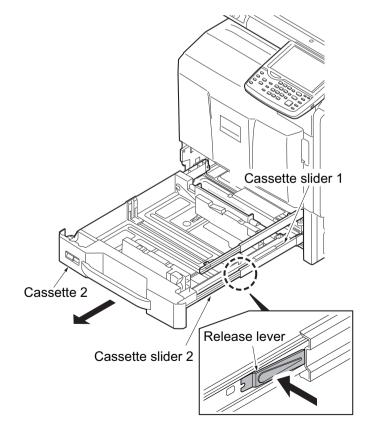
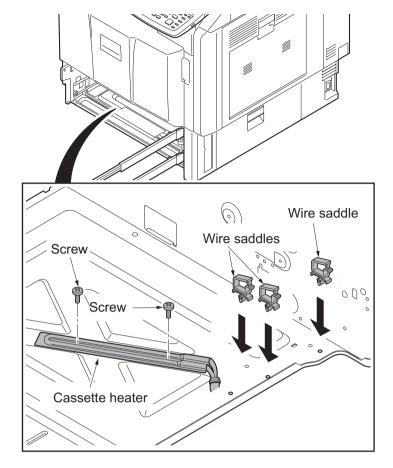


Figure 1-2-83

- 6. Fit three wire saddles on the bottom frame of the machine.
- 7. Fit the cassette heater using two M3 x 8 screws.





- 8. Pass the wire of the cassette heater through three wire saddles and then fasten the wire.
- *: Route the wire so that it do not disturb opening and closing the cassettes.
- 9. Connect the connector of the cassette heater to the connector in the rear frame of the machine.

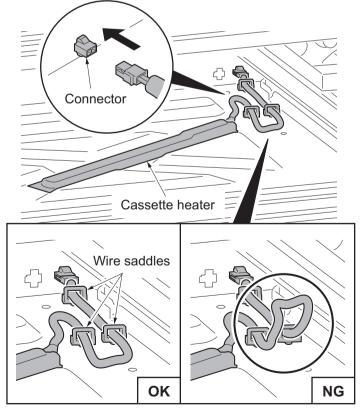


Figure 1-2-85

- 10. Insert two hooks of the connector cover to the holes of base of the machine each.
- 11. Install the connector cover by using a M4 x 8 screw.

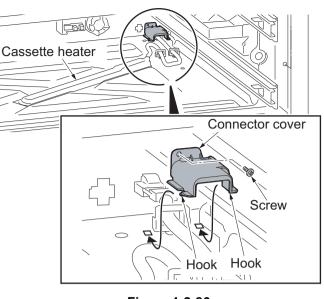


Figure 1-2-86

Caution label

Figure 1-2-87

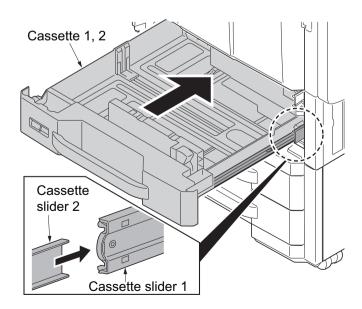


Figure 1-2-88

12. Adhere the caution label after wiping the bottom frame of this side of cassette heater with alcohol.

- 13. To install Cassette 1 and Cassette 2, align the cassette slider 2 and cassette slider 1 with each other.
- 14. Push the cassette in fully.

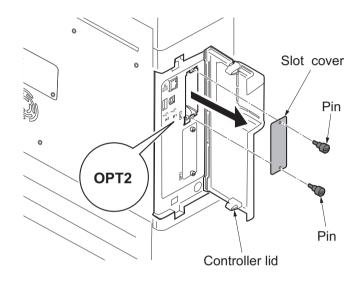
1-2-8 Installing the gigabit ethernet board (option)

Parts	Quantity	Part.No.
Gigabit ethernet board	1	1505JV0UN0 (option)

Gigabit ethernet board installation requires the following parts:

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Open the controller lid.
- 3. Remove two pins and then remove the slot cover of the OPT2.





- 4. Insert the gigabit ethernet board along the groove in OPT2 and secure the board with two pins that have been removed in step 3.
- *: Do not directly touch the gigabit ethernet board terminal. Hold the top and bottom of the gigabit ethernet board, or the projection of the board to insert the gigabit ethernet board.

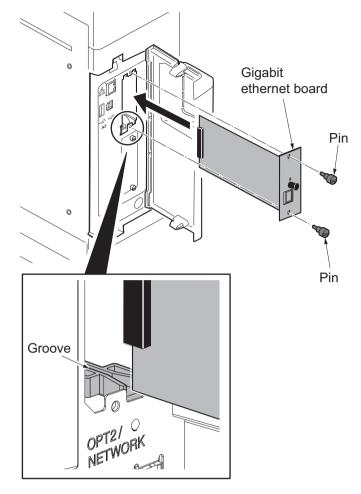
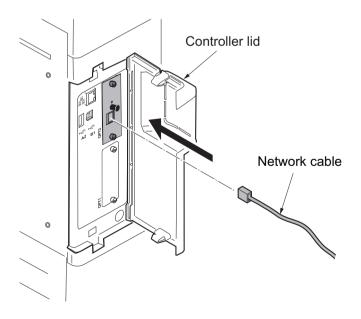


Figure 1-2-90

- 5. Plug the network cable into the connector.
- 6. Close the controller lid.





1-2-9 Installing the IC card reader holder (option)

Parts	Quantity	Part.No.
IC card reader holder	1	1709AD0UN0 (option)

IC card reader holder installation requires the following parts:

Supplied parts of IC card reader holder (1709AD0UN0):

Parts	Quantity	Part.No.
Card reader case	1	-
Card reader base	1	-
Card reader mount	1	-
Card reader tray	1	-
USB Wire (For extension)	1	-
Pin	3	303NS24410
Clamp	6	7YZM690002++H01

The card reader base, card reader mount, and the pin are packaged as an assembled kit.

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Remove the pin of the card reader base and then remove the card reader mount.

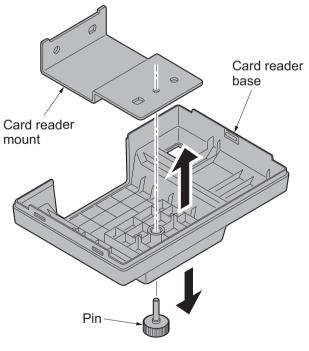


Figure 1-2-92

- 3. Remove the cover next to the operation panel using a flat-blade screwdriver.
- 4. Fit the card reader mount to the machine using two pins.

5. Refit the card reader base to card

step 2.

reader mount using the pin removed in

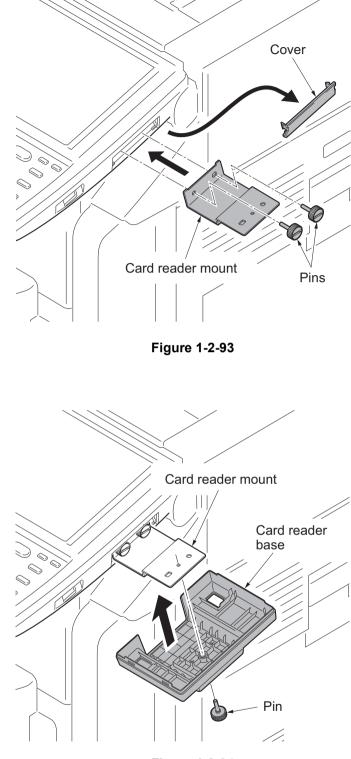


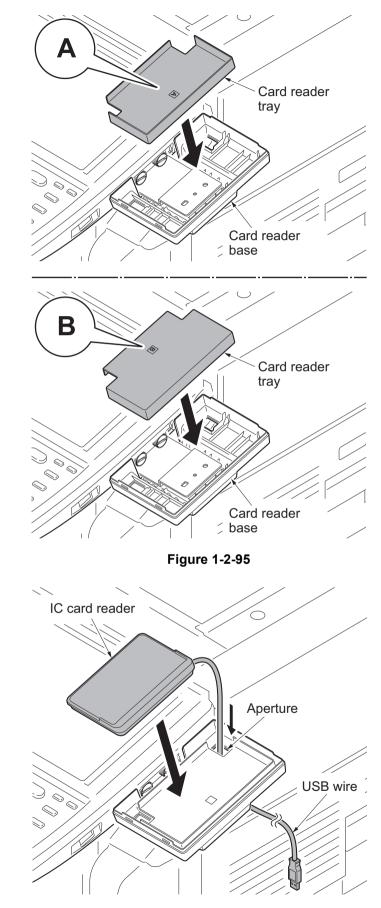
Figure 1-2-94

6. Fit the card reader tray to the card reader base.

Choose the direction of mounting the IC card reader according to the depth of the reader.

10mm to 22mm: Face the mark A upwards.

Less than 10mm: Face the mark B upwards.



7. Route the USB wire of the IC card reader through the aperture of the card reader base and mount the IC card reader on the card reader base.

Figure 1-2-96

 Hook the two hooks of the card reader case to fit the card reader case to the card reader base.
 Press its top until it clicks in.

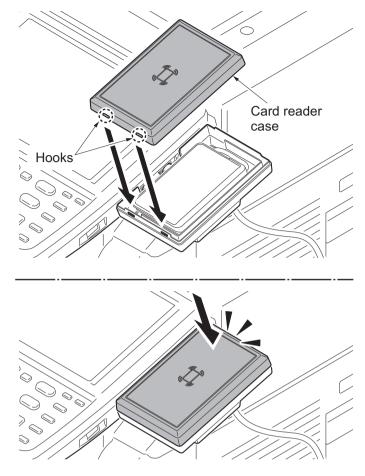


Figure 1-2-97

9. Fit six clamps. Right side: three Rear side: three

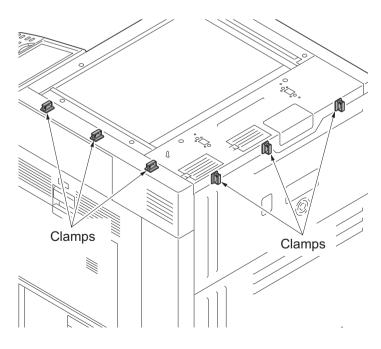


Figure 1-2-98

10. Cut out the breakaway cover on the controller lid using nippers.

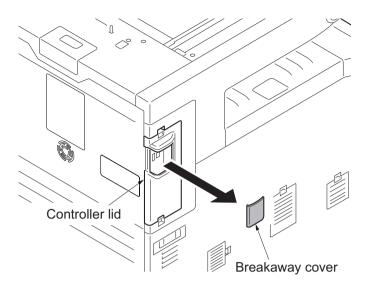


Figure 1-2-99

- 11. Pass the USB wire of the IC card reader through six clamps and then fasten the wire.
- 12. Connect the USB wire to the machine. If the length does not suffice, use the USB wire supplied.

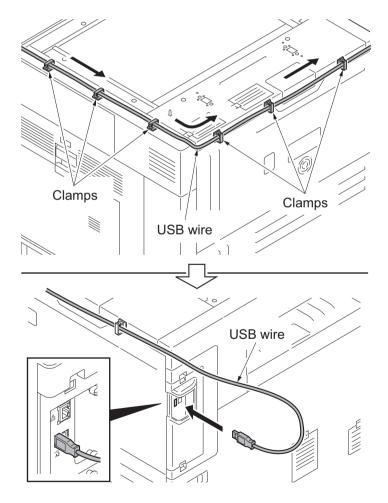


Figure 1-2-100

Enabling IC Card Authentication

Precautions

To install the optional function, you need the License Key. Please access the designated website of your dealer or service representative, and register "Machine No." indicated on your machine and "Product ID" indicated on the License Certificate supplied with the product to issue the License Key.

- 1. Turn the main power switch on.
- 2. Press the System Menu key and then press [System].

If user login administration is disabled, the user authentication screen appears.

Enter your login user name and password and then press [Login]. For this, you need to log in with administrator privileges.

- 3. Press [Next] of Optional Function.
- 4. Select CARD AUTHENTICATION KIT(B) and press [Activate].
- 5. The License Key entry screen is displayed. Enter the License Key using the numeric keys and press [Official].
- 6. Confirm the product name CARD AUTHENTICATION KIT(B) and press [Yes].
- 7. To use a SSFC card, run maintenance mode U222 and set SSFC.

1-2-10 Installing the keyboard holder (option)

Keyboard holder installation requires the following parts:

Parts	Quantity	Part.No.
Keyboard holder	1	1709AF0UN0 (option)

Supplied parts of keyboard holder (1709AF0UN0):

Parts	Quantity	Part.No.
Upper keyboard holder	1	-
Lower keyboard holder	1	-
Keyboard cover	1	-
Velcro A	2	-
Velcro B	2	-
Film	1 *1	-
M4 x 8 tap-tight S screw	2	-
M4 x 8 tap-tight P screw	3	-
M3 x 8 tap-tight S screw	2 *1	-

*1: Not used in this model.

*2: Clamp x1 is not used.

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Remove the staple holder and then remove two screws.

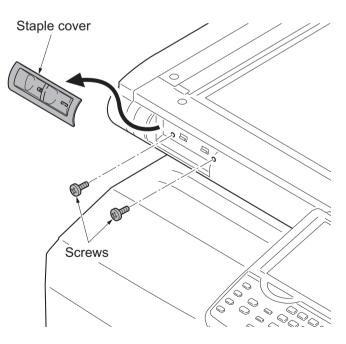
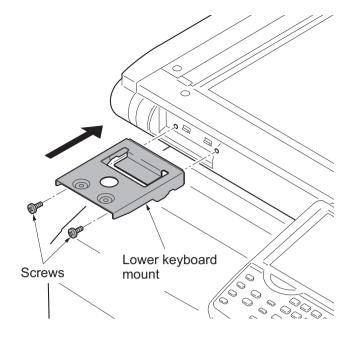
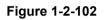


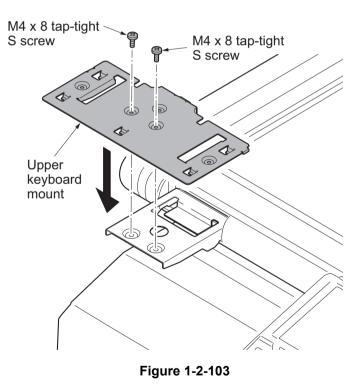
Figure 1-2-101

3. Fit the lower keyboard mount to the machine using two screws removed in step 2.

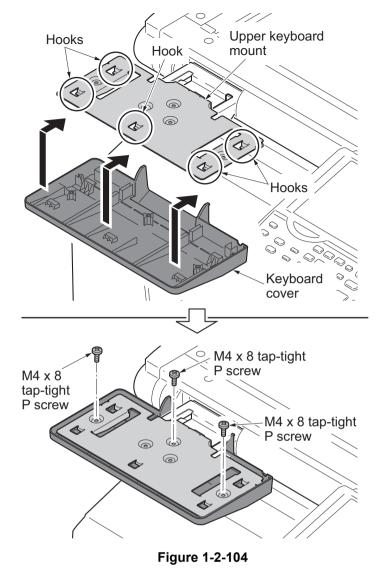




4. Fit the upper keyboard mount to the lower keyboard mount using two M4 x 8 tap-tight S screws.



- 5. Latch the keyboard cover with the upper keyboard mount by the five hooks.
- 6. Fit the keyboard cover to the upper keyboard mount using three M4 x 8 taptight P screws.



7. Adhere two Velcro tapes onto the upper keyboard mount.

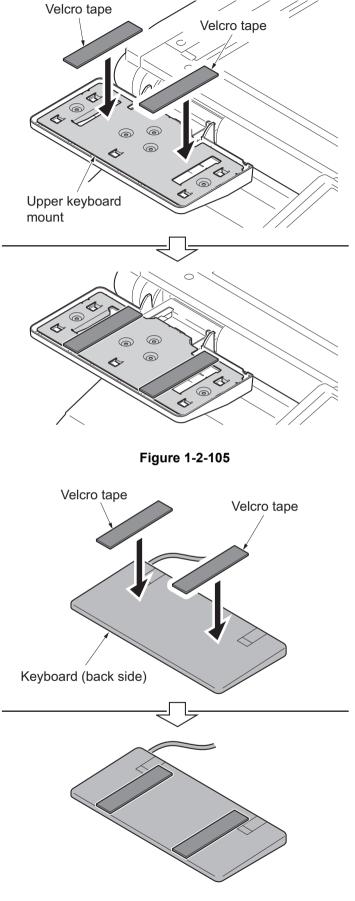
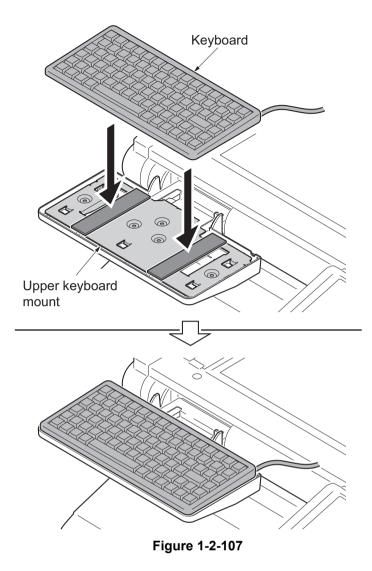


Figure 1-2-106

8. Adhere two Velcro tapes onto back side of the keyboard.

9. Align the Velcro tapes with each other, mount the keyboard onto the upper keyboard mount.



10. Fit the spaple cover.

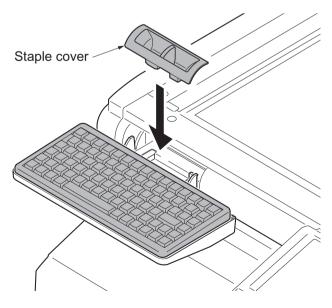


Figure 1-2-108

11. Cut out the breakaway cover on the controller lid using nippers.

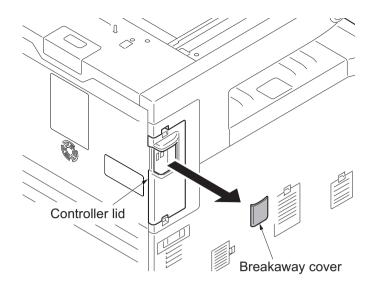
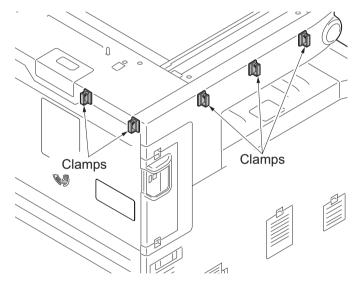


Figure 1-2-109





12. Fit five clamps. Left side: three Rear side: two

- 13. Pass the USB wire of the keyboard through five clamps and then fasten the wire.
- 14. Connect the USB wire to the machine.

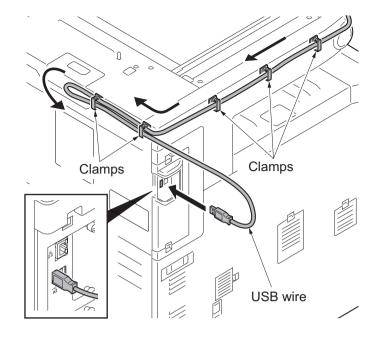
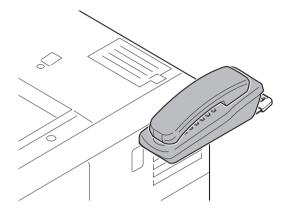


Figure 1-2-111

1-2-11 Installing the handset (option for japan only)

(1) Installing directly on the device



Handset installation requires the following parts:

Parts	Quantity	Part.No.
Handset	1	1909AG9JP0 (option)

Supplied parts of handset (1909AG9JP0):

Parts	Quantity	Part.No.
Handset	1	-
Handset base	1	-
Handset mount	1	-
Protection cover	1	-
Pin	2	-
Telephone wire	1	-
Modular cable	1	-
M4 nut	2	3CY06030

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Pull the paper conveying unit out.
- 3. Remove two screws and then remove the ISU right cover.
- 4. Remove the screw and five hooks and then remove the right upper cover.

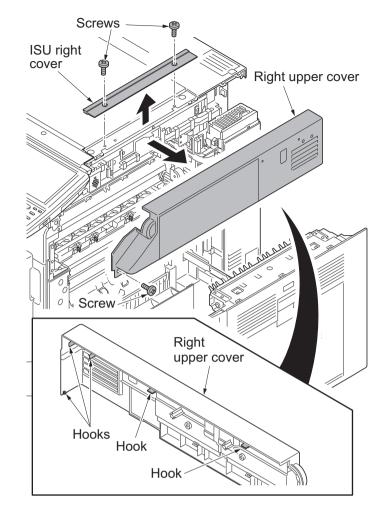
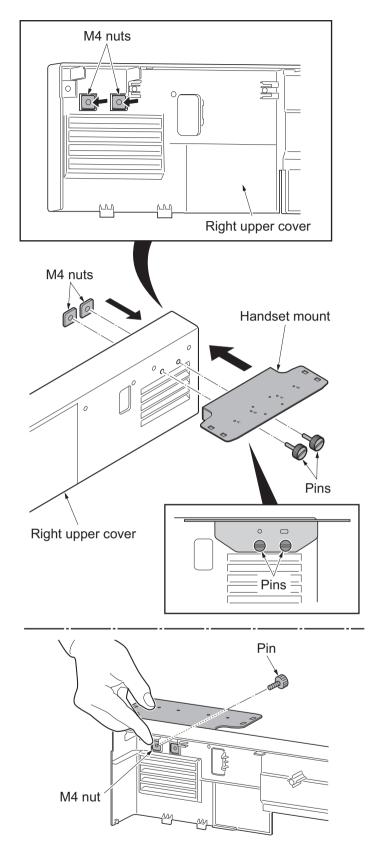


Figure 1-2-112

- 5. Mount two M4 nuts at the back of the right upper cover.
- 6. Fit the handset mount to the right upper cover using two pins.Use the lower screw holes.





*: Secure the screws making sure that the nuts do not fall.

- 7. Refit the right upper cover.
- 8. Refit the ISU right cover.
- 9. Close the paper conveying unit.
- 10. Remove two nuts and two pins from the handset mount and remount it at mark B.
- ę Handset mount Nut Nut Pin Ŷ Pin Β Nut Nut

Pins

Figure 1-2-114

11. Insert the pins at the insert parts on the back of the handset base, and slide it towards you.

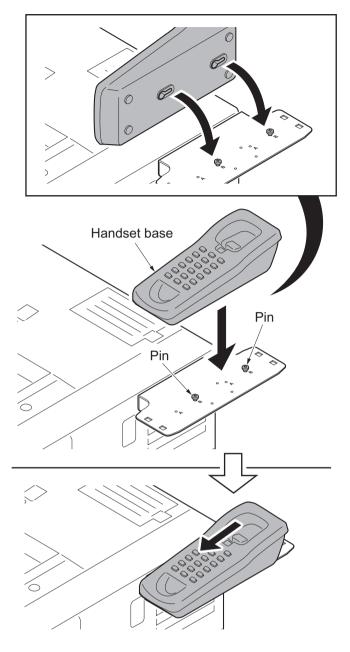


Figure 1-2-115

12. Fit the protection cover to the handset mount.

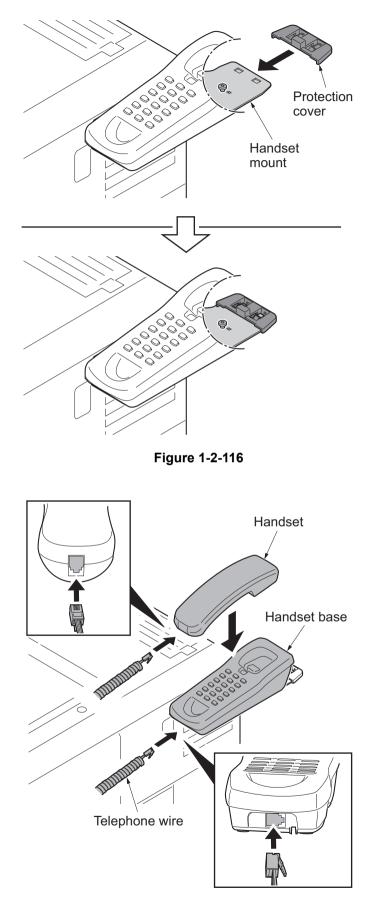


Figure 1-2-117

13. Connect the telephone wire to the handset and the handset base.

14. Connect the modular cable to the handset base and the machine.

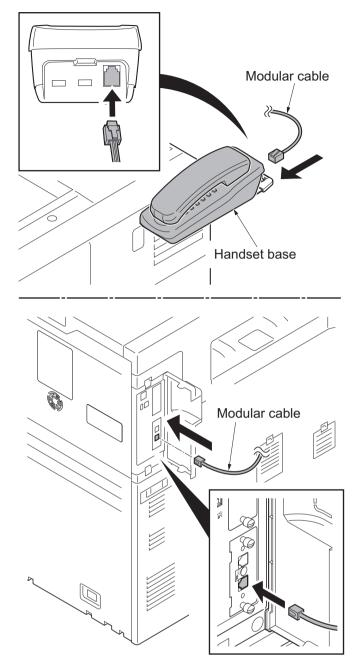
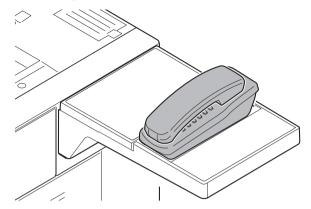


Figure 1-2-118

(2) Mounting on the document table



Handset installation requires the following parts:

Parts	Quantity	Part.No.
Handset	1	1909AG9JP0 (option)
Document table	1	1902H70UN2 (option)

Supplied parts of handset (1909AG9JP0):

Parts	Quantity	Part.No.
Handset	1	-
Handset base	1	-
Handset mount	1*	-
Protection cover	1	-
Pin	2	-
Telephone wire	1	-
Modular cable	1	-
M4 nut	2*	3CY06030

*: Not used in this model.

Supplied parts of document table (1902H70UN2):

Parts	Quantity	Part.No.
Tray stay	1	-
Tray mount	1	-
Tray cover	1	302LC04601
Tray lower cover	1	302LC04710
Tray retainer	1	-
Sheet	2*	302LC04660
Pin	2	303NS24410
M4 nut	2	3CY06030
M4 x 8 screw	7	7BB180408H
M4 x 14 screw	2	7BB607414H

*: Sheet x1 is not used.

Procedure

- 1. Press the power key on the operation panel to off. Make sure that the power indicator and the memory indicator are off before turning off the main power switch. And then unplug the power cable from the wall outlet.
- 2. Pull the paper conveying unit out.
- 3. Remove two screws and then remove the ISU right cover.
- 4. Remove the screw and five hooks and then remove the right upper cover.

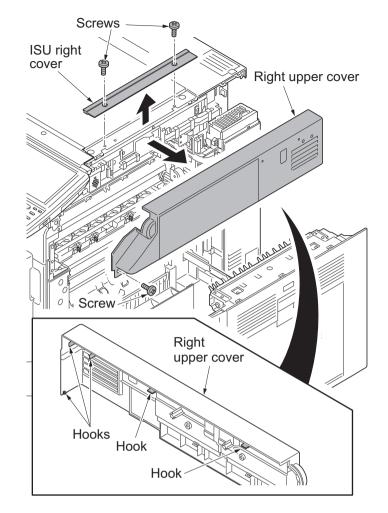


Figure 1-2-119

- 5. Mount two M4 nuts at the back of the right upper cover.
- 6. Fit the tray stay to the right upper cover using two M4 x 14 screws.

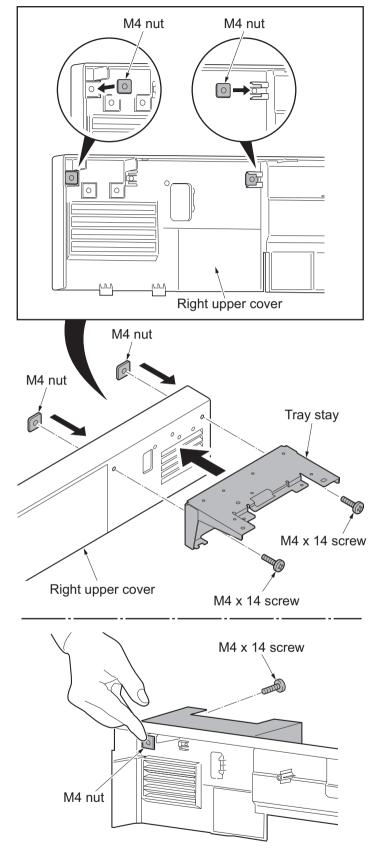


Figure 1-2-120

*: Secure the screws making sure that the nuts do not fall.

- 7. Fit the tray retainer to the machine using the M4 x 8 screw.
- *: The procedure described above is not required if an optional right job separator has been installed.
- 8. Refit the right upper cover.
- 9. Refit the ISU right cover.
- 10. Close the paper conveying unit.

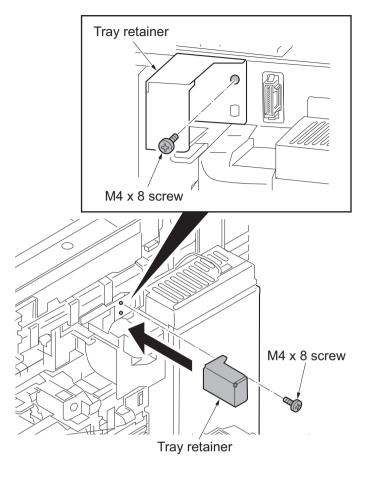


Figure 1-2-121

11. Snap in the tray mount to the tray stay and fix using two M4 x 8 screws.

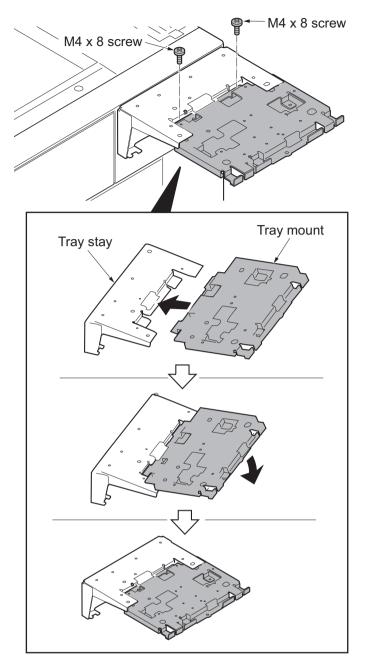


Figure 1-2-122

12. Fit the tray cover to the tray stay using four M4 x 8 screws.

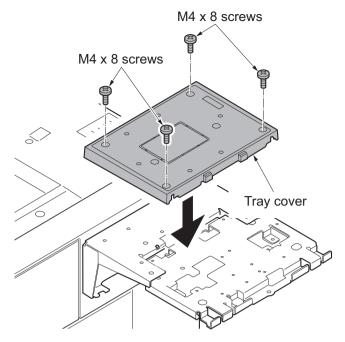


Figure 1-2-123

- 13. Remove two nuts and two pins from the handset mount.
- 14. Replace the two nuts and two pins which were removed at mark A on the tray mount.

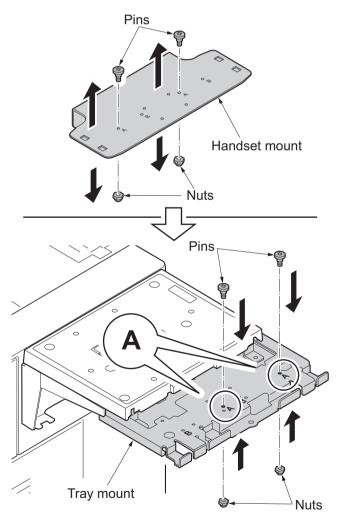
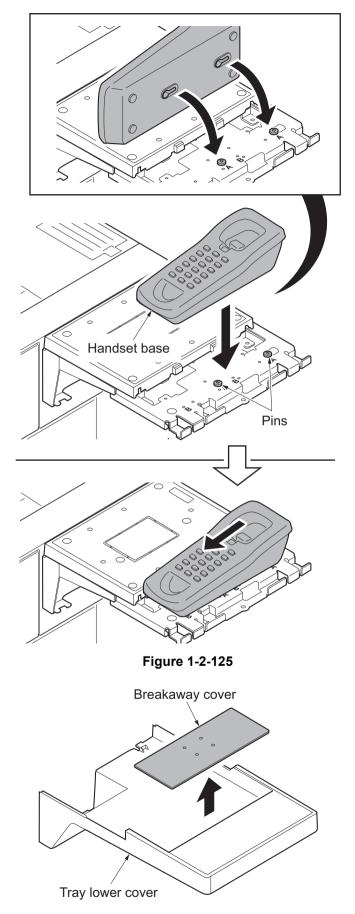


Figure 1-2-124

15. Insert the pins at the insert parts on the back of the handset base, and slide it towards you.



16. Cut out the breakaway cover on the tray lower cover using nippers.



- 17. Fit the tray lower cover.
- 18. Secure the tray lower cover with two pins.

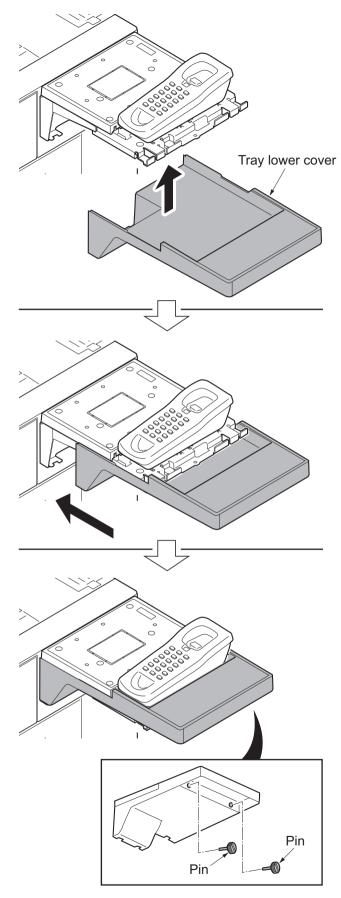


Figure 1-2-127

19. Adhere the sheet onto left side of the document table.

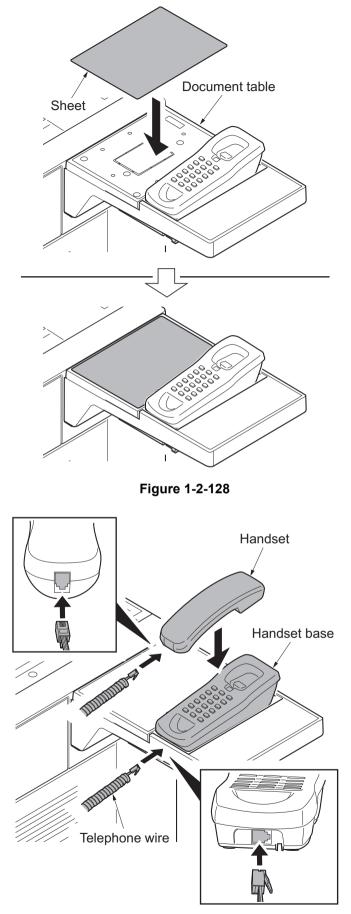


Figure 1-2-129

20. Connect the telephone wire to the handset and the handset base.

21. Connect the modular cable to the handset base and the machine.

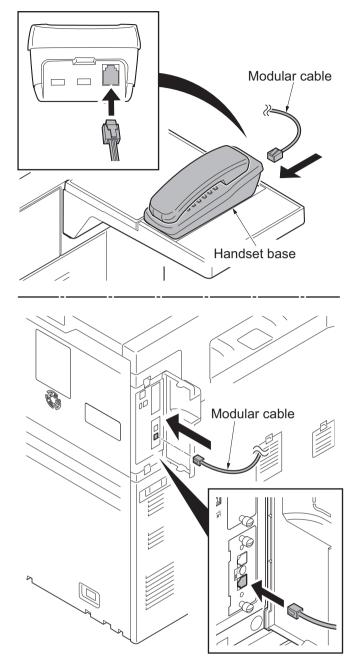


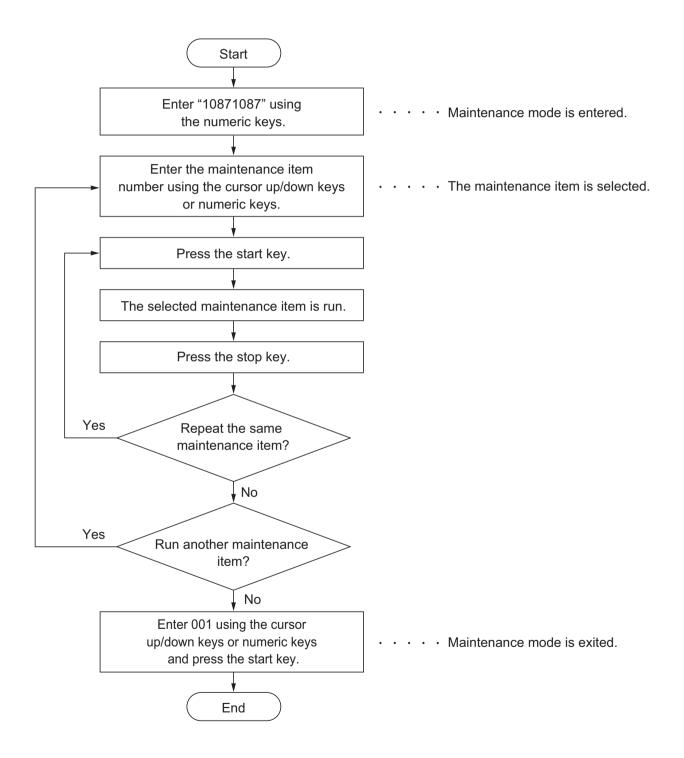
Figure 1-2-130

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1-3-1 Maintenance mode

The machine is equipped with a maintenance function which can be used to maintain and service the machine.

(1) Executing a maintenance item



(2) Maintenance modes item list

Continu	ltem	Contact of maintanance item		Initial setting]
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm
General	U000	Outputting an own-status report		-	
	U001	Exiting the maintenance mode		-	
	U002	Setting the factory default data		-	
	U003	Setting the service telephone number		-	
	U004	Setting the machine number	-		
UC	U010	Setting the maintenance mode ID	-		
	U019	Displaying the ROM version		-	
Initializa-	U021	Memory initializing		-	
tion	U024	HDD formatting		-	
Drive,	U030	Checking the operation of the motors		-	
paper feed and paper conveying	U031	Checking switches and sensors for paper con- veying		-	
system	U032	Checking the operation of the clutches		-	
-	U033	Checking the operation of the solenoids	-		
	U034	Adjusting the print start timing			
		LSU Out Top	0/0/0	0/	0/0/0
		LSU Out Left		0/0/0/0/0/0/0	
	U035	Setting the printing area for folio paper	330/210		
	U037	Checking the operation of the fan motors	-		
	U039	Adjusting the magnification	0		
	U051	Adjusting the deflection in the paper	1/1/1/1/1/1/ 1/1/1/1/1/1/1/1/1/1/1/1/1/	-5/0/-5/0/ -5/0/-5/0/ -5/0/-3/0	-8/-1/-8/-1/ -8/-1/-8/-1/ -8/-1/-6/-1
	U052	Setting the fuser motor control		•	
		Set Loop Sensor		-	
		Loop Sensor Control	On/	On/On/On/Or	n/On
		Set Loop Sensor Valid		On	
	U053	Setting the adjustment of the motor speed			
		Motor1	78	60	49
		Motor2	953/-/29	736/33/22	596/27/18
		Motor3	18/-30/26/ 26/66/35/ -/-/-/0/0/0/ 0	13/-24/20/ 20/120/26/ 72/-10/-10/ 0/0/0/0	10/-20/15/ 15/97/19/ 58/-8/-8/0/ 0/0/0
		Motor1 Half		0	
		Motor2 Half	1907/-/56	1473/66/ 44	1191/54/ 35

No.			Initial setting			
NO.	Content of maintenance item	35ppm	45ppm	55ppm		
U053	Motor3 Half	106/0/112/	82/0/86/	66/0/70/		
		-	86/238/	70/194/		
				133/116/ -16/-16		
11059	Setting fan mode	-/-/-	-20/-20	-10/-10		
0000	-		Mode1			
U061			_			
U063			0			
U065			0/0			
U066			0/0			
U067	Adjusting the scanner center line		0/0			
U068	Adjusting the scanning position for originals from the DP	0/0				
U070	Adjusting the DP magnification	0/0/0/0				
U071	Adjusting the DP scanning timing	0/0/0/0				
U072	Adjusting the DP center line	0/0/0				
U073	Checking the scanner operation	-				
U074	DP input response adjustment	1				
U087	Setting DP reading position modification opera- tion	125/125/125				
U089	Outputting a MIP-PG pattern		-			
U091	Setting the white line correction	112/75/0				
U099	Adjusting original size detection	DP is not installed 20/30/40/20/30/40/20/30/40 DP is installed 50/50/50/50/50/50/50/50/50/50/		0/30/40 d		
U100	Adjusting main high voltage					
	Adj AC Bias		-			
	Set AC Auto Adj		On			
	Set DC Bias		-			
	Adj DC Bias		0/0			
	Set Low Temp		1			
	Set Charger Freq		9160			
	Chk Current		-			
	U059 U061 U063 U065 U066 U067 U068 U070 U071 U072 U073 U074 U073 U074 U087 U089 U091 U099	U059Setting fan modeFan ModeCooling ModeU061Checking the operation of the exposure lampU063Adjusting the shading positionU064Adjusting the scanner magnificationU065Adjusting the scanner leading edge registrationU066Adjusting the scanner center lineU067Adjusting the scanner center lineU068Adjusting the Scanner center lineU070Adjusting the DP magnificationU071Adjusting the DP scanning timingU072Adjusting the DP center lineU073Checking the scanner operationU074DP input response adjustmentU087Setting DP reading position modification operationU089Outputting a MIP-PG patternU091Setting the white line correctionU092Adjusting main high voltageAdj AC BiasSet AC Auto AdjSet DC BiasAdj DC BiasSet Low TempSet Charger Freq	1112/132/ 210/ -/U059Setting fan modeFan ModeCooling ModeU061Checking the operation of the exposure lampU063Adjusting the shading positionU064Adjusting the scanner magnificationU065Adjusting the scanner center lineU066Adjusting the scanner center lineU067Adjusting the scanner center lineU068Adjusting the scanner center lineU070Adjusting the DP magnificationU071Adjusting the DP scanning timingU072Adjusting the DP center lineU073Checking the scanner operationU074DP input response adjustmentU087Setting DP reading position modification operationU089Outputting a MIP-PG patternU091Setting the white line correctionU092Adjusting original size detectionU093Adjusting main high voltageAdj AC BiasSet AC Auto AdjSet DC BiasAdj DC BiasAdj DC BiasSet Charger FreqSet Charger Freq	Image: set in the set of the		

Section	ltem	Content of maintenance item	I	nitial setting	J
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm
High	U106	Setting the voltage for the secondary transfer			
voltage		Light/Normal1 1st	150/143/ 139	174/165/ 157	146/140/ 134
		Light/Normal1 2nd	146/139/ 124	160/153/ 135	133/130/ 120
		Normal2/3 1st	150/143/ 139	174/165/ 157	146/140/ 134
		Normal2/3 2nd	146/139/ 124	160/153/ 135	133/130/ 120
		Heavy1-3 1st Half	122/122/ 118	130/130/ 126	116/116/ 114
		Heavy1-3 2nd Half	115/115/ 105	122/122/ 109	121/121/ 109
		Heavy4/5 1st Half	118/118/ 110	126/126/ 115	114/114/ 107
		Heavy4/5 2nd Half	114/114/ 104	120/120/ 108	110/110/ 102
		ОНР	108/108/ 101	112/112/ 104	105/105/ 101
		Bias	163/163/ 108/100	163/163/ 113/102	164/164/ 117/105
	U110	Checking the drum count		-	
	U111	Checking the drum drive time		-	
	U117	Checking the drum number		-	
	U118	Displaying the drum history	-		
	U119	Setting the drum			
	U127	Checking/clearing the transfer count		-	
	U128	Setting transfer high-voltage timing	-20/-/-13	-18/-/-15	-15/-/-18
Developer	U130	Initial setting for the developer		-	
	U131	Adjusting the toner sensor control voltage		-	
		Manual	107	120	128
		Mode		Auto	
	U132	Replenishing toner forcibly		-	
	U135	Checking toner motor operation	_		
	U136	Setting toner near end detection		3	
	U139	Displaying the temperature and humidity outside the machine		-	

Section	ltem	Content of maintenance item	I	Initial setting	9	
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm	
Developer	U140	Displaying developer bias				
		Sleeve DC	62	62	70	
		Sleeve AC	159	159	150	
		Mag DC	148	148	180	
		Mag AC	101	101	199	
		Sleeve Freq	4580/5345	4580/5345	4580/5345	
		Sleeve Duty	63	63	43	
		Mag Duty	37	37	68	
		AC Calib		I		
		Magnification	-	_	12	
		High Altitude	(D	Mode1	
	U147	Setting for toner applying operation				
		Timing	35/8	45/8	55/8	
		Mode		Mode1		
		Upper Limit		2.0		
		Minimum	10			
	U148	Setting drum refresh mode	2			
	U155	Checking sensors for toner		-		
	U156	Setting the toner replenishment level				
		Supply		512		
		Empty	100			
	U157	Checking the developer drive time		-		
	U158	Checking the developer count		-		
Fuser	U161	Setting the fuser control temperature				
		Warm Up	110/110/ 155/150/ 155/160	110/110/ 160/155/ 160/160	110/110/ 170/165/ 170/160	
		Print	160/170/0	165/175/0	175/185/0	
	U163	Resetting the fuser problem data		-	I	
	U167	Checking/clearing the fuser count		-		
	U193	Setting the fuser drive control		On		
	U199	Displaying fuser heater temperature		-		

Castian	Item	Contant of maintenance item		Initial setting]
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm
Operation	U200	Turning all LEDs on		-	
panel and support	U201	Initializing the touch panel		-	
equipment	U202	Setting the KMAS host monitoring system		-	
	U203	Checking DP operation	-		
	U204	Setting the presence or absence of a key card or key counter	C	Off/Coin Vende	er
	U206	Setting the presence or absence of a coin vender			
		On/Off Config		Off	
		No Coin Action		Off	
		Price		10/10/10/10/	
	U207	Checking the operation panel keys		-	
	U208	Setting the paper size for the side deck	Lette	r (Inch)/A4 (M	letric)
	U211	Setting the presence or absence of the job separator		Off	
	U221	Setting the USB host lock function	Off		
	U222	Setting the IC card type	Other		
	U223	Operation panel lock	Unlock		
	U224	Panel sheet extension		-	
	U234	Setting punch destination	Inch (Inch)/Europe Met	ric (Metric)
	U237	Setting finisher stack quantity		0/0	
	U240	Checking the operation of the finisher		-	
	U241	Checking the operation of the switches of the finisher		-	
	U243	Checking the operation of the DP motors		-	
	U244	Checking the DP switches		-	
	U245	Checking messages		-	
	U246	Setting the finisher			
		Finisher		0/)
		Booklet	0	/0/0/0/0/0/0/0	/0
	U247	Setting the paper feed device		-	
	U249	Finisher operation test		-	
Mode	U250	Checking/clearing the maintenance cycle		-	
setting	U251	Checking/clearing the maintenance counter		-	
	U252	Setting the destination		-	
	U253	Switching between double and single counts	C	BL(A3/Ledge	er)
	U260	Selecting the timing for copy counting		Eject	

Section	ltem	Content of maintenance item		Initial setting	9	
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm	
Mode	U265	Setting OEM purchaser code		-		
setting	U271	Setting the page count		2/3		
	U278	Setting the delivery date	-			
	U285	Setting service status page	On			
	U323	Setting abnormal temperature and humidity warning		On		
	U325	Setting the paper interval	Off/1			
	U326	Setting the black line cleaning indication		On/8		
	U327	Setting the cassette heater control		Off		
	U332	Setting the size conversion factor		1.0		
	U340	Setting the applied mode		50/1		
	U341	Specific paper feed location setting for printing function		-		
	U343	Switching between duplex/simplex copy mode	Off			
	U345	Setting the value for maintenance due indication	0			
Image processing	U402	Adjusting margins of image printing	4.0/3.0/3.0/3.9			
	U403	Adjusting margins for scanning an original on the contact glass	2.0/2.0/2.0/2.0			
	U404	Adjusting margins for scanning an original from the DP	3.0/2.5/3.0/4.0/3.0/2.5/3.0/4.0			
	U407	Adjusting the leading edge registration for mem- ory image printing		0		
	U410	Adjusting the halftone automatically		Table1		
	U411	Adjusting the scanner automatically		-		
	U412	Adjusting the uneven density		-		
	U415	Adjusting the print position automatically		-		
	U425	Setting the target		-		
	U464	Setting the ID correction operation				
		Permission		On		
		Time Interval		0		
		Mode		Normal		
		On/Sleep Out		On		
		AP/NE		On		
		Leaving Time		60		
		Driving Time		300		
		Timing		0		
		Target Value		750/330		
		Calib		-		

Section	Item	Content of maintenance item	Initial setting			
Section	No.	Content of maintenance item	35ppm	45ppm	55ppm	
Image	U465	Data reference for ID correction		-		
processing	U470	Setting the JPEG compression ratio				
		Сору	90/90/90/90			
		Send	30/40/51 15	/70/90/30/40 /70/90/30/40 /25/90/15/25/ /25/90/15/25	/51/70/90 ′90/	
		System		90/90		
	U485	Setting the image processing mode		1/0		
Others	U901	Checking copy counts by paper feed locations		-		
	U903	Checking/clearing the paper jam counts		-		
	U904	Checking/clearing the call for service counts		-		
	U905	Checking counts by optional devices		-		
	U906	Resetting partial operation control		-		
	U908	Checking the total counter value		-		
	U910	Clearing the print coverage data		-		
	U911	Checking copy counts by paper sizes		-		
	U917	Setting backup data reading/writing		-		
	U920	Checking the copy counts		-		
	U927	Clearing the all copy counts and machine life counts (one time only)		-		
	U928	Checking machine life counts		-		
	U930	Checking/clearing the charger roller count		-		
	U935	Relay board maintenance		Mode0		
	U942	Setting of deflection for feeding from DP		0/0/0		
	U952	Maintenance mode workflow		-		
	U964	Checking of log		-		
	U969	Checking of toner area code		-		
	U977	Data capture mode		-		
	U984	Checking the developer unit number		-		
	U985	Displaying the developer unit history		-		
	U989	HDD Scan disk		-		
	U990	Checking the time for the exposure lamp to light		-		
	U991	Checking the scanner operation count		-		

(3) Contents of the maintenance mode items

	Description						
U000	Outputting an own-status report						
	occurrences. Outputs the memory. Purpose To check the current sett Before initializing or repla	nt settings of the maintenance items, and paper jam and service call e event log or service status page. Also sends output data to the USB ing of the maintenance items, or paper jam or service call occurrences acing the backup RAM, output a list of the current settings of the mainten re settings after initialization or replacement.					
	1. Press the start key.						
	2. Select the item to be	output using the cursor up/down keys.					
	Display	Output list					
	Maintenance	List of the current settings of the maintenance modes					
	User Status	Outputs the user status page					
	Service Status	Outputs the service status page					
	Event	Outputs the event log					
	Network Status	Outputs the network status page					
	All	Outputs the all reports					
	-	list is output. The interrupt print mode is entered and a list is output. Fr is available, a report of this size is output. If not, specify the paper fee					
	location. The output status is o	displayed.					
	location.	displayed. Description					
	location. The output status is o						
	location. The output status is o Display	Description					
	location. The output status is o Display Ready	Description List of the current settings of the maintenance modes					

Item No.	Description					
U000	 Method: Send to the USB memory 1. Press the power key on the operation panel, and after verifying the main power indicator has gone off, switch off the main power switch. 2. Insert USB memory in USB memory slot. 3. Turn the main power switch on. 4. Enter the maintenance item. 5. Press the start key. 6. Select the item to be send. 7. Select [Text] or [HTML]. 					
	Display	Output list				
	Print	Outputs the report				
	USB (Text)	Sends output data to the USB memory (text type)				
	USB (HTML)	Sends output data to the USB memory (HTML type)				
	8. Press the start key. Output will be sent to the	e USB memory.				

2LL/2LJ/2LH

No.				Description			
00	Event log						
	F	vent Lo	a				
		FP	9		(2) 27/Oct/2010 08:		
			2LH_2000.000.000 2010.1	(3) 0.27 [XXXXXXXX][]	(4) (5) (6) XXXXXXXXX [XXXXXXX] [XXXXXXX		
			_				
	(8)	Paper Jam Log # Count.	Event Descriprions	(12) Counter Log (f) J0000: 0 J0041	: 1 (g) C0000: 0 (h) T00: 10		
		1699999991588888881477777771366666666	0501.01.08.01.01 4002.01.08.01.01 0501.01.08.01.01 4002.01.08.01.01	J0001: 1 J0042 J0002: 11 J0043 J0003: 222 J0044	2: 1 C0001: 1 T01: 24 3: 1 C0002: 2 T02: 34 4: 1 C0003: 3 T03: 44		
		12 5555555 11 4444444 10 3333333	0501.01.08.01.01 4002.01.08.01.01 0501.01.08.01.01	J0004: 1 J0045 J0005: 1 J0046 J0006: 1 J0047	6: 1 C0005: 5 T05: 99 7: 1 C0006: 6		
		9 2222222 8 1111111 7 9999055 6 855000	4002.01.08.01.01 0501.01.08.01.01 4002.01.08.01.01	J0007: 1 J0048 J0008: 1 J0049 J0009: 1 J0050 J0010: 1	0: 1 C0008: 8 0: 1 C0009: 9 C0010: 10		
		5 4 3 2 (050 ² (a)	(b) (c) (d) (e)		C0011: 11 C0012: 12 C0013: 13 C0014: 14 C0015: 15		
		1 1	4002.01.08.01.01	J0017: 1 J0018: 1	C0016: 16 C0017: 17		
	(9)	Service Call Log # Count.) Service Code	J0019: 1 J0020: 1	C0018: 18 C0019: 19		
		8 1111111 7 999999 6 888888	01.6000 01.2100 01.4000	J0020: 1 J0021: 1 J0022: 1 J0023: 1	C0020: 20 C0020: 21 C0022: 22		
		5 777777 4 666666 3 555555	01.6000 01.2100 01.4000	J0024: 1 J0025: 1 J0026: 1	C0023: 23		
		2 444444 1 1	01.6000 01.2100	J0027: 1 J0028: 1 J0029: 1			
	(10)	Maintenance Lo # Count.	g Item.	J0030: 1 J0031: 1 J0032: 1			
		Log Data I	Nothing	J0033: 1 J0034: 1			
	(11)	Unknown toner		J0035: 1 J0036: 1			
		# Count. 5 1111111 4 9999999 3 888888 2 777777	Item. 01.00 01.00 01.00 01.00	J0037: 1 J0038: 1 J0039: 1 J0040: 1			
	_	1 666666	01.00				
					(7) [XXXXXXXXXXXXXXX		
				Figure 1-3-1			
	Detail o	of event log					
	No.	Items		Descript	tion		
	(1)	System version	on				
	(2)	System date					
	(3)	Engine soft ve	ersion				

	Description							
U000	Detail of event log							
	No. Items Description							
	(5)	Controller BROM version						
	(6)	Operation panel mask version						
	(7)	Machine serial number						
	(8)	Paper Jam	#	Count.	Event			
		Log	Remembers 1 to 16 of occurrence. If the occur- rence of the previous paper jam is less than 16, all of the paper jams are logged. When the occurrence excesseds 16, the oldest occur- rence is removed.	The total page count at the time of the paper jam.	Log code (hexadeci- mal, 5 categories) (a) Cause of a paper jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject			
			(a) Cause of paper jam (I	Hexadecimal)	1			
			For details on the case of paper jam, refer to Paper Misfeed Detection (P.1-4-1)					
			(b) Detail of paper source (Hexadecimal)					
			 01: Cassette 1 02: Cassette 2 03: Cassette 3 (paper feeder/large capacity feeder) 04: Cassette 4 (paper feeder/large capacity feeder) 05: Cassette 5 (side deck) 06 to 09: Reserved 					
			(c) Detail of paper size (Hexadecimal)					
			00: (Not specified) 01: Monarch 02: Business 03: International DL 04: International C5 05: Executive 06: Letter-R 86: Letter-E 07: Legal 08: A4R	0B: B4 0C: Ledger 0D: A5R 0E: A6 0F: B6 10: Commercial #9 11: Commercial #6 12: ISO B5 13: Custom size 1E: C4	 22: Special 1 23: Special 2 24: A3 wide 25: Ledger wide 26: Full bleed paper (12 x 8) 27: 8K 28: 16K-R A8: 16K-E 32: Statement-R 			

Item No.	Description						
U000	No.	Items Description					
	(8) cont.	Paper Jam Log	(d) Detail of paper type (Hexadecimal)				
			 01: Plain 02: Transparency 03: Preprinted 04: Labels 05: Bond 06: Recycled 07: Vellum 08: Rough 09: Letterhead 	0A: Color 0B: Prepunched 0C: Envelope 0D: Cardstock 0E: Coated 0F: 2nd side 10: Media 16 11: High quality	15: Custom 1 16: Custom 2 17: Custom 3 18: Custom 4 19: Custom 5 1A: Custom 6 1B: Custom 7 1C: Custom 8		
			(e) Detail of paper eje	ect location (Hexadecin	nal)		
		 01: Face down (FD) 02: Face up (FU)/100 4000-sheet finish 03: 1000-sheet finish 05: Job separator tray 06: 4000-sheet finish 07: 4000-sheet finish 07: 4000-sheet finish 09: 4000-sheet finish 08: Mailbox tray 1 (FI 0C: Mailbox tray 1 (FI 0C: Mailbox tray 2 (FI 16: Mailbox tray 2 (FI 16: Mailbox tray 2 (FI 16: Mailbox tray 3 (FI 20: Mailbox tray 3 (FI 20: Mailbox tray 4 (FI 33: Mailbox tray 4 (FI 34: Mailbox tray 5 (FI 34: Mailbox tray 6 (FI 35: Mailbox tray 6 (FI 36: Mailbox tray 7 (FI 47: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 49: Mailbox tray 7 (FI 40: Mailbox tray 7 (FI 41: Mailbox tray 7 (FI 42: Mailbox tray 7 (FI 43: Mailbox tray 7 (FI 44: Mailbox tray 7 (FI 45: Mailbox tray 7 (FI 46: Mailbox tray 7 (FI 47: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 49: Mailbox tray 7 (FI 40: Mailbox tray 7 (FI 41: Mailbox tray 7 (FI 42: Mailbox tray 7 (FI 43: Mailbox tray 7 (FI 44: Mailbox tray 7 (FI 45: Mailbox tray 7 (FI 46: Mailbox tray 7 (FI 47: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 48: Mailbox tray 7 (FI 49: Mailbox tray 7 (FI 40: Mailbox tray 7 (FI 					

	Description							
No.	No. Items Description							
(9)	Service Call	#	Count.	Service Code				
	Log	Remembers 1 to 8 of occurrence of self diagnostics error. If the occurrence of the previous diag- nostics error is less than 8, all of the diagnostics errors are logged.	The total page count at the time of the self diagnostics error.	Self diagnostic error code (See page 1-4-2) Example: 01.6000 01: Self diagnostic error 6000: Self diagnostic error code number				
(10)	Maintenance	#	Count.	Item				
	Log	Remembers 1 to 8 of occurrence of replacement. If the occurrence of the previous replace- ment of toner con- tainer is less than 8, all of the occur- rences of replace- ment are logged.	The total page count at the time of the replacement of the toner container. * :The toner replacement log is triggered by toner empty. This record may contain such a ref- erence as the toner container is inserted twice or a used toner con- tainer is inserted.	Code of maintenance replacing item (1 byte, 2 categories) First byte (Replacing item) 01: Toner container Second byte (Type of replacing item) 00: Black First byte (Replacing item) 02: Maintenance kit Second byte (Type of replacing item) 01: MK-6305A/				
(11)	Unknown	#	Count.	Item				
	Toner Log	Remembers 1 to 5 of occurrence of unknown toner detection. If the occurrence of the previous unknown toner detection is less than 5, all of the unknown toner detection are logged.	The total page count at the time of the toner empty error with using an unknown toner container.	Unknown toner log code (1 byte, 2 categories) First byte 01: Toner container (Fixed Second byte 00: Black				

Item No.	Description							
U000	No.	Items	Items Description					
Item No. U000	No. (12)	Items Counter Log Comprised of three log coun- ters including paper jams, self diagnostics errors, and replacement of the toner con- tainer.	Desc (f) Paper jam Indicates the log counter of paper jams depending on location. Refer to Paper Jam Log. All instances includ- ing those are not occurred are dis- played.	-	 (h) Maintenance item replacing Indicates the log coun- ter depending on the maintenance item for maintenance. T: Toner container 00: Black M: Maintenance kit 00: MK-6305A Example: T00: 1 The toner container has been replaced once. * :The toner replace- ment log is triggered by toner empty. This record may con- tain such a reference as the toner container is inserted twice or a 			
					used toner container is inserted.			

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	Description Service status page (1)						
J000							
	Service S	Status Page					
	MFP			(2) 27/10/2010			
	(1) Firmware version 2LH_2000.000.000 2010.10.27		(3) (4) (5) [XXXXXXX] [XXXXXXX] [XXXXXXX] (30) FAX Information Slot1/Slot2 (31) Rings (Normal) 3				
	Memory status (7) Total Size	2.0 GB	 (32) Rings (FAX/TEL) (33) Rings (TAD) (34) Option DIMM Size 	3 3 16 MB			
	Time (8) Local Time Zone	+01:00 Amsterdam	(
	(9) Date and Time (10) Time Server	27/10/2010 12:00 10.183.53.13	(35) FRPO Status Default Pattern Switch Default Font Number	B8 C5*1000+C2*100+C3	0 00000		
	Installed Options						
	(11) Document Process (12) Paper feeder	sor Installed Cassette (500 x 2)					
	(12) Paper leeder (13) Side feeder	Not Installed	•				
	(14) Finisher	1000-Finisher					
	(15) Job Separator	Installed	•				
	(16) Document Guaed (17) Card Authenticatio						
	(17) Card Addreniticatio (18) Internet FAX Kit (A		•				
	(19) Security Kit (E)	Installed					
	Data Security Kit	(E) Software Type I					
	(20) UG-34	Installed					
	(21) USB Keyboard (22) USB Keyboard Typ	Connected be US-English					
			•				
		/ Usage Page(A4/Letter Conversion)	· · · · · · · · · · · · · · · · · · ·				
	(24) Total K: 1.10	/ 1111111.11					
	(25) Copy						
		/ 1111111.11					
	(26) Printer						
	K: 1.10 (27) FAX	/ 1111111.11	e-MPS error control	Y6	0		
		/ 1111111.11					
	(28) Period	(27/10/2010 - 03/11/2010 08:40) ((%) 1.00 / 2.22 / 3.33 / 4.44	RP Code (36) 1234 5678 9012				
			(37) 5678 9012 3456 (38) 9012 3456 7890 (39) 3456 7890 1234				
		1		(6) [XXXXXXXXXXXXX	xxxx]		
		Figu	re 1-3-2				

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Item No.	Description						
U000	Service status page (2)						
	Service Status Page MFP 27/10/2010 12:00						
	Firmware version 2LH_2000.000.000 2010.10.27 [XXXXXXX] [XXXXXXX] [XXXXXXX]						
	Engine Information Send Information						
	Engine momation Send momation (40) NVRAM Version _1F31225_1F31225 (44) Date and Time 10/10/27 (41) Scanner Version 2LH_1200.001.089 (45) Address 10/10/27 (42) FAX Slot1 FAX BOOT Version 5JT_5000.001.001 FAX PL Version 5JT_5100.001.001 FAX IPL Version 5JT_5200.001.001 FAX IPL Version 5JT_5200.001.001 (43) MAC Address 00:C0:EE:D0:01:0D FAX PL Version 5JT_500.001.001						
	1/2 (46) (47) (48) 100/100 (49) 000/000/00000000000000000000000000000						
	2 [XXXXXXXXXXX]						
	Figure 1-3-3						

ltem No.	Description							
U000	Detail of service status page							
	No.	Description	Supplement					
	(1)	Firmware version	-					
	(2)	System date	-					
	(3)	Engine soft version	-					
	(4)	Engine boot version	-					
	(5)	Operation panel mask version	-					
	(6)	Machine serial number	-					
	(7)	Total memory size	-					
	(8)	Local time zone	-					
	(9)	Report output date	Day/Month/Year hour:minute					
	(10)	NTP server name	-					
	(11)	Presence or absence of the document processor	Installed/Not installed					
	(12)	Presence or absence of the paper feeder	Paper feeder/Large capacity feeder/Not Installed					
	(13)	Presence or absence of the side feeder	Side deck/Side multi tray/Side paper feeder/ Side large capacity feeder/Not Installed					
	(14)	Presence or absence of the finisher	1000-sheet finisher/4000-sheet finisher/ Not Installed					
	(15)	Presence or absence of the job separator	Installed/Not Installed					
	(16)	Presence or absence of the printed document guard kit	Installed/Not Installed					
	(17)	Presence or absence of the IC card authentication kit	Installed/Not Installed/Trial					
	(18)	Presence or absence of the internet fax kit	Installed/Not Installed					
	(19)	Presence or absence of the data security kit	Installed/Not Installed					
	(20)	Presence or absence of the UG-34	Installed/Not Installed					
	(21)	Presence or absence of the USB keyboard	Connected/Not connected					
	(22)	USB keyboard setting display	US-English/US-English with Euro					
	(23)	Page of relation to the A4/Letter	* :Print Coverage provides a close-matching refer- ence of toner consumption and will not match with the actual toner consumption.					
	(24)	Average coverage for total	-					
	(25)	Average coverage for copy	-					
	(26)	Average coverage for printer	-					

Item No.	Description							
U000								
	No.	Description	Supplement					
	(27)	Average coverage for fax	-					
	(28)	Cleared date and output date	-					
	(29)	Coverage on the final output page	-					
	(30)	Fax kit information	This item is printed only when the fax kit is installed.					
	(31)	Number of rings	0 to 15					
	(32)	Number of rings before auto- matic switching	0 to 15					
	(33)	Number of rings before connect- ing to answering machine	- 0 to 15 -					
	(34)	Optional DIMM size						
	(35)	FRPO setting	-					
	(36)	RP code	Code the engine software version and the date of update.					
	(37)	RP code	Code the main software version and the date of update.					
	(38)	RP code	Code the engine software version and the date of the previous update.					
	(39)	RP code	Code the main software version and the date of the previous update.					
	(40)	NV RAM version	_ 1F3 1225 _ 1F3 1225 (a) (b) (c) (d) (e) (f)					
			 (a) Consistency of the present software version and the database _ (underscore): OK * (Asterisk): NG 					
			 (b) Database version (c) The oldest time stamp of database version (d) Consistency of the present software version and the ME firmware version (underscore): OK * (Asterisk): NG 					
			 (e) ME firmware version (f) The oldest time stamp of the ME database version Normal if (a) and (d) are underscored, and (b) and (e) are identical with (c) and (f). 					
	(41)	Scanner firmware version	-					
	(42)	Fax firmware version	This item is printed only when the fax kit is installed.					

em No.	Description							
U000	No	Departmention	Sumplement					
	No.	Description	Supplement					
	(43)	Mac address	-					
	(44)	The last sent date and time	-					
	(45)	Transmission address	-					
	(46)	Destination information	-					
	(47)	Area information	-					
	(48)	Margin settings	Top margin/Left margin					
	(49)	Margin/Page length/Page width settings	Top margin integer part/Top margin decimal part/ Left margin integer part/Left margin decimal part/ Page length integer part/Page length decimal part Page width integer part/Page width decimal part					
		Life counter (The first line)	Machine life/MP tray/Cassette 1/Cassette 2/ Cassette 3/Cassette 4/Cassette 5/Duplex					
	(50)	Life counter (The second line)	Drum unit/Transfer belt unit/Developer unit/ Maintenance kit A					
	(51)	Panel lock information	0: Off/1: Partial lock/2: Full lock					
	(52)	USB information	U00: Not installed/U01: Full speed/U02: Hi speed					
	(53)	Paper handling information	0: Paper source unit select/1: Paper source unit					
	(54)	Black and white printing double count mode	 0: All single counts 1: A3, Single count, Less than 420 mm (length) 2: Legal, Single count, 356 mm or less (length) 3: Folio, Single count, Less than 330 mm (length) 					
	(55)	Billing counting timing	-					
	(56)	Temperature (machine outside)	-					
	(57)	Relative Humidity (machine outside)	-					
	(58)	Fixed assets number	-					
	(59)	Job end judgment time-out time	-					
	(60)	Job end detection mode	-					
	(61)	Prescribe environment reset	0: Off 1: On					
	(62)	Media type attributes 1 to 28 (Not used: 18, 19, 20)	Weight settingsFuser settings0: Light0: High1: Normal 11: Middle2: Normal 22: Low3: Normal 33: Vellum4: Heavy 1Duplex settings5: Heavy 20: Disable6: Heavy 31: Enable7: Extra Heavy					

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Item No.							Descrip	otion							
U000	00														
	No.	D	escrij	otion						Sup	pleme	ent			
	(63)	Calibration i	inform	ation			-								
	(64)	Calibration i	inform	ation			-								
	(65)	Calibration information - Calibration information - Calibration information - Calibration information - Calibration information -				- - -									
	(66)														
	(67)														
	(68)					-									
	(69)					-									
	(70)	Calibration i	inform	ation			-								
	(71)	Calibration information			-										
	(72)	RFID inform	nation				-								
	(73)	RFID reader/writer version infor- mation			-										
	(74)	Maintenance information				-									
	(75)	Altitude			0: Standard 1: High altitude 1 2: High altitude 2										
	(76)	Charger roller correction				1 to 5									
	(77)	Data Sanitization information					-								
	(78)	Toner low setting				0: Enabled 1: Disabled 0 to 100 (%)									
	(79)	Toner low detection level													
	(80)	Drum serial number				-									
		Code conversion													
			А	В	С	D	E	F	G	Н	Ι	J]		
			0	1	2	3	4	5	6	7	8	9			
							•						-		

U001	. Description					
0001	Exiting the maintenance mode					
	Description Exits the maintenance mode and returns to the normal copy mode. Purpose To exit the maintenance mode.					
	Method 1. Press the start key. T	he normal copy mode is entered.				
U002	Setting the factory defa	ult data				
	Purpose	nditions to the factory default settings.				
	 Method Press the start key. Select [Mode1(All)]. Press the start key. The mirror frame of the scanner returns to the home position. Turn the main power switch off and on. Allow more than 5 seconds between Off and On. * An error code is displayed in case of an initialization error. When errors occurred, turn main power switch off then on, and execute initialization using maintenance item U002. 					
	Error codes					
	Codes	Description				
	Codes	Description Entity error				
	0001	Entity error				
	0001 0002	Entity error Controller error				
	0001 0002 0003	Entity error Controller error OS error				

Item No.		Description			
U003	Setting the service telephone number				
	Description Sets the telephone number to be displayed when a service call code is detected. Purpose To set the telephone number to call service when installing the machine.				
	Setting 1. Press the start key. The keys to enter the num 2. Enter a telephone number 3. Press the start key. The set				
	Completion Press the stop key. The scree	n for selecting a maintenance item No. is displayed.			
U004	Setting the machine numbe	r			
	Description Sets or displays the machine Purpose To check or set the machine r Method 1. Press the start key. If the machine serial numb				
	Display	Description			
	Machine No.	Displays the machine serial number			
	If the machine serial numb	per of engine PWB does not match with that of main PWB			
	Display	Description			
	Machine No.(Main)	Displays the machine serial number of main			
	Machine No.(Eng)	Displays the machine serial number of engine			
	Completion				

tem No.		Description			
U010	Setting the maintenance mode ID				
	Description Sets the maintenance mode ID. Purpose Modify maintenance mode ID for more security. Method 1. Press the start key.				
	Display	Description			
	New ID	Enter a new 8-digit ID			
	New ID(Reconfirm)	Enter a new 8-digit ID (to confirm)			
	Initialize	Initialize the ID			
	Setting 1. Select [New ID]. 2. Enter a new 8-digit ID on 3. Select [New ID(Reconfirm	ten keys (0 – 9, *, #). * and # are mandatory to contain.			
	 3. Select [New ID(Recommin)]. 4. Enter a new 8-digit ID on ten keys (0 – 9, *, #). 5. Press the start key. The setting is set. Method: [Initialize] Select [Initialize]. Press the start key. ID is initialized. 				
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			

tem No.		Description					
U019	Displaying the ROM version						
	 Description Displays the part number of the ROM fitted to each PWB. Purpose To check the part number or to decide, if the newest version of ROM is installed. 						
	Method						
	 Press the start key. The ROM version are displayed. Change the screen using the cursor up/down keys. 						
	Display	Description					
	Main	Main ROM					
	MMI	Operation ROM					
	Browser	Browser ROM					
	Engine	Engine ROM					
	Engine Boot	Engine booting					
	Scanner	Scanner ROM					
	Scanner Boot	Scanner booting					
	RFID	RFID ROM					
	Dictionary	-					
	Option Language	Optional language ROM					
	PDF1.7 Resource	PDF1.7 resource ROM					
	Solution Framework	Framework ROM					
	FMU	FMU ROM					
	Weekly Timer	Weekly Timer ROM					
	DP	Document processor ROM					
	DP Boot	Document processor booting					
	PF1	Paper feeder / Large capacity feeder ROM					
	PF1 Boot	Paper feeder / Large capacity feeder booting					
	Side PF	Side deck ROM					
	Side PF Boot	Side deck booting					
	DF	1000-sheet finisher / 4000-sheet finisher ROM					
	DF Boot	1000-sheet finisher / 4000-sheet finisher booting					
	РН	Punch unit ROM					
	PH Boot	Punch unit booting					
	МТ	Mailbox ROM					
	MT Boot	Mailbox booting					
	BF	Center-folding unit ROM					
	BF Boot	Center-folding unit booting					

Item No.		Description
U019		
	Display	Description
	Fax APL1	Fax APL 1
	Fax Boot1	Fax booting 1
	Fax IPL1	Fax IPL 1
	Fax APL2	Fax APL 2 (dual Fax)
	Fax Boot2	Fax booting 2 (dual Fax)
	Fax IPL2	Fax IPL 2 (dual Fax)
	Completion Press the stop key. The scr	reen for selecting a maintenance item No. is displayed.

Item No.		Description
U021	Memory initializing	
	- · ·	
	 Method 1. Press the start key. 2. Select [Execute]. 3. Press the start key. All date machines is initialized base 4. Turn the main power switten and the main power switten and the start sta	ta other than that for adjustments due to variations between sed on the destination setting. ch off and on. Allow more than 5 seconds between Off and On. yed in case of an initialization error. turn main power switch off then on, and execute initialization using
	Error codes	
	Codes	Description
	0001	Entity error
	0002	Controller error
	0020	Engine error
	0040	Scanner error

Item No.		Description					
U024	HDD formatting						
	Description						
	Initializes the hard disk.						
	Purpose	•					
	To initialize the hard disk when replacing the hard disk after shipping.						
		ettings are also initialized by initializing the hard disk. administration, job accounting, address book, one-touch keys and doc-					
	ument box etc.), shortcuts						
		following pre-installed software are removed.					
	Option language, PDF1.7	resource, FMU, weekly timer					
	Method						
	1. Press the start key.						
	2. Select the item.						
	Display	Description					
	Full	Full format					
	Data	Data format (the application software are retained)					
	3. Press [Execute].						

JU030 Checking the operation of the motors Description Drives each motor. Description Drives each motor. Purpose To check the operation of each motor. Method 1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Puser Fuser motor (FUM) is turned on Fuser SB(CW) Eject motor (EM) is turned on colockwise SB(CCW) Job Separator JS eject motor (JSEM) is turned on Regist* Bridge1 BR conveying motor 1 (BRCM1) is turned Bridge2 BR conveying motor 2 (BRCM2) is turned on	
Drives each motor. Purpose To check the operation of each motor. Method 1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on countered Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned on	
Purpose To check the operation of each motor. Method 1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on countered Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned	
To check the operation of each motor. Method 1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on clockwise SB(CCW) Display Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned on	
Method 1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on clockwise SB(CCW) Eject motor (JSEM) is turned on Job Separator JS eject motor (RM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned	
1. Press the start key. 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on clockwise SB(CCW) Eject motor (JSEM) is turned on Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned	
 2. Select the motor to be operated. 3. Press the start key. The operation starts. Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) SB(CCW) Eject motor (EM) is turned on countered Job Separator Registr* Registration motor (RM) is turned on Bridge1 BR conveying motor 2 (BRCM2) is turned 	
Display Description Feed Paper feed motor (PFM) is turned on DLP(K) Developer motor (DEVM) is turned on Fuser Fuser motor (FUM) is turned on SB(CW) Eject motor (EM) is turned on clockwise SB(CCW) Eject motor (EM) is turned on countercl Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned	
DisplayDescriptionFeedPaper feed motor (PFM) is turned onDLP(K)Developer motor (DEVM) is turned onFuserFuser motor (FUM) is turned onSB(CW)Eject motor (EM) is turned on clockwiseSB(CCW)Eject motor (EM) is turned on counterclJob SeparatorJS eject motor (JSEM) is turned onRegist*Registration motor (RM) is turned onBridge1BR conveying motor 1 (BRCM1) is turned	
DLP(K)Developer motor (DEVM) is turned on FuserFuserFuser motor (FUM) is turned on Eject motor (EM) is turned on clockwise SB(CCW)SB(CCW)Eject motor (EM) is turned on countercl Job SeparatorJob SeparatorJS eject motor (JSEM) is turned on Regist*Regist*Registration motor (RM) is turned on Bridge1Bridge2BR conveying motor 1 (BRCM1) is turned	
FuserFuser motor (FUM) is turned onSB(CW)Eject motor (EM) is turned on clockwiseSB(CCW)Eject motor (EM) is turned on counterclJob SeparatorJS eject motor (JSEM) is turned onRegist*Registration motor (RM) is turned onBridge1BR conveying motor 1 (BRCM1) is turnedBridge2BR conveying motor 2 (BRCM2) is turned	
SB(CW) Eject motor (EM) is turned on clockwise SB(CCW) Eject motor (EM) is turned on countercl Job Separator JS eject motor (JSEM) is turned on Regist* Registration motor (RM) is turned on Bridge1 BR conveying motor 1 (BRCM1) is turned Bridge2 BR conveying motor 2 (BRCM2) is turned	
SB(CCW)Eject motor (EM) is turned on counterclJob SeparatorJS eject motor (JSEM) is turned onRegist*Registration motor (RM) is turned onBridge1BR conveying motor 1 (BRCM1) is turnBridge2BR conveying motor 2 (BRCM2) is turn	
Job SeparatorJS eject motor (JSEM) is turned onRegist*Registration motor (RM) is turned onBridge1BR conveying motor 1 (BRCM1) is turnBridge2BR conveying motor 2 (BRCM2) is turn	÷
Regist*Registration motor (RM) is turned onBridge1BR conveying motor 1 (BRCM1) is turnBridge2BR conveying motor 2 (BRCM2) is turn	ockwise
Bridge1BR conveying motor 1 (BRCM1) is turnBridge2BR conveying motor 2 (BRCM2) is turn	
Bridge2 BR conveying motor 2 (BRCM2) is turn	
	ed on
DU1* Duplex motor 1 (DUM1) is turned on	ed on
DU2* Duplex motor 2 (DUM2) is turned on	
Mid Roller* Middle motor (RM) is turned on	
Inner Job Separator(CW) JS conveying motor (JSCM) is turned of	n clockwise
Inner Job Separator(CCW) JS conveying motor (JSCM) is turned of wise	n counterclock-
*: 45 ppm/55 ppm model only	
4. To stop operation, press the stop key.	
Completion	
Press the stop key. The screen for selecting a maintenance item No. is dis	

ltem No.		Description					
U031	Checking switches and s	ensors for paper conveying					
	Description						
	Displays the on-off status of each paper detection switch or sensor on the paper path.						
	Purpose To check if the switches and sensors for paper conveying operate correctly.						
	TO CHECK IT THE SWITCHES AN	a sensors for paper conveying operate correctly.					
	Method						
	1. Press the start key.	nsor on and off manually to check the status.					
		a switch or sensor is detected, that switch or sensor is displayed in					
	reverse.						
	Display	Description					
	MPT Jam	MP feed sensor (MPFS)					
	Cassette1 Feed	Feed sensor 1 (FS1)					
	Cassette2 Feed	Feed sensor 2 (FS2)					
	Feed2(Feed B)	Paper conveying sensor (PCS)					
	Regist	Registration sensor (RS)					
	Belt Jam	Loop sensor (LPS)					
	Exit Feed	Switchback sensor (SBS)					
	DU1	Duplex sensor 1 (DUS1)					
	DU2	Duplex sensor 2 (DUS2)					
	Bridge1 Feed	BR conveying sensor 1 (BRCS1)					
	Bridge2 Feed	BR conveying sensor 2 (BRCS2)					
	Bridge Exit	BR eject sensor (BRES)					
	Exit Paper	Eject full sensor (EFS)					
	Fuser Feed	Fuser eject sensor (FUES)					
	Feed1(Mid)	Middle sensor (MS)					
	Exit Job Separator	JS eject sensor (JSES)					
	Inner Job Separator	Tray full sensor(JSTFS)					

Press the stop key. The screen for selecting a maintenance item No. is displayed.

tem No.	. Description					
U032	Checking the operation of the clutches					
	Description					
	Turns each clutch on.					
	Purpose					
	To check the operation of	each clutch.				
	Method					
	1. Press the start key.					
	 Select the clutch to be Press the start key. The start is the start is	•				
	Display	Description				
	Feed1	Paper feed clutch 1 (PFCL1) is turned on				
	Feed2	Paper feed clutch 2 (PFCL2) is turned on				
	Mid Roller*1	Middle clutch (MCL) is turned on				
	MPT Feed	MP paper feed clutch (MPPFCL) is turned on				
	Regist ^{*1}	Registration clutch (RCL) is turned on				
	Feed	Paper conveying clutch (PCCL) is turned on				
	DU1*1	Duplex clutch 1 (DUCL1) is turned on				
	DU2*1	Duplex clutch 2 (DUCL2) is turned on				
	Assist1*2	Assist clutch 1 (ASCL1) is turned on				
	Assist1 ⁺ 2 Assist2 ⁺ 2	Assist clutch 1 (ASCL1) is turned on Assist clutch 2 (ASCL2) is turned on				

Press the stop key. The screen for selecting a maintenance item No. is displayed.

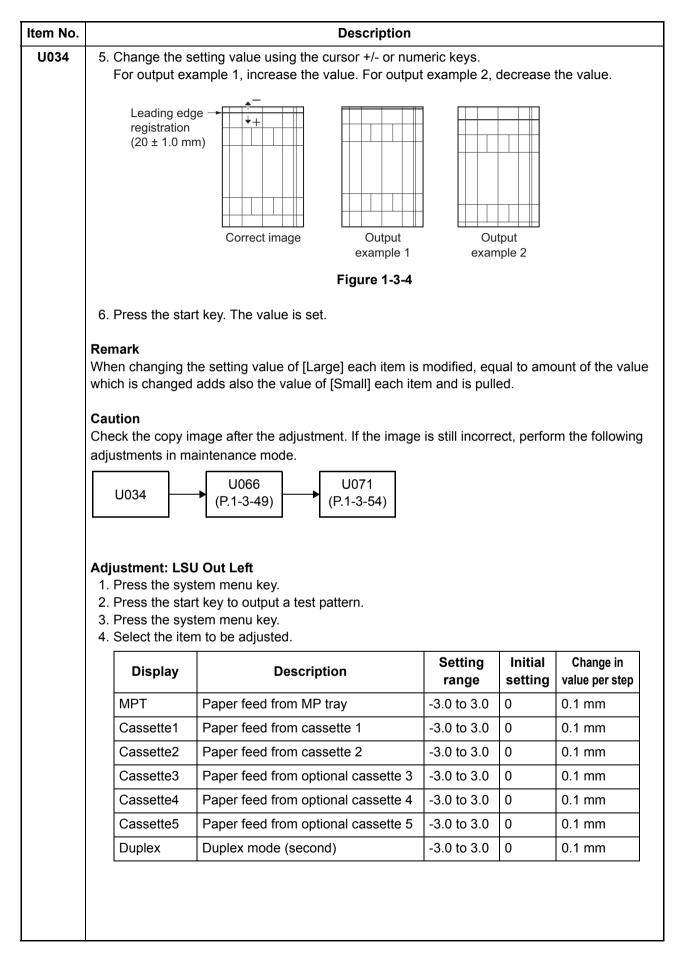
Item No.		Description				
U033	Checking the operation of	of the solenoids				
	Description					
	Turns each solenoid on.					
	Purpose					
	To check the operation of e	each solenoid.				
	Method					
	1. Press the start key.					
	2. Select the solenoid to be operated.z					
	Select the solenoid to I	pe operated.z				
	 Select the solenoid to I Press the start key. The 	•				
		•				
	3. Press the start key. The	e operation starts.				
	3. Press the start key. The Display	e operation starts. Description				
	3. Press the start key. The Display Branch Left	e operation starts.				
	3. Press the start key. The Display Branch Left Branch Exit	e operation starts.				

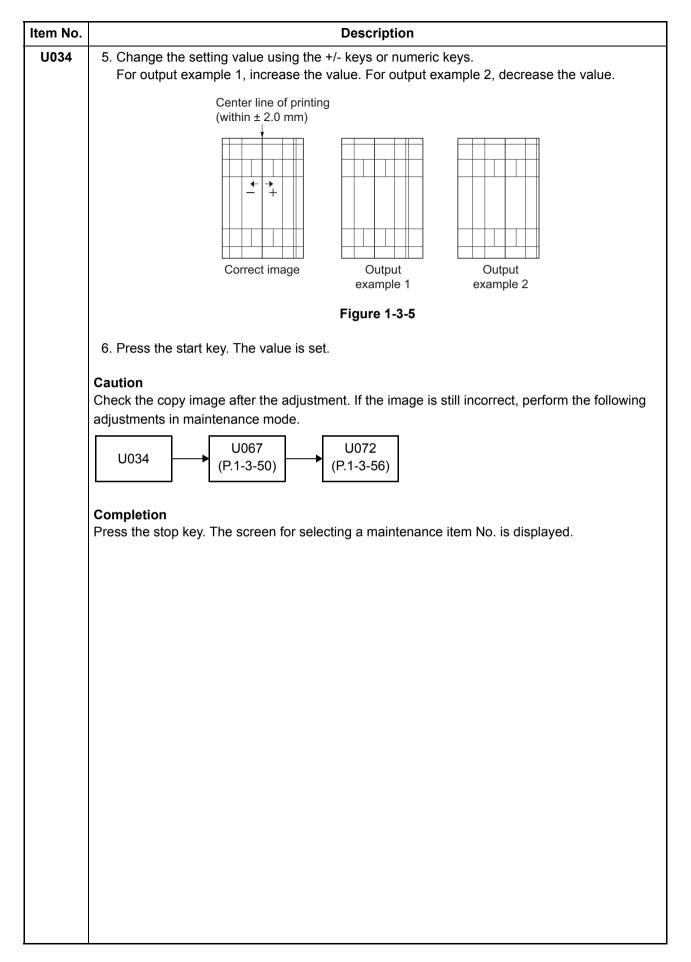
*: 45 ppm/55 ppm model only.4. To stop operation, press the stop key.

Completion

Press the stop key. The screen for selecting a maintenance item No. is displayed.

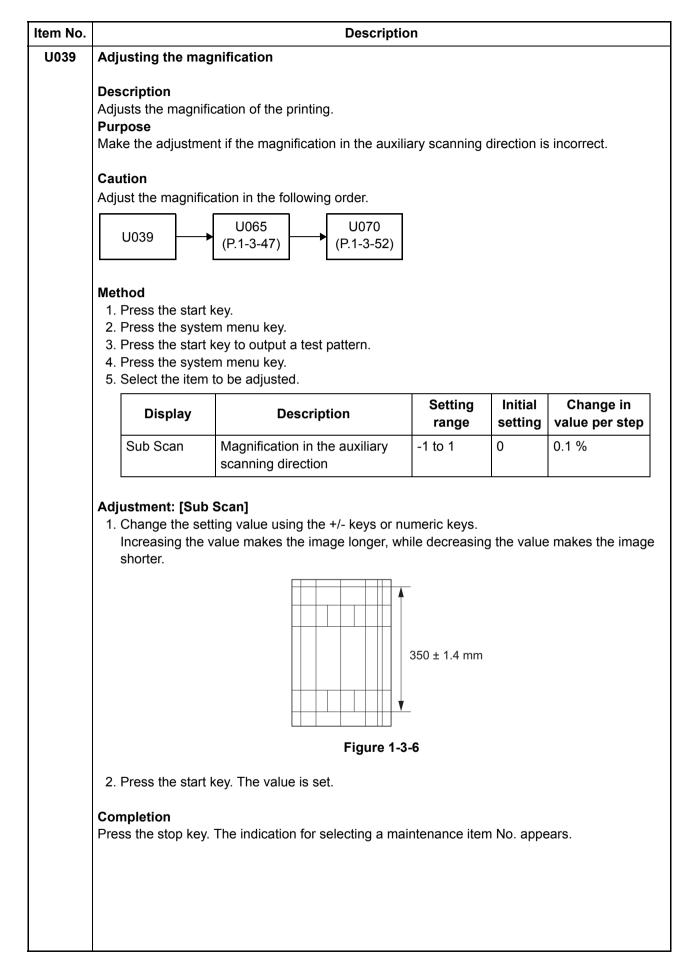
m No.	Description							
034	Adjusting the print start timing							
	 Description Adjusts the leading edge registration or center line. Purpose Make the adjustment if there is a regular error between the leading edges of the copy imagoriginal. Make the adjustment if there is a regular error between the center lines of the copy image original. 							
	Me	thod						
		Press the star	•	alta a fa al				
	2.	Select the iten		djusted.	Description			
		Displa LSU Out Top	-	Looding odgo registration	Description			
		LSU Out Left		Leading edge registration Center line adjustment	naujustment			
		Press the system mer Select the item to be a		u kcy.				
	4.	Select the iten Display	n to be a	-	Setting	Initial	Change in	
	4.	Display		djusted.	Setting range -3.0 to 3.0	Initial setting	-	
	4.		Paper f	djusted.	range	setting	value per step	
	4.	Display MPT(L)	Paper f Paper f	djusted. Description eed from MP tray	-3.0 to 3.0	setting 0	value per step 0.1 mm	
	4.	Display MPT(L) MPT Half(L)	Paper f Paper f Paper f	djusted. Description eed from MP tray eed from MP tray	range -3.0 to 3.0 -3.0 to 3.0	setting 0 0	value per step 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette	Paper f Paper f Paper f Paper f	djusted. Description eed from MP tray eed from MP tray eed from cassette	range -3.0 to 3.0 -3.0 to 3.0 -3.0 to 3.0 -3.0 to 3.0	setting 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L)	Paper f Paper f Paper f Paper f Duplex	djusted. Description eed from MP tray eed from MP tray eed from cassette eed from cassette	range -3.0 to 3.0	setting 0 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L) Duplex(L) Duplex	Paper f Paper f Paper f Paper f Duplex Duplex	djusted. Description eed from MP tray eed from MP tray eed from cassette eed from cassette mode (second)	range -3.0 to 3.0	setting 0 0 0 0 0 0 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L) Duplex(L) Duplex Half(L)	Paper f Paper f Paper f Paper f Duplex Duplex Paper f	Description eed from MP tray eed from MP tray eed from cassette eed from cassette mode (second) mode (second)	range -3.0 to 3.0	setting 0 0 0 0 0 0 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L) Duplex(L) Duplex Half(L) MPT(S) MPT	Paper f Paper f Paper f Duplex Duplex Paper f Paper f	Description reed from MP tray reed from MP tray reed from cassette reed from MP tray reed from MP tray	range -3.0 to 3.0	setting 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L) Duplex(L) Duplex Half(L) MPT(S) MPT Half(S)	Paper f Paper f Paper f Paper f Duplex Duplex Paper f Paper f	Description reed from MP tray reed from MP tray reed from cassette reed from MP tray reed from MP tray reed from MP tray reed from MP tray	range -3.0 to 3.0	setting 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm	
	4.	Display MPT(L) MPT Half(L) Cassette(L) Cassette Half(L) Duplex(L) Duplex Half(L) MPT(S) MPT Half(S) Cassette(S) Cassette	Paper f Paper f Paper f Paper f Duplex Duplex Paper f Paper f Paper f	Description reed from MP tray reed from MP tray reed from Cassette reed from MP tray reed from Cassette	range -3.0 to 3.0 -3.0 to 3.0	setting 0	value per step 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm 0.1 mm	





em No.	. Description							
U035	Setting the printing area for folio paper							
	Description							
	Changes the		area for copying on folio pap	er.				
	Purpose	cropped in	nages on the trailing edge or	left/right side of conv pa	aper by setting the			
			or folio paper.	iciting it side of copy pe	aper by setting the			
	Setting							
	1. Press th	ie start ke	y.					
	2. Select th							
	_	splay	by value using the +/- keys. Description	Setting range	Initial setting			
	Length		Length	330 to 356 mm	330			
	Width		Width	200 to 220 mm	210			
				200 10 220 1111	210			
	4. Piess in	ie start ke	y. The value is set.					
				intenance item No. is dis	spiayeu.			
					spiayeu.			
					spiayeu.			
					spiayeu.			
					spiayeu.			
					spiayeu.			
					spiayeu.			

em No.								
U037	Checking the operation of the fan motors							
	Description							
	Drives each fan motor.							
	Purpose To check the operation of	of each fan motor.						
	Method 1. Press the start key.							
	2. Select the fan motor	•						
	3. Press the start key.	The operation starts.						
	Display	Description	Group					
	Fuser Cooling	Fuser rear fan motor (FURFM) is turned on	В					
	LSU Cooling	LSU fan motor (LSUFM) is turned on	В					
	Exit Cooling	Eject front fan motor (EFFM) is turned on	В					
	Toner	Toner fan motor (TFM) is turned on	A					
	Low Volt	Power source fan motor (PSFM) is turned on	A					
	Exit Rear Cooling	Eject rear fan motor (EFRM) is turned on	В					
	IH PWB	Heater fan motor (HFM) is turned on	A					
	Container Cooling	Exhaust motor 1and 2 (EXFM1, 2) is turned on	A					
	GroupA	Fan motors of group A are turned on						
	GroupB	Fan motors of group B are turned on						
	4. To stop operation, p	ress the stop key.						
	Completion	screen for selecting a maintenance item No. is display	ved					
	Fress the stop key. The	screen for selecting a maintenance item No. is display	yeu.					



ltem No.	Description								
U051	Adjusting the deflection in the paper								
	Description Adjusts the deflection in the paper at the registration roller. Purpose Make the adjustment if the leading edge of the copy image is missing or varies randomly, or if the copy paper is Z-folded.								
	Method								
	1. Press the start	key.							
	2. Select the item	to be adjuste	d.						
	Disp	olay		Descriptio	n				
	Paper Loop A	mount	Deflection adjustme	ent					
	Adjustment 1. Press the syste 2. Place an origin 3. Press the syste 4. Select the item	al and press t em menu key.	he start key to make	a test copy.					
			u.	Setting	Ini	tial setti	ng		
	Display	D	escription	range	35ppm	45ppm	-		
	MPT(L)	Paper feed f	rom MP tray	-30 to 20	1	-5	-8		
	MPT Half(L)	Paper feed f	rom MP tray	-30 to 20	1	0	-1		
	Cassette(L)	Paper feed f	rom cassette	-30 to 20	1	-5	-8		
	Cassette Half(L)	Paper feed f	rom cassette	-30 to 20	1	0	-1		
	Duplex(L)	Duplex mode	e (second)	-30 to 20	1	-5	-8		
	Duplex Half(L)	Duplex mode	e (second)	-30 to 20	1	0	-1		
	MPT(S)	Paper feed f	rom MP tray	-30 to 20	1	-5	-8		
	MPT Half(S)	Paper feed f	rom MP tray	-30 to 20	1	0	-1		
	Cassette(S)		rom cassette	-30 to 20	1	-5	-8		
	Cassette Half(S)	Paper feed f	rom cassette	-30 to 20	1	0	-1		
	Duplex(S)	Duplex mode	e (second)	-30 to 20	1	-3	-6		
	Duplex Half(S)	Duplex mode	e (second)	-30 to 20	1	0	-1		
	Change in valu (L): When large (S): When sma	e size paper is	used (218 mm or m	nore in width of	paper).				

Item No.	Description						
U051	5. Change the setting value using the +/- keys or numeric keys.						
	For output example 1, increase the value. For output example 2, decrease the value.						
	The greater the value, the larger the deflection; the smaller the value, the smaller the deflec- tion.						
	Original Copy Copy example 1 example 2						
	Figure 1-3-7						
	6. Press the start key. The value is set.						
	Completion						
	Press the stop key. The indication for selecting a maintenance item No. appears.						

U052		Description					
	Setting the fus	ser motor cont	rol				
	replaced and p Purpose	erforms correcti	described on the supplied sheet provided w on processing for the fuser motor. loop sensor or paper conveying unit.	hen the loop sensor			
	Method						
	1. Press the s	•					
	2. Select the i		Description				
	Set Loop S	isplay Sensor	Description Enter the data value for loop sensor				
		sor Control	Set the loop sensor detection control				
		Sensor Valid	Sets the presence or absence of the loop s	sensor			
	2. Enter the set the +/- keys 3. Select [Sca	s. Inning Board2].	(e.g.) e of supplied sheet DATA1 using e of supplied sheet DATA2 using	1 2 3 0 4 4 5 5 6 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1			
	the +/- keys 5. Press the s	s. tart key. The va Sensor Contro tem.		7 8 9 0 3 6 4			
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i	s. tart key. The va Sensor Contro tem.					
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i 2. Select On c	s. tart key. The va Sensor Contro tem. or Off.	ol] Description ction On/Off setting at 125 to 250 mm from	$\begin{array}{c} 9 \\ 0 \\ \hline 3 \\ \hline 3 \\ \hline 6 \\ \hline 4 \\ \hline \end{array}$			
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i 2. Select On o Display	s. tart key. The va Sensor Contro tem. or Off. Sensor detec the top of pap	Description Description Ction On/Off setting at 125 to 250 mm from Decription On/Off setting at 250 to 290 mm from	9 0 3 6 4 Initial setting			
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i 2. Select On c Display No.1	s. tart key. The va Sensor Contro tem. or Off. Sensor detec the top of pap Sensor detec the top of pap	Description ction On/Off setting at 125 to 250 mm from per ction On/Off setting at 250 to 290 mm from per ction On/Off setting at 300 to 330 mm from per	9 0 3 6 4 Initial setting On			
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i 2. Select On c Display No.1 No.2	s. tart key. The va Sensor Contro tem. or Off. Sensor detec the top of pap Sensor detec the top of pap Sensor detec the top of pap	Description ction On/Off setting at 125 to 250 mm from per ction On/Off setting at 250 to 290 mm from per ction On/Off setting at 300 to 330 mm from per ction On/Off setting at 300 to 330 mm from per	9 0 3 6 4 Initial setting On On			
	the +/- keys 5. Press the s Setting: [Loop 1. Select the i 2. Select On c Display No.1 No.2 No.3	s. tart key. The va Sensor Contro tem. or Off. Sensor detect the top of pap Sensor detect the top of pap Sensor detect the top of pap Sensor detect the top of pap	Description ction On/Off setting at 125 to 250 mm from per ction On/Off setting at 250 to 290 mm from per ction On/Off setting at 300 to 330 mm from per ction On/Off setting at 300 to 330 mm from per	9 0 1 1 1 1 1 1 1 1 1 1 1 1 1			

Item No.		Descripti	on					
U052	Setting: [Set Loop 1. Select On or O Initial setting: 0 2. Press the start	ff.						
	Completion Press the stop key	. The indication for selecting a ma	aintenance item N	No. appe	ars.			
U053	Setting the adjust	ment of the motor speed						
	Purpose	-		ck settin	g only if	faulty		
	Display	C	Description					
	Motor1	Adjustment of drum motor spee	eds					
	Motor2	Adjustment of developer motor, registration motor and transfer motor speeds						
	Motor3	Adjustment of eject motor, fuser motor, BR conveying motor 1/2, paper feed motor, JS eject motor, middle motor and duplex motor 1/2 speeds						
	Motor1 Half	Adjustment of drum motor spee	eds in half speed					
	Motor2 Half	Adjustment of developer motor, registration motor and transfer motor speeds in half speed						
	Motor3 Half	Adjustment of eject motor, fuser motor, BR conveying motor 1/2, paper feed motor, JS eject motor, middle motor and duplex motor 1/2 speeds in half speed						
	Setting: [Motor1] 1. Select the item to be adjusted.							
	Display	Description	Setting	Ini	tial setti	ng		
	Display	Beschption	range	35ppm	45ppm	55ppm		
	Drum(K)	Drum motor (DRM)	-5000 to 5000	0	0	0		
	Display Drum(K)	Description Drum motor (DRM)	range	35ppm	45ppm	55p		

U053 Setting: [Motor2] 1. Select the item to be adjusted. Display Description Setting range Dev(K) Developer motor (DEVM) -5000 to 5 Regist* Registration motor (RM) -5000 to 5 Sep Belt Transfer motor (TRM) -5000 to 5 *: 45 ppm/55 ppm model only *: 45 ppm/55 ppm model only Setting: [Motor3] Description Setting range 1. Select the item to be adjusted. Setting range Setting range	35 5000 95 5000 - 5000 29 9	ppm 53	ial setti 45ppm 736 33 22	
Display Description range Dev(K) Developer motor (DEVM) -5000 to 5 Regist* Registration motor (RM) -5000 to 5 Sep Belt Transfer motor (TRM) -5000 to 5 *: 45 ppm/55 ppm model only * Setting: [Motor3] Description 1. Select the item to be adjusted. Setting	35 5000 95 5000 - 5000 29 9	ppm 53	45ppm 736 33	55ppm 596 27
Display Description range Dev(K) Developer motor (DEVM) -5000 to 5 Regist* Registration motor (RM) -5000 to 5 Sep Belt Transfer motor (TRM) -5000 to 5 *: 45 ppm/55 ppm model only * Setting: [Motor3] 1. Select the item to be adjusted. Setting	35 5000 95 5000 - 5000 29 9	53	736 33	596 27
Regist* Registration motor (RM) -5000 to 5 Sep Belt Transfer motor (TRM) -5000 to 5 *: 45 ppm/55 ppm model only -5000 to 5 Setting: [Motor3] 1. Select the item to be adjusted. Display Description	5000 - 5000 29 g		33	27
Sep Belt Transfer motor (TRM) -5000 to 5 *: 45 ppm/55 ppm model only Setting: [Motor3] 1. Select the item to be adjusted. Display Description	9000 29			
*: 45 ppm/55 ppm model only Setting: [Motor3] 1. Select the item to be adjusted. Display Description Setting	g)	22	18
Setting: [Motor3] 1. Select the item to be adjusted. Display Description Setting	-			
1. Select the item to be adjusted. Display Description Setting	-			
Display Description	-			
) 35p		al settii 15ppm	_
SB Eject motor (EM) -5000 to 5		-	13	10
Fixing Fuser motor (FUM) -5000 to 5	5000 -30) -	-24	-20
Bridge1 BR conveying motor 1 -5000 to 5 (BRCM1)	000 26	2	20	15
Bridge2 BR conveying motor 2 -5000 to 5 (BRCM2)	000 26	2	20	15
FeedPaper feed motor (PFM)-5000 to 5	66 000	•	120	97
Job JS eject motor (JSEM) -5000 to 5 Separator	6000 35	2	26	19
Mid Roller* Middle motor (MM) -5000 to 5	6000 -	7	72	58
DU1* Duplex motor 1 (DUM1) -5000 to 5	6000 -	-	-10	-8
DU2* Duplex motor 2 (DUM2) -5000 to 5	6000 -	-	-10	-8
Bridge1 DFBR conveying motor 1-5000 to 5High(BRCM1)	0000 0	(0	0
Bridge1 DF BR conveying motor 1 -5000 to 5 Low (BRCM1)	000 0	(0	0
Bridge2 DFBR conveying motor 2-5000 to 5High(BRCM2)	000 0	(0	0
Bridge2 DF LowBR conveying motor 2 (BRCM2)-5000 to 5	000 0	(0	0
 *: 45 ppm/55 ppm model only. Setting: [Motor1 Half] 1. Select the item to be adjusted. 			i	
Display Description Settin	g	Init	ial setti	ing
Display Description range	-	ppm	45ppm	55ppm
Drum(K) Drum motor (DRM) in half -5000 to 5	000 0		0	0

speed

Item No.	Description								
U053	Setting: [Motor2 Half]								
	1. Select the item to be adjusted.								
	Display	Description	Setting	Initial setting					
	Display	Description	range	35ppm 45ppm		55ppm			
	Dev(K)	Developer motor (DEVM) in half speed	-5000 to 5000	1907	1473	1191			
	Regist*	Registration motor (RM) in half speed	-5000 to 5000	-	66	54			
	Sep Belt	Transfer motor (TRM) in half speed	-5000 to 5000	56	44	35			
	*: 45 ppm/55	ppm model only	1	-		1			
	Setting: [Motor3	-							
	1. Select the ite	m to be adjusted.		-					
	Diaplay	Description	Setting	Init	ial setti	ng			
	DISDIAV								
	Display	Description	range	35ppm	45ppm	55ppm			
	SB	Eject motor (EM) in half speed	range -5000 to 5000	35ppm 106	45ppm 82	55ppm 66			
		-	_						
	SB	Eject motor (EM) in half speed Fuser motor (FUM) in half	-5000 to 5000	106	82	66			
	SB	Eject motor (EM) in half speed Fuser motor (FUM) in half speed BR conveying motor 1	-5000 to 5000 -5000 to 5000	106 0	82 0	66 0			
	SB Fixing Bridge1	Eject motor (EM) in half speed Fuser motor (FUM) in half speed BR conveying motor 1 (BRCM1) in half speed BR conveying motor 2	-5000 to 5000 -5000 to 5000 -5000 to 5000	106 0 112	82 0 86	66 0 70			
	SB Fixing Bridge1 Bridge2	Eject motor (EM) in half speed Fuser motor (FUM) in half speed BR conveying motor 1 (BRCM1) in half speed BR conveying motor 2 (BRCM2) in half speed Paper feed motor (PFM) in half	-5000 to 5000 -5000 to 5000 -5000 to 5000 -5000 to 5000	106 0 112 112	82 0 86 86	66 0 70 70			
	SB Fixing Bridge1 Bridge2 Feed Job	 Eject motor (EM) in half speed Fuser motor (FUM) in half speed BR conveying motor 1 (BRCM1) in half speed BR conveying motor 2 (BRCM2) in half speed Paper feed motor (PFM) in half speed JS eject motor (JSEM) in half 	-5000 to 5000 -5000 to 5000 -5000 to 5000 -5000 to 5000 -5000 to 5000	106 0 112 112 112 132	82 0 86 86 238	66 0 70 70 194			
	SB Fixing Bridge1 Bridge2 Feed Job Separator	 Eject motor (EM) in half speed Fuser motor (FUM) in half speed BR conveying motor 1 (BRCM1) in half speed BR conveying motor 2 (BRCM2) in half speed Paper feed motor (PFM) in half speed JS eject motor (JSEM) in half speed Middle motor (MM) in half 	-5000 to 5000 -5000 to 5000 -5000 to 5000 -5000 to 5000 -5000 to 5000	106 0 112 112 112 132	82 0 86 86 238 164	66 0 70 70 194 133			

Completion Press the stop key. The indication for selecting a maintenance item No. appears.

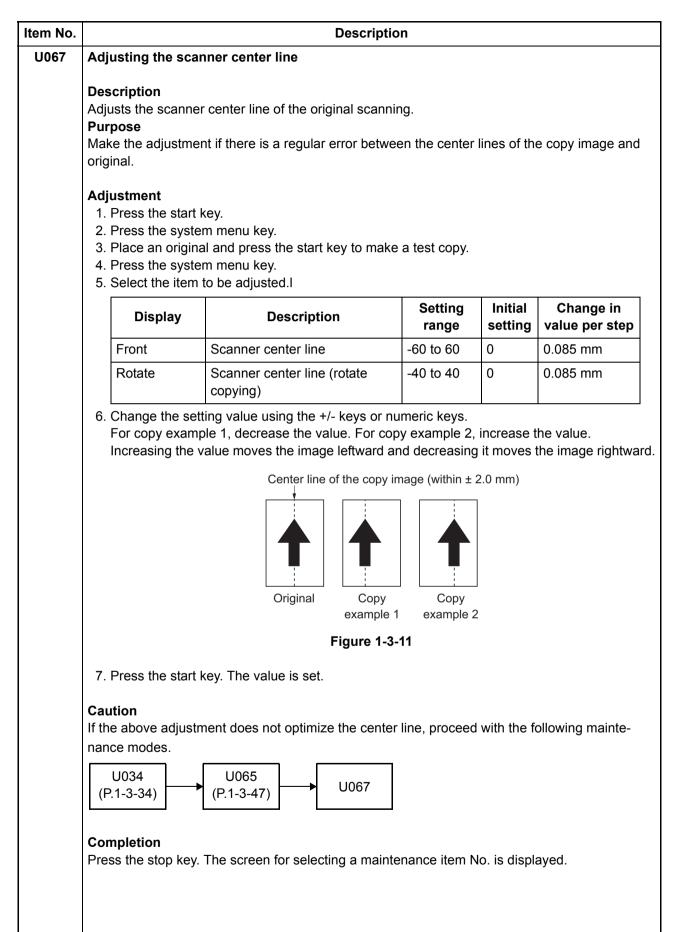
No.			Description			
9	Setting fan mode					
	Description Specifies mode for de Purpose Handling the lowering		per fan motors. sity [to suppress thermal stresses owi	ng to the heat	ed toner]	
	Method 1. Press the start key 2. Select the mode.	y.				
	Display		Descriptio	on		
	Fan Mode		Sets threshold temperature at which ate.		motors oper-	
	Cooling Mode		Sets temperature at which the develop for controlling.	oper fan motor	s are switched	
	Setting: [Fan Mode] 1. Select the mode.		Description			
	Display	0.0		1		
	Mode1 Mode2		tting temperature:Normal	old is raised f	rom modol	
	Modez	(W	tting temperature:Temperature thresh /UP, temperature at READY : mode1 t e at PRINT : mode1 temperature -3(°	emperature -7		
	Mode3	(W	tting temperature:Temperature thresh /UP, temperature at READY : mode1 t /re at PRINT : mode1 temperature -8(emperature -2		
	Auto					
	Initial setting: Mod 2. Press the start key		e setting is set.			
	Setting: [Cooling Mo 1. Change the setting	_	ue using the +/- keys.			
	Display		Description	Setting range	Initial setting	
	Cooling Mode		nount of shift from the initial standard nperature	-3 to 3 (°C)	0	
	* . A lana a		nces the operating timing, and a small			

		Desc	ription			
U061	Checking the ope	ration of the exposure lam	р			
	Description					
	Lights the exposure	e lamp.				
	Purpose					
	To check whether t	he exposure lamp are turned	d on.			
	Method					
	1. Press the start key.					
	2. Select the item					
	Display		Description			
	CCD	The exposure lamp	lights			
	CIS	The CIS lights (whe	n dual scan DP is i	nstalled)		
		key. The lamp lights.				
	4. Io turn the lam	p off, press the stop key.				
	Completion					
	Press the stop key.	The screen for selecting a r	maintenance item N	lo. is displ	ayed.	
U063	Adjusting the sha	ding position				
	Description					
	Description	ng position of the scanner				
	Changes the shading position of the scanner. Purpose					
	Used when the white line continue to appear longitudinally on the image after the shading plate is					
	cleaned.					
	This is due to flaws or stains inside the shading plate. To prevent this problem, the shading pos					
	tion should be changed so that shading is possible without being affected by the flaws or stains					
	Setting					
	1. Press the start	key.				
	2 Change the set					
	2. Change the set	tting value using the +/- keys	s or numeric keys.			
			s or numeric keys. Setting	Initial	Change in	
	Display	Description	Setting range	setting	value per step	
			Setting		-	
	Display Position Increasing the	Description Shading position value moves the shading po	Setting range 0 to 18 sition toward the main	setting 0	value per step 0.158 mm	
	Display Position Increasing the moves the posi	Description Shading position value moves the shading po- ition toward the machine right	Setting range 0 to 18 sition toward the main	setting 0	value per step 0.158 mm	
	Display Position Increasing the moves the posi	Description Shading position value moves the shading po	Setting range 0 to 18 sition toward the main	setting 0	value per step 0.158 mm	
	Display Position Increasing the moves the posi	Description Shading position value moves the shading po- ition toward the machine right	Setting range 0 to 18 sition toward the main	setting 0	value per step 0.158 mm	
	Display Position Increasing the volume moves the posi 3. Press the start Supplement While this maintena	Description Shading position value moves the shading position toward the machine right key. The value is set.	Setting range 0 to 18 sition toward the month nt.	setting 0 achine left	value per step 0.158 mm , and decreasing it	
	Display Position Increasing the volume moves the posi 3. Press the start Supplement While this maintena	Description Shading position value moves the shading po- ition toward the machine right key. The value is set.	Setting range 0 to 18 sition toward the month nt.	setting 0 achine left	value per step 0.158 mm , and decreasing it	
	Display Position Increasing the void of the position 3. Press the start Supplement While this maintenation copying mode (white)	Description Shading position value moves the shading position toward the machine right key. The value is set.	Setting range 0 to 18 sition toward the month nt.	setting 0 achine left	value per step 0.158 mm , and decreasing it	
	Display Position Increasing the moves the position 3. Press the start Supplement While this maintenation copying mode (while Completion	Description Shading position value moves the shading position toward the machine right key. The value is set.	Setting range 0 to 18 sition toward the mont.	setting 0 achine left riginal is a cy).	value per step 0.158 mm , and decreasing it vailable in interrupt	
	Display Position Increasing the moves the position 3. Press the start Supplement While this maintenation copying mode (while Completion	Description Shading position value moves the shading po- ition toward the machine right key. The value is set. ance item is being executed, ch is activated by pressing the set of the set o	Setting range 0 to 18 sition toward the mont.	setting 0 achine left riginal is a cy).	value per step 0.158 mm , and decreasing it vailable in interrupt	
	Display Position Increasing the moves the position 3. Press the start Supplement While this maintenation copying mode (while Completion	Description Shading position value moves the shading po- ition toward the machine right key. The value is set. ance item is being executed, ch is activated by pressing the set of the set o	Setting range 0 to 18 sition toward the mont.	setting 0 achine left riginal is a cy).	value per step 0.158 mm , and decreasing it vailable in interrupt	
	Display Position Increasing the moves the position 3. Press the start Supplement While this maintenation copying mode (while Completion	Description Shading position value moves the shading po- ition toward the machine right key. The value is set. ance item is being executed, ch is activated by pressing the set of the set o	Setting range 0 to 18 sition toward the mont.	setting 0 achine left riginal is a cy).	value per step 0.158 mm , and decreasing it vailable in interrupt	

ltem No.	Description						
U065	Adjusting the scanner magnification						
	Description						
	Adjusts the magnifi	ication of the original scanning.					
	Purpose	at if the magnification in the main	aaanaina dira	otion io in	a a rea a t		
		ent if the magnification in the main ent if the magnification in the auxilia	-				
			-)				
	Caution	adjustment along the main scannir	na direction or		black stroaks		
	-	content of the original document.			black sticars		
	Adjust the magnific	cation of the scanner in the followir	ng order.				
	U039		U065				
	(P.1-3-38)	 main scanning auxilia direction di 	ry scanning irection				
			1				
	Method						
	1. Press the start						
	2. Press the syste 3. Place an origin	em menu key. al and press the start key to make	a test conv				
	4. Press the syste						
	5. Select the item	to be adjusted.					
	Display	Description	Setting range	Initial setting	Change in value per step		
	Main Scan	Scanner magnification in the main scanning direction	-75 to 75	0	0.02 %		
	Sub Scan	Scanner magnification in the auxiliary scanning direction	-125 to 125	0	0.02 %		
	For copy exam	tting value using the +/- keys or nu ple 1, increase the value. For copy setting enlarges the image and de $\underbrace{\bigcap_{Original}}_{Original}$	y example 2, o creasing it na				
		Figure 1-3	-8				
	2. Press the start	key. The value is set.					
	1						

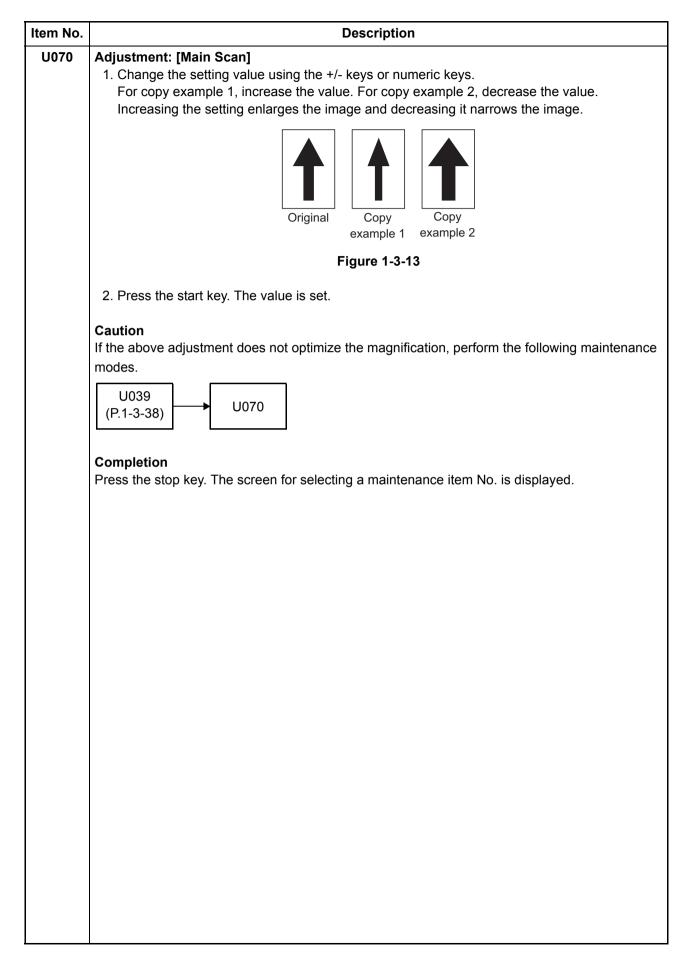
Item No.	Description
U065	Adjustment: [Sub Scan]
	 Change the setting value using the +/- keys or numeric keys.
	For copy example 1, increase the value. For copy example 2, decrease the value.
	Increasing the value makes the image longer, while decreasing the value makes the image shorter.
	Original Copy example 1 Copy example 2
	Figure 1-3-9
	2. Press the start key. The value is set.
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.		Descriptio	n				
U066	Adjusting the scanner leading edge registration						
	Purpose	ner leading edge registration of the c nent if there is a regular error betwee	-	-	the copy image and		
	4. Press the sys	tem menu key. inal and press the start key to make	a test copy.				
	Display	Description	Setting range	Initial setting	Change in value per step		
	Front	Scanner leading edge registra- tion	-30 to 30	0	0.158 mm		
	Rotate	Scanner leading edge registra- tion (rotate copying)	-30 to 30	0	0.158 mm		
		Leading edge registration of the Original Copy example 1, increase the value. For copy forward an Leading edge registration of the Copy example 1	d decreasing	the value	moves the image		
	Figure 1-3-10						
	7. Press the sta	rt key. The value is set.					
	U039 (P.1-3-38) Completion	U034 (P.1-3-33) U065 (P.1-3-47)	→ U06	6			
	Press the stop ke	y. The screen for selecting a mainte	nance item N	lo. is displ	ayed.		

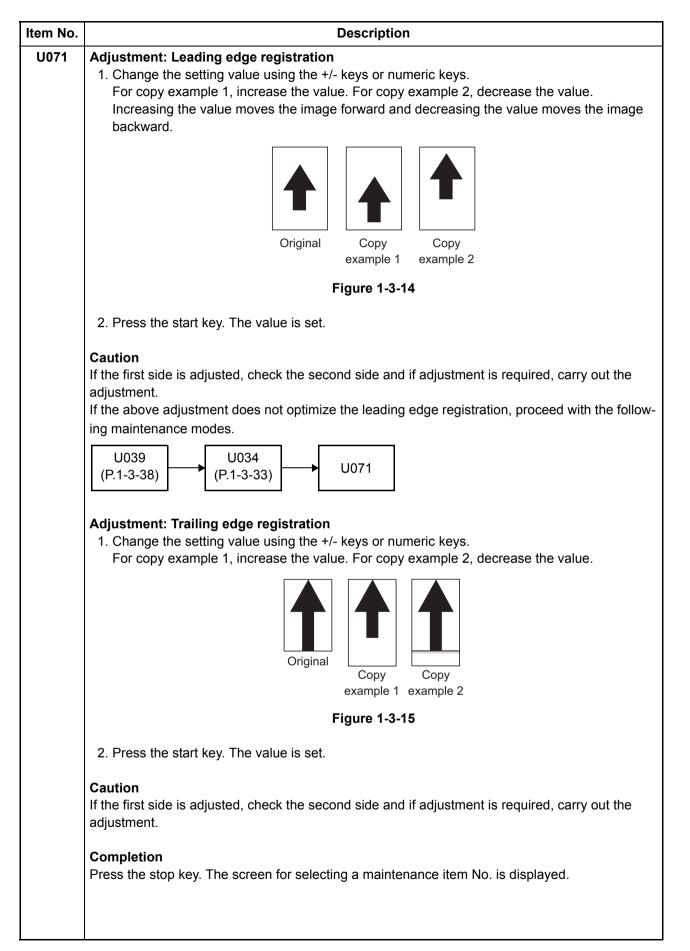


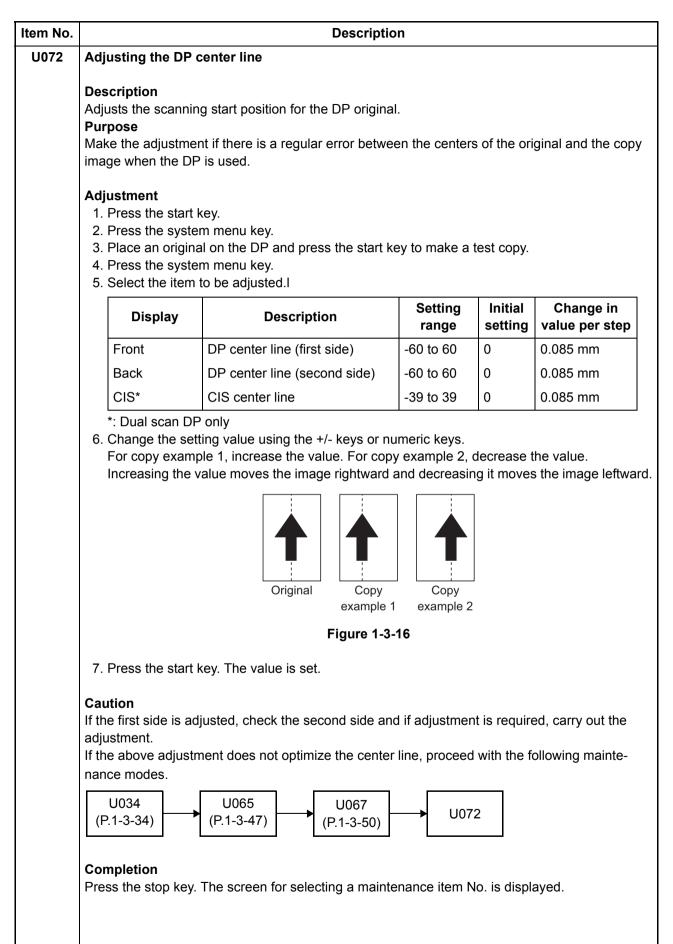
 Adjusting the scanning position for originals from the DP Description Adjusts the position for scanning originals from the DP. Performs the test copy at the four scanning positions after adjusting. Purpose Used when the image fogging occurs because the scanning position is not proper when the D used. Run U071 to adjust the timing of DP leading edge when the scanning position is change Setting Press the start key.! Display Description Setting Initial Change in value per step DP Read Starting position adjustment for -38 to 38 0 0.158 mm scanning originals Black Line Scanning position for the test 0 to 3 0 - copy originals Setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Setting using the +/- keys or numeric keys. Press the start key. The value is set. Sette to original (the one which density is known) in the DP and press the system menu key. Press the start key. The value is set. Press the start key. The screen for selecting a maintenance item No. is displayed. 	Description Adjusts the position for scanning originals from the DP. Performs the test copy at the four scining positions after adjusting. Purpose Used when the image fogging occurs because the scanning position is not proper when the D used. Run U071 to adjust the timing of DP leading edge when the scanning position is change in the scanning position adjust the timing of DP leading edge when the scanning position is change in the setting Setting 1. Press the start key.! DP Read Starting position adjustment for -38 to 38 0 0.158 mm Black Line Scanning originals 0 to 3 0 - 2. Select [DP Read]. Change the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu H 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.			Descriptio	n				
Adjusts the position for scanning originals from the DP. Performs the test copy at the four scanning positions after adjusting. Purpose Used when the image fogging occurs because the scanning position is not proper when the D used. Run U071 to adjust the timing of DP leading edge when the scanning position is change Setting 1. Press the start key.! DP Read Starting position adjustment for -38 to 38 0 0.158 mm Black Line Scanning position for the test 0 to 3 0 - 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu key. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.	Adjusts the position for scanning originals from the DP. Performs the test copy at the four scanning positions after adjusting. Purpose Used when the image fogging occurs because the scanning position is not proper when the D used. Run U071 to adjust the timing of DP leading edge when the scanning position is changed. Setting 1. Press the start key.! DP Read Starting position adjustment for scanning originals Black Line Scanning position for the test 0 to 3 0 2. Select [DP Read]. Schange the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu F 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.	8	Adjusting the scanning position for originals from the DP						
1. Press the start key.l Display Description Setting Initial Change in value per step DP Read Starting position adjustment for scanning originals -38 to 38 0 0.158 mm Black Line Scanning position for the test or to to 3 0 - - 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu key. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.	1. Press the start key.! Display Description Setting Initial Change in value per step DP Read Starting position adjustment for scanning originals -38 to 38 0 0.158 mm Black Line Scanning position for the test of to 3 0 - - 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu H 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.		Adjusts the position ning positions after Purpose Used when the ima	r adjusting. age fogging occurs because the sca	anning positio	on is not pr	oper when the D		
Display Description range setting value per step DP Read Starting position adjustment for scanning originals -38 to 38 0 0.158 mm Black Line Scanning position for the test copy originals 0 to 3 0 - 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu key. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.	Display Description range setting value per step DP Read Starting position adjustment for scanning originals -38 to 38 0 0.158 mm Black Line Scanning position for the test copy originals 0 to 3 0 - 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu H 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned.		-	key.l					
scanning originals scanning originals Black Line Scanning position for the test of the set of the copy originals 0 to 3 0 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu key. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned. Completion	scanning originals scanning originals Black Line Scanning position for the test of the test of the test of the test copy originals 0 to 3 0 2. Select [DP Read]. 3. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. 4. Press the start key. The value is set. 5. Select [Black Line]. 6. Change the setting using the +/- keys or numeric keys. 7. Press the start key. The value is set. 8. Set the original (the one which density is known) in the DP and press the system menu leg. 9. Press the start key. Test copy is executed. 10. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned. Completion		Display	Description	-		-		
 copy originals Select [DP Read]. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Set the original (the one which density is known) in the DP and press the system menu key. Press the start key. Test copy is executed. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned. Completion 	 copy originals Select [DP Read]. Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Set the original (the one which density is known) in the DP and press the system menu key. Press the start key. Test copy is executed. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned. 		DP Read		-38 to 38	0	0.158 mm		
 Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Set the original (the one which density is known) in the DP and press the system menu key. Press the start key. Test copy is executed. Perform the test copy at each scanning position with the setting value from 0 to 3 and che that no black line appears and the image is normally scanned. 	 Change the setting using the +/- keys or numeric keys. When the setting value is increased, the scanning position moves to the right and it move the left when the setting value is decreased. Press the start key. The value is set. Select [Black Line]. Change the setting using the +/- keys or numeric keys. Press the start key. The value is set. Set the original (the one which density is known) in the DP and press the system menu keys. Press the start key. Test copy is executed. Perform the test copy at each scanning position with the setting value from 0 to 3 and ch that no black line appears and the image is normally scanned. 		Black Line		0 to 3	0	-		
				key. Test copy is executed.					
			10. Perform the tea that no black li Completion	key. Test copy is executed. st copy at each scanning position wind ne appears and the image is norm	with the settir ally scanned	ng value fro	om 0 to 3 and ch		
			10. Perform the tea that no black li Completion	key. Test copy is executed. st copy at each scanning position wind ne appears and the image is norm	with the settir ally scanned	ng value fro	om 0 to 3 and ch		
			10. Perform the tea that no black li Completion	key. Test copy is executed. st copy at each scanning position wind ne appears and the image is norm	with the settir ally scanned	ng value fro	om 0 to 3 and ch		

Item No.		Descriptio	n				
U070	Adjusting the DP magnification						
	Purpose Make the adjustmer DP is used.	nal scanning speed. ht if the magnification is incorrect i ht if the magnification is incorrect in		-	-		
	Adjustment 1. Press the start k 2. Press the system 3. Place an original 4. Press the system 5. Select the item	m menu key. Il on the DP and press the start ke m menu key.	ey to make a t	est copy.			
	Display	Description	Setting range	Initial setting	Change in value per step		
	Sub Scan(F)	Magnification in the auxiliary scanning direction of CCD (first side)	-125 to 125	0	0.02 %		
	Sub Scan(B)*1	Magnification in the auxiliary scanning direction of CCD (second side)	-125 to 125	0	0.02 %		
	Main Scan(CIS)⁺²	Magnification in the main scan- ning direction of CIS	-100 to 100	0	0.02 %		
	Sub Scan(CIS)*2	Magnification in the auxiliary scanning direction of CIS	-125 to 125	0	0.02 %		
	Adjustment: [Sub 1. Change the sett For copy examp	P only. *2: Dual scan DP only. Scan] ing value using the +/- keys or nu ole 1, increase the value. For copy value makes the image longer, wh Image longer	v example 2, c				
		Original Copy example 1 Figure 1-3-	Copy example 2				
	2. Press the start I	key. The value is set.					



ltem No.		Descriptio	n		
U071	Adjusting the DP	scanning timing			
	Purpose Make the adjustme	ginal scanning timing. ent if there is a regular error betwee nage when the DP is used.	en the leading	g or trailing	g edges of the orig
	Method 1. Press the start 2. Press the syste 3. Place an origin 4. Press the syste 5. Select the item Reversed DP	em menu key. Ial on the DP and press the start ke em menu key.	ey to make a	test copy.	
	Display	Description	Setting range	Initial setting	Change in value per step
	Front Head	Leading edge registration of CCD (first side)	-32 to 32	0	0.085 mm
	Front Tail	Trailing edge registration of CCD (first side)	-32 to 32	0	0.085 mm
	Back Head	Leading edge registration of CCD (second side)	-32 to 32	0	0.085 mm
	Back Tail	Trailing edge registration of CCD (second side)	-32 to 32	0	0.085 mm
	Dual scan DP				
	Display	Description	Setting range	Initial setting	Change in value per step
	Front Head	Leading edge registration of CCD (first side)	-27 to 27	0	0.207 mm
	Front Tail	Trailing edge registration of CCD (first side)	-27 to 27	0	0.207 mm
	CIS Head	Leading edge registration of CIS	-27 to 27	0	0.207 mm
	CIS Tail	Trailing edge registration of CIS	-27 to 27	0	0.207 mm





em No.			De	scription	
U073	Checking the scanr	ner opera	ation		
	Description				
	Simulates the scanne	er operat	ion under the a	rbitrary conditions.	
	Purpose	r operatio	n This is also	done to check the ac	cumulation of dust on the sl
	glass.				
	Method				
	1. Press the start ke	•			
	2. Select the item to	-	ated.	Descripti	
	Display Scanner Motor		Seener oner	Description	on
			Scanner opera		
	Home Position Dust Check		Home position		
				check operation with	патр оп
	DP Reading		DP scanning p	osition operation	
	Setting: [Scanner N	-			
	1. Select [Scanner]	Motor].			
	 Select the item. Change the settil 	na usina	the +/- kevs.		
	Display	<u> </u>	-	conditions	Setting range
	Zoom	Magn	nification		25 to 400 %
	Size	Origir	ginal size		See below.
	Lamp	On ar	and off of the exposure lamp 0 (off) or 1 (on)		
	Original sizes for	each set	ting in SIZE		
	Setting		Paper size	Setting	Paper size
	5000	A4	ŀ	5000	A5R
	4300	B5	5	7800	Folio
	5100	11	" x 8 1/2"	10200	11" x 17"
	10000	A3	3	9000	11" x 15"
	8600	B4	Ļ	8400	8 1/2" x 14"
	7100	A4	R	6600	8 1/2" x 11"
	6100	B5	δR	5100	5 1/2" x 8 1/2"
	4. Press the start ke 5. Select [Execute].	-	-		;
		~			
	5. Select [Execute].	-	-	r the selected conditi	

Item No.	Description
U073	Method: [Home Position]
	1. Select [Home Position].
	Press the start key. The mirror frame of the scanner moves to the home position.
	The minor name of the scanner moves to the nome position.
	Method: [Dust Check]
	1. Select [Dust Check].
	2. Press the start key. The exposure lamp lights.
	3. To turn the exposure lamp off, press the stop key.
	Method: [DP Reading]
	1. Select [DP Reading].
	2. Press the start key.
	The mirror frame of the scanner moves to the reading position.
	Completion
	Press the stop key when scanning stops. The screen for selecting a maintenance item No. is displayed.

Item No. U074								
U074	DP input response a	adjustment						
	Description Sets the density correction for scanning originals from the DP.							
	Modify the setting on	ly if a spotted background appears when	a bluish origina	l or a document				
	_	at is slightly colored is scanned from the						
	Perform adjustment in match.	f the page scanned using the table and the	ne page scanne	d using DP do r				
	match.							
	Setting							
	1. Press the start ke	-						
	2. Change the settir	ng using the +/- or numeric keys.						
	Display	Description	Setting	Initial				
			range	setting				
	Coefficient	Compensating original document scanning density	0 to 3	1				
	Settings 0: No co	rrection / 1: Slight correction / 2: Medium	correction / 3: 8	Strong correctio				
	3. Press the start ke	-		0				
		ce item is being executed, copying from a is activated by pressing the system mer	-	ailable in interru				
	While this maintenan copying mode (which Completion		nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					
	While this maintenan copying mode (which Completion	is activated by pressing the system mer	nu key).					

			Description			
U087	Setting DP read	ling position	modification operation			
	 Description The presence or absence of dust is determined by comparing the scan data of the original trailine edge and that taken after the original is conveyed past the DP original scanning position. If dust is identified, the DP original scanning position is adjusted for the following originals. Using image correction to reduce black streaks. Purpose When using DP, to solve the problem when black lines occurs due to the dust with respect to original reading position. Caution The coordinates of position where documents are scanned are modified when [System Menu] [Adjustment/Maintenance] [Correcting Black Line] is set to [Off]. Method 					
	1. Press the sta 2. Select the ite	•				
	Dis	play	Descri	ption		
	CCD		Setting of standard data when de	ust is detected.		
	Black Line		Initialization of original reading p	osition.		
	Display		ne +/- or numeric keys. Description	Setting		
	R	Lowest den	sity of the R regard as the dust	0 to 255	125	
	G	Lowest den	sity of the G regard as the dust	0 to 255	125	
	В	Lowest den	sity of the B regard as the dust	0 to 255	125	
	3. Press the sta	art key. The v	alue is set.			
	Completion	r]. art key. The s	etting is cleared. en for selecting a maintenance iter	m No. is displa	yed.	

n No.		Descriptio	n
089	Outputting a MIP-PG pa	ttern	
	Purpose	-	e machine. sting image printing, using MIP-PG patte
	1. Press the start key. 2. Select the MIP-PG pa	attern to be output and press	s the start key.
	Display	PG pattern to be output	Purpose
	Gray Scale		To check the laser scanner unit engine output characteristics
	Mono1 (Output density: 0)		To check the drum quality
	Mono4 (Output density: 70)		To check the drum quality
	256-Level		To check resolution reproducibility in printing
	Completion	MIP-PG pattern is output.	nance item No. is displayed.

		Description
U091	Setting the white line	e correction
	abnormal pixels. Purpose	on threshold value for white line correction and displays the count result of acing the CIS, DP main PWB or CIS roller.
	1. Press the start key 2. Select the item.	<i>Į.</i>
	Display	Description
	Calculation(R)	Abnormal pixel count result for color R
	Calculation(G)	Abnormal pixel count result for color G
	Calculation(B)	Abnormal pixel count result for color B
	Threshold(R)	Displaying of abnormal pixel detection threshold value for color R
	Threshold(G)	Displaying of abnormal pixel detection threshold value for color G
	Threshold(B)	Displaying of abnormal pixel detection threshold value for color B
	Threshold (Abnormal)	Abnormal pixel threshold value setting
	Mode	Switching between white line correction mode ON/OFF
	Execute	Holding of white reference data
	 The count result of Press the system Place a gray origin The paper should Press the start key Two test pattern s Blank or approx. 6 If vertical black line 	y. Holding of white reference data is started. f abnormal pixels is displayed. menu key. hal on the DP with the gray side down. Load paper in the cassette. be the same size as the original. y. heets will be printed.(1 st sheet: Approx. 60 mm black band, 2nd sheet:

1004			Description				
J091	How to view te	est copies					
	blank sheet	black band	black band Causes		Corrective measures		
	No lines	No lines	-	Complete			
	Black lines	White lines	Dirty CIS roller or CIS glass	Clean CIS roller and then perfor	-		
	Black lines	No lines	Engine side	U091 ends, che	ck engine		
	No lines	White lines	Engine side	U091 ends, che	ck engine		
:	Setting: Threshold 1. Select the item 2. Change the val	to be set.	or numeric keys.				
	Display		Description	Setting range	Initial setting		
	Threshold(B)		of abnormal pixel detectior alue for color B	n 0 to 1023	112		
	Threshold (Abnormal)	Abnormal p	vixel threshold value setting	g 0 to 8191	75		
	Mode	Switching b mode ON/0	etween white line correctio	n 0: OFF/ 1: ON/	0		
	-	e Threshold (Cor	m) value should not be cha	2: Test mode anged from 112, t	he initial settin		
	If white lines If fine lines i Set within th	e Threshold (Cor s appear even the n some originals ne range 50 to 20	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this rang	2: Test mode anged from 112, t iss are not dirty, r value.	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start	e Threshold (Cor s appear even the n some originals ne range 50 to 20	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this rang	2: Test mode anged from 112, t iss are not dirty, r value.	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this rang	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va be affected.)		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va be affected.)		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va be affected.)		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va be affected.)		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va be affected.)		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va		
	If white lines If fine lines i Set within th 3. Press the start Completion	e Threshold (Cor s appear even the n some originals he range 50 to 20 key. The value is	m) value should not be cha ough the CIS roller and gla disappear, lower the set v 00. (If set outside this range s set.	2: Test mode anged from 112, t ass are not dirty, r value. e, the image may	he initial settin aise the set va		

Item No. U099			Description			
U099	Adjusting origina	al size dete	ction			
	Purpose Modify the thresh	old of detect	riginal size detection and sets the sensi	ected in size		
	a wholly dark doc	ument or a o	document enclosed with dark objects on	edges.		
	Method 1. Press the star 2. Select the iter	•				
	Display		Description			
	Data1	Displaying	original size detection transmission data	а		
	B/W Level1	Setting ori	ginal size detection threshold value			
	Data2	Displaying	original size detection transmission data	a (when DP i	s installed)	
	Method: [Data1/I 1. Place the orig	-	se the original cover or DP			
	-		es and the CCD sensor determines the v	width of the c	locument. T	
	-		mines the document is vertical or horizo the DP is installed.)	ntal. (The do	cument is	
	Disp		Description			
	Original Area	-	Detected original width size for color R			
	Original Area		Detected original width size for color G			
	Original Area		Detected original width size for color B			
	Original Area		Detected original width size	-		
	Size SW L		Displays the original size sensor (OSS) ON/OFF		
	Setting: [B/W Le 1. Select an item	n to be set.	using the +/- keys or numeric keys.l			
	2. Change the se	etting value			Т	
	2. Change the se Display		Description	Setting range	Initial setting*	
				•		
	Display	Original t	Description	range	setting*	
	Display Original R1	Original t Original t	Description hreshold value for color R (near side)	range 0 to 255	setting* 20/50	
	Display Original R1 Original R2	Original t Original t Original t	Description hreshold value for color R (near side) hreshold value for color R (center)	range 0 to 255 0 to 255	setting* 20/50 30/50	
	Display Original R1 Original R2 Original R3	Original t Original t Original t Original t	Description hreshold value for color R (near side) hreshold value for color R (center) hreshold value for color R (far side)	range 0 to 255 0 to 255 0 to 255 0 to 255	setting* 20/50 30/50 40/50	
	Display Original R1 Original R2 Original R3 Original G1	Original t Original t Original t Original t Original t	Description hreshold value for color R (near side) hreshold value for color R (center) hreshold value for color R (far side) hreshold value for color G (near side)	range 0 to 255	setting* 20/50 30/50 40/50 20/50	
	Display Original R1 Original R2 Original R3 Original G1 Original G2	Original t Original t Original t Original t Original t Original t	Description hreshold value for color R (near side) hreshold value for color R (center) hreshold value for color R (far side) hreshold value for color G (near side) hreshold value for color G (center)	range 0 to 255	setting* 20/50 30/50 40/50 20/50 30/50	
	Display Original R1 Original R2 Original R3 Original G1 Original G2 Original G3	Original t Original t Original t Original t Original t Original t Original t	Description hreshold value for color R (near side) hreshold value for color R (center) hreshold value for color R (far side) hreshold value for color G (near side) hreshold value for color G (center) hreshold value for color G (far side)	range 0 to 255 0 to 255	setting* 20/50 30/50 40/50 20/50 30/50 40/50	

Item No.	Desc	ription			
U099	 Reducing the value increases the sensitivity density to be detected, however, the docum ment. If the values vary excessively, mal-detection placed. 	ent mat	could be	detected as a	an original docu-
	Original mat	Fig.	Original R/G/B	Original widt	h size range
		1	1	A4R to A3	8.5" to 11"
		2	2	B6R to A4R	5.5" to 8.5"
	297 mm □	3	3	to B6R	to 5.5"
	Figur	e 1-3-17			
	4. Press the start key. The value is set.				
	Completion				
	Press the stop key. The screen for maintenance	e item No	o. is displa	ayed.	

tem No.		Description				
U100	Adjusting main high voltageDescriptionControls the charger roller voltage to optimize the surface potential.					
	Purpose To change the setting val	ue to adjust the image if an image failure (b	ackground blur, etc.) occu			
	Method 1. Press the start key.					
	2. Select an item and pr	ress the start key.				
	Display	Description				
	Adj AC Bias	Main charger AC bias for each color				
	Set AC Auto Adj	Setting the AC bias auto adjustment				
	Set DC Bias	Main charger DC bias for each color				
	Adj DC Bias	Additional surface potential				
	Set Low Temp					
	Set Low Temp Pre-charge time at power supply ON Set Charger Freq Setting the main charger frequency					
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting	Rush current display ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments.	kes the image darker.			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of	ng the +/- or numeric keys. 9 makes the image lighter; decreasing it ma 1epending on environments.	- t			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary o Display	ng the +/- or numeric keys. 9 makes the image lighter; decreasing it ma lepending on environments. Description	Setting range			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K)	ng the +/- or numeric keys. 9 makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias	- t			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary o Display	ng the +/- or numeric keys. 9 makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias	Setting range			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set.	Setting range			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off.	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set.	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON	Setting range 0 to 255			
	Chk Current Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On 2. Press the start key. T	ing the +/- or numeric keys. g makes the image lighter; decreasing it mail lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF he setting is set.	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On 2. Press the start key. T Displaying: [Set DC Bia	ing the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF he setting is set. s]	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On 2. Press the start key. T Displaying: [Set DC Bia 1. The current setting is	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF he setting is set. s] displayed.	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On 2. Press the start key. T Displaying: [Set DC Bia 1. The current setting is Display	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF he setting is set. s] displayed. Description	Setting range 0 to 255			
	Chk Current Setting: [Adj AC Bias] 1. Change the value usi Increasing the setting The values set vary of Display AC Bias(K) 2. Press the start key. T Setting: [Set AC Auto A 1. Select On or Off. Display On Off Initial setting: On 2. Press the start key. T Displaying: [Set DC Bia 1. The current setting is	ng the +/- or numeric keys. g makes the image lighter; decreasing it ma lepending on environments. Description Main charger AC bias he value is set. dj] Description Turns auto adjustment ON Turns auto adjustment OFF he setting is set. s] displayed.	Setting range 0 to 255			

em No.				Description				
U100	1. 2.	-	e set. sing th	ne +/- or numeric keys. kes the image lighter; decreasing	ı it make	es the im	age	darker.l
		Display		Description		Settir rang	-	Initial setting
		DC2 Bias(K)	Main	charger DC bias (full speed)		128 to 7	127	0
		DC2 Bias Half(K)	Main	charger DC bias (half speed)		128 to ⁻	127	0
	Set	Press the start key. ting: [Set Low Tem Change the value u	p]	alue is set. ne +/- or numeric keys.l				
		Display	<u></u> g.	Description		etting Inge		Initial etting
		Set Low Temp	Pre-c	harge time at power supply ON	0 to (6	1	
	2.	Press the start key.	The v	alue is set.				
	Dis	Generally Press the start key. playing: [Chk Curr	The va		7500 to	ige 11280	916	etting 60
	1.	The current setting	is disp	layed.				
		Display		Descr	intion			
		Display K		Descr Rush current	iption			

em No.					Descri	puon			
U106	Set	ting the voltag	ge for	the s	econdary transfer	•			
	Set Pur	pose	-		e secondary transfe ny density problem				
	1.	t hod Press the start	-	aat					
	2. Select the item to be set Display			: SCI.		Descriptio	on		
		Light/Normal	-		Control voltage for 52 g/m ² to 64 g/m ²	the transfer bias	on paper	with thick	kness
		Normal2/3			Control voltage for 76 g/m ² to 105 g/m		on paper	with thick	kness
		Heavy1-3			Control voltage for 106 g/m² to 220 g/		on paper	with thick	kness
		Heavy4/5		Control voltage for 221 g/m ² to 300 g/		on paper	with thick	kness	
		OHP	Control voltage for the		r the transfer bias	for transp	arencies		
:	Bias				Transfer bias value				
	Cot			47		6			
		ting: [Light/No Select the item Display	n to be	set.		Description			
		ting: [Light/No Select the item Display 1st	n to be	set. Contr	rol voltage for the tra	Description ansfer bias for the		· ·	,
	1.	ting: [Light/No Select the item Display 1st 2nd	n to be	Contr	ol voltage for the transformed to the transformed t	Description ansfer bias for the		· ·	,
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap	n to be	Contr Contr Contr	ol voltage for the transformed to the transformed t	Description ansfer bias for the ansfer bias for the		· ·	,
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st]	n to be	Contr Contr Contr th to I sing th	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke	Description ansfer bias for the ansfer bias for the	e second s	· ·	speed)
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va	n to be	Contr Contr Contr th to I sing th	rol voltage for the tra rol voltage for the tra be set.	Description ansfer bias for the ansfer bias for the eys.	e second s	side (full s	speed)
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st]	n to be	Contr Contr Contr th to I sing th	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description	Description ansfer bias for the ansfer bias for the eys. Setting	e second s	side (full s	speed)
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display	n to be	Contr Contr Contr th to I sing th	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide	Description ansfer bias for the ansfer bias for the eys. Setting range	e second s	itial setti	ng 55ppm
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105	n to be	Contr Contr Contr th to I sing th	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255	e second s In 35ppm 150	itial setti 45ppm	ng 55ppm 146
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105 Width=210	n to be	Contr Contr Contr th to I sing th mm v	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255 0 to 255	e second s In 35ppm 150 143	itial setti 45ppm 174 165	ng 55ppm 146 140
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105 Width=210 Width=297 [2nd]	n to be	mm v mm v	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide wide	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255 0 to 255	e second s In 35ppm 150 143 139	itial setti 45ppm 174 165	ng 55ppm 146 140 134
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105 Width=210 Width=297	n to be	mm v mm v	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255 0 to 255 0 to 255	e second s In 35ppm 150 143 139	itial setti 45ppm 174 165 157	ng 55ppm 146 140 134
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105 Width=210 Width=297 [2nd]	105 210 297	mm v mm v	rol voltage for the tra rol voltage for the tra be set. ne +/- or numeric ke Description wide wide wide Description	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255 0 to 255 0 to 255 0 to 255	e second s 35ppm 150 143 139 In	itial setti 45ppm 174 165 157 itial setti	ng 55ppm 146 140 134
	1. 2. 3.	ting: [Light/No Select the item Display 1st 2nd Select the pap Change the va [1st] Display Width=105 Width=210 Width=297 [2nd] Display	105 105	mm v	rol voltage for the tra- rol voltage for the tra- be set. ne +/- or numeric ke Description wide wide wide wide	Description ansfer bias for the ansfer bias for the eys. Setting range 0 to 255 0 to 255 0 to 255 0 to 255	e second s 35ppm 150 143 139 In 35ppm	itial setti 45ppm 174 165 157 itial setti 45ppm	ng 55ppm 146 140 134 ng 55ppm

tem No.	Description									
U106	Setting: [Normal2/3] 1. Select the item to be set.									
		Display		Description						
		1st	Control voltage for the tran	sfer bias for the	e first side	(full spee	ed)			
		2nd	Control voltage for the tran	sfer bias for the	e second s	side (full s	speed)			
	2.	Select the pap	er width to be set.							
		3. Change the value using the +/- or numeric keys. [1st]								
		Diamlay	Description	Setting	In	itial setti	ng			
		Display	Description	range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	150	174	146			
		Width=210	210 mm wide	0 to 255	143	165	140			
		Width=297	297 mm wide	0 to 255	139	157	134			
		[2nd]								
				Setting	Initial setting					
		Display	Description	range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	146	160	133			
		Width=210	210 mm wide	0 to 255	139	153	130			
			210 1111 1140	0 10 200	100		100			
		Width=297	297 mm wide	0 to 255	124	135	120			
	4.									
	Set	Press the start	297 mm wide key. The value is set. 3]							
	Set	Press the start	297 mm wide key. The value is set. 3]	0 to 255						
	Set	Press the start	297 mm wide key. The value is set. 3]							
	Set	Press the start ting: [Heavy1- Select the item	297 mm wide key. The value is set. 3]	0 to 255 Description	124	135	120			
	Set	Press the start ting: [Heavy1- Select the item Display	297 mm wide key. The value is set. 3] n to be set.	0 to 255 Description sfer bias for the	124 e first side	135 (half spe	120 ed)			
	Set 1. 2.	Press the start tting: [Heavy1- Select the item Display 1st Half 2nd Half Select the pap	297 mm wide key. The value is set. 3] n to be set. Control voltage for the tran	0 to 255 Description sfer bias for the sfer bias for the	124 e first side	135 (half spe	120 ed)			
	Set 1. 2.	Press the start sting: [Heavy1- Select the item Display 1st Half 2nd Half Select the pap Change the va	297 mm wide key. The value is set. 3] n to be set. Control voltage for the tran Control voltage for the tran	0 to 255 Description sfer bias for the sfer bias for the s.l Setting	124 e first side e second s	135 (half spe side (half	120 ed) speed)			
	Set 1. 2.	Press the start ting: [Heavy1- Select the item Display 1st Half 2nd Half Select the pap Change the va [1st Half] Display	297 mm wide key. The value is set. 3] n to be set. Control voltage for the tran Control voltage for the tran er width to be set. Ilue using the +/- or numeric keys Description	0 to 255 Description sfer bias for the sfer bias for the s.l Setting range	124 e first side e second s In 35ppm	135 (half spe side (half itial setti 45ppm	120 ed) speed) ng 55ppm			
	Set 1. 2.	Press the start ting: [Heavy1- Select the item Display 1st Half 2nd Half Select the pap Change the va [1st Half] Display Width=105	297 mm wide key. The value is set. 3] n to be set. Control voltage for the tran Control voltage for the tran er width to be set. lue using the +/- or numeric keys Description 105 mm wide	0 to 255 Description sfer bias for the sfer bias for the s.l Setting range 0 to 255	124 e first side e second s 35ppm 122	135 (half spe side (half itial setti 45ppm 130	120 eed) speed) ng 55ppm 116			
	Set 1. 2.	Press the start ting: [Heavy1- Select the item Display 1st Half 2nd Half Select the pap Change the va [1st Half] Display	297 mm wide key. The value is set. 3] n to be set. Control voltage for the tran Control voltage for the tran er width to be set. Ilue using the +/- or numeric keys Description	0 to 255 Description sfer bias for the sfer bias for the s.l Setting range	124 e first side e second s In 35ppm	135 (half spe side (half itial setti 45ppm	120 ed) speed) ng 55ppm			

ltem No.	Description									
U106		[2nd Half]								
		Display	Description	Setting	Initial setting					
		Display	Description	range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	115	122	121			
		Width=210	210 mm wide	0 to 255	115	122	121			
		Width=297	297 mm wide	0 to 255	105	109	109			
	4. Press the start key. The value is set.									
		ting: [Heavy4/s Select the item	-							
		Display		Description						
		1st Half	Control voltage for the tran	nsfer bias for the	e first side	(half spe	ed)			
		2nd Half Control voltage for the transfer bias for the second side (half speed)								
			er width to be set. ue using the +/- or numeric key	/s.l						
		Display	Description	Setting	Initial setting					
				range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	118	126	114			
		Width=210	210 mm wide	0 to 255	118	126	114			
		Width=297	297 mm wide	0 to 255	110	115	107			
	[2nd Half]									
		Display	Description	Setting	In	itial setti	ng			
		Display	Description	range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	114	120	110			
		Width=210	210 mm wide	0 to 255	114	120	110			
		Width=297	297 mm wide	0 to 255	104	108	102			
	4.	Press the start	key. The value is set.		1	1	1			
	1.	ting: [OHP] Select the item Change the val	to be set. ue using the +/- or numeric key	/5.						
		Display	Description	Setting		itial setti	-			
				range	35ppm	45ppm	55ppm			
		Width=105	105 mm wide	0 to 255	108	112	105			
		Width=210 Width=297	210 mm wide 297 mm wide	0 to 255 0 to 255	108 101	112 104	105 101			

tem No.										
U106	Setting: [Bias] 1. Select the iter 2. Change the v	n to be set. alue using the +/- or numeric k	eys.							
	Display	Description	Setting	-	itial setti	-				
	Reverse	Transfer reverse bias (full speed)	0 to 255	35ppm 163	45ppm 163	55ppm 164				
	Reverse Hal		0 to 255	163	163	164				
	Cleaning	Cleaning control value (full speed)	0 to 255	108	113	117				
	Cleaning Ha	f Cleaning control value (half speed)	0 to 255	100	102	105				
	3. Press the sta	t key. The value is set.								
		y. The screen for selecting a m			laved					
				1 0. 13 013p	layed.					
					layed.					
					layed.					
					ayed.					
					layed.					

Item No.	Description							
U110	Checking the drum count							
	Description							
	Displays the drum counts for	checking.						
	Purpose							
	To check the drum status.							
	Method							
	1. Press the start key. The o	current drum counts is displayed.						
	Display	Description						
	K Drum count value							
	O a manufaction of							
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.						
U111	Checking the drum drive ti							
	Description	for checking a figure, which is used as a reference when correcting						
t	Displays the drum drive time for checking a figure, which is used as a reference when correcting the high voltage based on time.							
	Purpose							
	To check the drum status.							
	Method							
		drum drive time is displayed.						
	Display	Description						
	К	Drum drive time						
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.							
U117	Checking the drum number							
	Description							
	Displays the drum number.							
	Purpose To check the drum number.							
	Method 1. Press the start key. The o	drum number is displayed						
	Display	Description						
	K	Drum number						
	Completion							
	-	en for selecting a maintenance item No. is displayed.						

Item No.							
U118	Displaying the drum histor	у					
	Purpose	nachine number and the drum counter. nachine number and the drum counter.					
	Method 1. Press the start key. 2. Select [K].						
	Display	Description					
	К	Drum past record					
	The history of a machine cases.	number and a drum counter for each color is displayed by three					
	Display	Description					
	Machine History1 - 3	Historical records of the machine number					
	Cnt History1 - 3	Historical records of drum counter					
	 When completed, perform ma * : After execution, the U Method 1. Press the start key. 2. Select [Execute]. 3. Press the start key. Drum 	ng the drum unit or laser scanner unit. aintenance mode U464, Calibration. 930 charging roller counter is cleared. In setup is commenced. tch off and on. Allow more than 5 seconds between Off and On.					

Item No.										
U127	Checking/clearing the transfer count									
	Description Displays and clears the counts of the transfer counter. Purpose To check the count or drive time after replacement of the transfer belt unit. Also to clear the counts after replacing transfer belt unit.									
	Method 1. Press the start key. The current counts of the transfer counter is displayed.									
		Displ	ay		Descriptio	n				
		Belt(Cnt)	Transfer belt unit count value							
		Belt(Time)		Transfer belt unit drive	e time					
U128	Pre Set Des Adj Pui Bas bac Met	ting transfer h scription usts the ON/OF pose	F timing of ng need not rs, change key.	transfer high-voltage of the changed. If any pro	output.		-	irt on the		
	3.	Change the va	lue using the +/- keys or numeric		keys.					
		Display		Description	Setting range	In 35ppm	itial setti 45ppm	-		
		On Timing 1st	Transfer (value (firs	ON timing adjustment st side)	-200 to 200	-20	-18	-15		
		Off Timing	Transfer (ment valu	OFF timing adjust- ie	-200 to 200	-13	-15	-18		
	4.	Press the start	key. The v	alue is set.						
		mpletion ss the stop key	. The scree	n for selecting a maint	enance item N	o. is disp	layed.			

Item No.		Description
U130	Initial setting for the develo	oper
	Description	
	_	s is adjusted so that the sensor output is set as the target value with
	the initial developer.	
	Purpose	. An a structure of the set of a distribution of the distribution of the set of the set of the set of the set of
	Automatically executed wher	the developer unit loaded with the initial developer is replaced.
	Method	
	1. Press the start key.	
	2. Select [Execute].	
		ed and the control value of the toner sensor is displayed.
	K	ess the start key. lect [Execute]. ess the start key. ner installation is started and the control value of the toner sensor is displayed. Display Description Toner sensor control voltage
	Γ.	
	Completion	
	-	en for selecting a maintenance item No. is displayed.

No.			Descriptio	on					
31	Adjusting the toner sensor control voltage								
	Description Adjusts the toner sensor control voltage. Purpose If control values are not correctly retrievable due to the EEPROM of the developer unit far etc., use manual adjustment and obtain a temporary control value.								
	Method 1. Press the star 2. Select the iten	•	or displayed.						
	Disp			Descriptio	n				
	Manual	-	Toner sensor control v	-		ent			
	Auto		Toner sensor control v	oltage auto ad	djustment				
	Mode		Switching the manual	adjustment ar	nd auto ad	djustment	:		
	1. Change the va	alue using th	he +/- or numeric keys.		Initial setting		ng		
	Display		Description	range	35ppm	45ppm	55ppm		
	Control(K)	Toner ser	nsor control voltage	0 to 255	107	120	128		
	Displaying: [Auto 1. The current se	etting is disp	blayed.	Descriptio	<u></u>				
	Disp Default(K)	ay	Description Reference value for toner sensor control voltage						
	Control(K)		Toner sensor control v			~9~			
	Setting: [Mode] 1. Select the iten	n to be set.							
	Disp	ay	Description						
	Manual		Toner sensor control v	•					
	Auto		Toner sensor control voltage auto adjustment						
	Initial setting: 2. Press the star		alue is set.						
	Completion Press the stop key	/. The scree	en for selecting a mainte	enance item N	lo. is disp	layed.			
		Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.							

Item No.	Description							
U132	Replenishing toner forcibly							
	Descr	iption						
	Description Replenishes toner forcibly until the toner sensor output value reaches the toner feed start level.							
	Purpo		is detected from worth a					
	Used	when the toner empty	is detected frequently.					
	Metho							
		ess the start key. elect [Execute].						
		ess the start key.						
	То	ner is replenished unti	I the toner sensor output value reaches the toner feed start level.					
		Display	Description					
	S	upply(K)	Toner feed start level					
	S	ensor(K)	Toner sensor output value					
	4. To	stop operation, press	the stop key.					
	Comp	letion						
	-		en for selecting a maintenance item No. is displayed.					
U135	Check	king toner motor ope	ration					
	Purpose To check the operation of toner motors. Remarks When driving the toner motors long time or several times, developer section becomes the toner full and is locked.							
	Method							
	 Press the start key. Select item. 							
	3. Pr	ess the start key. The	operation starts.					
		Display	Description					
		oner	Toner motor (TM) is turned on					
		lopper	Toner hopper motor (THM) is turned on					
	4. IO	stop the operation, pr	ess the stop key.					
	Comp	letion						
			ration stops. The screen for selecting a maintenance item No. is dis					
	played	1.						

114.20	Description								
U136	Setting ton	er near o	end detection						
	Decorintion								
	Description		dicates the number of sheets that can be p	orinted from occur	rence of toner				
	near end to								
	Purpose								
			g to advance detection of near end if the int	terval from toner no	ear end to tone				
	empty seem	is too sh	ort.						
	Setting								
	1. Press th								
	2. Change	the valu	e using the +/- or numeric keys.						
	Die	play	Description	Setting	Initial				
	013	piay	Description	range	setting				
	К		Setting the level of toner	0 to 9	3				
	Increasi	ng the se	etting makes the interval from toner near e	nd to toner empty	longer.				
		-	setting makes the interval from toner near	end to toner empty	y shorter.				
			near end will not be detected.						
	3. Press th	ie start k	ey. The value is set.						

 Displaying the temperature and humidity outside the machine Description Displays the detected temperature and humidity outside the machine. Purpose To check the temperature and humidity outside the machine. Method 1. Press the start key. 2. Select the item. Display Description Ext/Int Internal/External temperature (°C), External humidity Developing Internal temperature around the laser scanner of the developer sector. 						
Displays the detected temperature and humidity outside the machine. Purpose To check the temperature and humidity outside the machine. Method 1. Press the start key. 2. Select the item. Display Description Ext/Int Internal/External temperature (°C), External humidity LSU Internal temperature around the laser scanner of the start temperature (°C)						
Display Description Ext/Int Internal/External temperature (°C), External humory LSU Internal temperature around the laser scanner of the l						
Ext/Int Internal/External temperature (°C), External human LSU Internal temperature around the laser scanner in						
LSU Internal temperature around the laser scanner						
	nidity (%)					
Developing Internal temperature around the developer sect	ınit (°C)					
	on (°C)					
Method: [Ext/Int] 1. The current temperature and humidity are displayed.						
Display Description						
External Temp External temperature (°C)						
External Humidity External humidity (%)						
Internal Temp Internal temperature (°C)						
Method: [LSU] 1. The current temperature is displayed. Display Description	1. The current temperature is displayed.					
K Internal temperature around the laser scanner						
Method: [Developing] 1. The current temperature is displayed.	Method: [Developing]					
Display Description						
K Internal temperature around the developer unit	(°C)					

em No.			Description						
U140	Displaying developer bias								
	Description Displays and changes various developer bias value. Purpose								
	To check or chang	jes the deve	eloper blas value.						
	Method 1. Press the star 2. Select the iten								
	Displ	lay		Descriptio	on				
	Sleeve DC		Developer sleeve roller	DC bias					
	Sleeve AC		Developer sleeve roller	AC bias					
	Mag DC		Developer magnet rolle	r DC bias					
	Mag AC		Developer magnet rolle	r AC bias					
	Sleeve Freq		Developer sleeve roller	frequency					
	Sleeve Duty		Developer sleeve roller	duty					
	Mag Duty		Developer magnet roller duty						
	AC Calib		Executing or setting the AC calibration						
	Display		using the +/- keys or nur Description	Setting	Ini	itial setti	ng		
	Display		Description	range	35ppm	45ppm	55ppm		
	к	Develope	r sleeve roller DC bias	0 to 255	62	62	70		
	2. Press the star Setting: [Sleeve / 1. Change the se	AC]	alue is set. using the +/- keys or nur	neric keys.					
	Display		Description	Setting range	Ini	itial setti	ng		
					35ppm	45ppm	55ppm		
	К	Develope	r sleeve roller AC bias	0 to 255	159	159	150		
	2. Press the star	t key. The v	alue is set.						

No.	Description										
40		ting: [Mag DC Change the s	`] etting value using the +/- keys or nur	meric keys.							
		Display	Description	Setting	Initial setting						
		K	Dovelanor magnet roller DC biog	range	35ppm						
	K Developer magnet roller DC bias 0 to 255 148 148 180 2 Dress the start loss. The value is set 1										
	 2. Press the start key. The value is set. Setting: [Mag AC] 1. Change the setting value using the +/- keys or numeric keys. 										
		Diamlay	Description	Setting	In	itial setti	ng				
		Display	Description	range	35ppm	45ppm	55ppn				
		К	Developer magnet roller AC bias	0 to 255	101	101	199				
	1.	Change the s	Setting	Initial setting							
			Description	range	35ppm	45ppm					
		Normal	Developer sleeve roller frequency	0 to 6200	4580	4580	4580				
		Half	Developer sleeve roller frequency (half speed)	0 to 6200	5345	5345	5345				
		ting: [Sleeve Change the s	Duty] etting value using the +/- keys or nur	-	In	itial setti	na				
		Display	Description	Setting range	35ppm	r	-				
		Normal	Developer sleeve roller duty	0 to 99	63	63	43				
	2		t key. The value is set.								
	Set	Setting: [Mag Duty] 1. Change the setting value using the +/- keys or numeric keys.									
		Display	Description	Setting		itial setti	-				
				range	35ppm						
		Normal	Developer magnet roller duty	0 to 99	37	37	68				
	Z.	୮୮୯୦୦ ୩୯ ମିଥା	't key. The value is set.								

tem No.	. Description								
U140	-	ethod: [AC Calib] (55 ppm model) I. Select the item.							
	Di	isplay	Description						
	Calibration	n	Executing the AC calibration						
	Magnifica	tion	AC calibration target bias value setting	J					
	High Altitu	ıde	Mode setting for AC calibration bias co	ontrol					
	1. Turns the in 2. If the mach	ethod: [Calibration] 1. Turns the items to implement to on. 2. If the machine is installed at high altitudes, turn to On. Changing Type to 1 sets to On.							
	Di	isplay	Description						
	К		When replacing the developer unit or o	drum unit					
	Туре		Setting the mode						
	* : When a Setting: [Mag	 5. Turn the main power switch off and on. Allow more than 5 seconds between Off and On. * : When an error occurs, an error code is displayed. etting: [Magnification] 1. Change the setting value using the +/- keys or numeric keys. 							
				Cotting					
	Display		Description	Setting range	Initial setting				
	К		cing the developer unit or drum unit	-					
	K 2. Press the s Method: [High	start key. The v	cing the developer unit or drum unit	range	setting				
	K 2. Press the s Method: [High 1. Select Mod	start key. The v	cing the developer unit or drum unit	range	setting				
	K 2. Press the s Method: [High 1. Select Mod	start key. The v Altitude] le1 or Mode2.	cing the developer unit or drum unit ralue is set.	-10 to1 5	setting				
	K 2. Press the s Method: [High 1. Select Mod	start key. The v Altitude] le1 or Mode2.	cing the developer unit or drum unit ralue is set. Description	control	setting 12				

m No.	Description								
140		Method: [AC Calib] (35 ppm model/45 ppm model) 1. Select the item.							
		Display			Description				
		High Altitude		Mode setting for A	AC calibration bias	s control			
	Method: [High Altitude] 1. Select mode.								
		Display	C	Description	Display	Description			
		Default	Initial se	tting	3000m	Settings equivalent to the altitude of 3000 m			
		1000m		equivalent to the of 1000 m	4000m	Settings equivalent to the altitude of 4000 m			
		2000m		equivalent to the of 2000 m					
	2.	Press the start	key. The v	alue is set.					
	Pre	ss the stop key	∕. The scre∉	en for selecting a m	naintenance item f	No. is displayed.			
	Pre	ss the stop key	⁄. The scre∉	en for selecting a m	naintenance item f	No. is displayed.			
	Pre	ss the stop key	⁄. The scre∉	en for selecting a m	naintenance item M	No. is displayed.			
	Pre	ss the stop key	⁄. The scre∉	en for selecting a m	naintenance item M	No. is displayed.			
	Pre	ss the stop key	∕. The scre∉	en for selecting a m	naintenance item M	No. is displayed.			

J147	Description	er applying operation									
	•		Setting for toner applying operation								
	 Description Sets the mode for removing charged toner in the developing unit (T7 control: Toner applying operation). Purpose The setting can be changed to reduce the toner applying quantity. If the charged toner stays inside the developing unit, density decreases. Method 1. Press the start key. 										
	2. Select the ite	em to be set.									
	Displa	-	Description								
	Timing	Setting timing to transit to tor									
	Mode	Settings for toner applying op									
	Upper Limit		Upper limit printing ratio of toner applying quantity with each mode								
	Minimum	Toner layer width when clean	ing mode is	selected							
	1. Change the Display	setting value using the +/- keys or nu Description	meric keys. Setting	Initial setting							
	Display	Description	range	35ppm	45ppm	55ppm					
	Paper Int	Setting number of pages to transit to toner applying (between pages)	0 to 100	35	45	55					
	Job End	Setting number of pages to transit to toner applying (job completed)	0 to 100	8	8	8					
	2. Press the sta	art key. The value is set.									
	Setting: [Mode] 1. Select the m										
	Displa	y [Description								
	Mode0	Less consumption of toner th	Less consumption of toner than a regular toner applying operation								
	Mode1	Executes toner applying with	Executes toner applying with the regular amount of toner								
	Initial setting 2. Press the st	; Mode1 art key. The setting is set.									

11447	Description								
U147		ting: [Upper Lin Change the set	mit] ting value using the +/- keys or numeric	keys.					
		Display	Description	Setting range	Initial setting				
		Value	Upper limit printing ratio of toner applyin quantity with each mode (%)	ng 0 to 2.0	2.0				
	2.	Press the start	key. The value is set.	·	·				
		ting: [Minimum Change the set] ting value using the +/- keys or numeric	keys.					
		Display	Description	Setting range	Initial setting				
		Value	Toner layer width when cleaning mode selected (mm)	is 0 to 30	10				
	2.	Press the start	key. The value is set.						
		npletion	The screen for selecting a maintenance	item No, is displa	ved				
U148		ting drum refre			ycu.				
		scription							
		ects the mode u 'pose	sed in drum refreshing						
		-	nen drum refreshing is too frequently exe	outod					
	Change settings when drum refreshing is too frequently executed.								
	Setting								
		•							
	1.	Press the start	key.	culeu.					
	1. 2.	Press the start I Select the mode	key. e.						
	1. 2.	Press the start I Select the mode	key.		Initial setting				
	1. 2.	Press the start Select the mode Change the set	key. e. ting value using the +/- keys or numeric	keys.	Initial setting				
	1. 2.	Press the start Select the mode Change the set Display	key. e. ting value using the +/- keys or numeric Description	keys. Setting range	-				
	1. 2. 3.	Press the start I Select the mode Change the set Display Normal ^{*1} Dew Conden- sation ^{*2} * 1: 0: Off / 1: \$ *2 : 0:Mode0/ 7 Larger the n	key. e. ting value using the +/- keys or numeric Description Automatic drum refreshing setting Dew condensation drum refreshing	keys. Setting range 0 to 3	2				
	1. 2. 3. 4.	Press the start I Select the mode Change the set Display Normal ^{*1} Dew Conden- sation ^{*2} * 1: 0: Off / 1: S *2 : 0:Mode0/ ^ Larger the n Press the start I	key. e. ting value using the +/- keys or numeric Description Automatic drum refreshing setting Dew condensation drum refreshing setting Short / 2: Standard / 3: Long 1:Mode1/ 2:Mode2/ 3:Mode3 umber, more the times of the refresh.	keys. Setting range 0 to 3 0 to 3	2 0				
	1. 2. 3. 4.	Press the start I Select the mode Change the set Display Normal ^{*1} Dew Conden- sation ^{*2} * 1: 0: Off / 1: S *2 : 0:Mode0/ ^ Larger the n Press the start I	key. e. ting value using the +/- keys or numeric Description Automatic drum refreshing setting Dew condensation drum refreshing setting Short / 2: Standard / 3: Long 1:Mode1/ 2:Mode2/ 3:Mode3 umber, more the times of the refresh. key. The setting is set.	keys. Setting range 0 to 3 0 to 3	2 0				
	1. 2. 3. 4.	Press the start I Select the mode Change the set Display Normal ^{*1} Dew Conden- sation ^{*2} * 1: 0: Off / 1: S *2 : 0:Mode0/ ^ Larger the n Press the start I	key. e. ting value using the +/- keys or numeric Description Automatic drum refreshing setting Dew condensation drum refreshing setting Short / 2: Standard / 3: Long 1:Mode1/ 2:Mode2/ 3:Mode3 umber, more the times of the refresh. key. The setting is set.	keys. Setting range 0 to 3 0 to 3	2 0				
	1. 2. 3. 4.	Press the start I Select the mode Change the set Display Normal ^{*1} Dew Conden- sation ^{*2} * 1: 0: Off / 1: S *2 : 0:Mode0/ ^ Larger the n Press the start I	key. e. ting value using the +/- keys or numeric Description Automatic drum refreshing setting Dew condensation drum refreshing setting Short / 2: Standard / 3: Long 1:Mode1/ 2:Mode2/ 3:Mode3 umber, more the times of the refresh. key. The setting is set.	keys. Setting range 0 to 3 0 to 3	2 0				

Item No.	Description								
U155	Checking sensors for toner								
	 Description Displays the toner sensor output value. Purpose To check the output value when any image problems occur. Method Press the start key. Select the item to be display. 								
	Display	Description							
	Waste Toner	Control voltage value of the waste toner sensor							
	Toner	Control voltage value and replenishment level of toner sensor							
	Method: [Waste Toner] 1. Check the status of se	ensor. The current value is displayed.							
	Display	Description							
	Full	Waste toner sensor 1 (WTS1)							
	Near Full	Waste toner sensor 2 (WTS2)							
	Method: [Toner] 1. Check the status of se Display	sor. The current value is displayed. Description							
		· · · · · · · · · · · · · · · · · · ·							
	Sensor(K)	-							
	Sensor(K) Supply(K)	Toner sensor output value Toner replenishment level							
	Supply(K) Completion	Toner sensor output value							
	Supply(K) Completion	Toner sensor output value Toner replenishment level							
	Supply(K) Completion	Toner sensor output value Toner replenishment level							
	Supply(K) Completion	Toner sensor output value Toner replenishment level							
	Supply(K) Completion	Toner sensor output value Toner replenishment level							

No.	. Description							
56	Setting the toner	replenishı	ment level					
	Description Sets the toner replenishment level for each color. Purpose							
	To change settings according to the original image.							
	Method 1. Press the start 2. Select the item	-						
	Displa	ay	Desc	ription				
	Supply		Setting the toner replenishmer	nt level				
	Empty		Setting the toner empty level					
	Display		Description	Setting range	Initial setting			
			Deservisite	Setting	Initial			
			-		-			
	К	Toner re	plenishment level	0 to 900	512			
			using the +/- or numeric keys.		1			
	1. Change the set	setting ma	using the +/- or numeric keys. kes 'toner empty' appear later a	nd decreasing it ma	akes 'toner			
	1. Change the set Increasing the	setting ma		nd decreasing it ma Setting range	akes 'toner Initial setting			
	1. Change the set Increasing the empty' appear	setting ma earlier. Toner er	kes 'toner empty' appear later a Description npty level	Setting	Initial			

ltem No.		Description						
U157	Checking the developer drive time							
	Description Displays the developer drive time for checking a figure, which is used as a reference when correcting the toner control. Purpose							
	To check the developer drive	time after replacing the developer unit.						
	Method 1. Press the start key. The de	eveloper drive time is displayed.						
	Display	Description						
	К	Developer drive time						
U158	Completion Press the stop key. The scree Checking the developer cou	n for selecting a maintenance item No. is displayed.						
	Description Displays the developer count for checking. Purpose To check the developer unit status. Method							
	Display	urrent developer counts is displayed. Description						
	K	Developer count value						
	Completion Press the stop key. The scree	n for selecting a maintenance item No. is displayed.						

	Description									
U161	Setting the fuser control temperature									
	Description Changes the fuser control temperature. Purpose									
	Normally no change is necessary. However, can be used to prevent curling or creasing of pape or solve a fuser problem on thick paper.									
		Method 1. Press the start key. 2. Select the item to be set.								
	Disp	lay		Description	า					
	Warm Up	-	Control temperature e	xcept at printin	g					
	Print		Control temperature d	uring printing						
	Display		Description	Setting	-	tial sett	-			
			-	range	35ppm	45ppm				
	Ready (Center)		emperature at display- y (Center)	130 to 200 (°C)	110	110	110			
	Ready (Edge)	Control te ing Read	emperature at display- y (Edge)	100 to 200 (°C)	110	110	110			
	Drive (Center)	Stable ter ing (Cent	mperature during driv- er)	130 to 200 (°C)	155	160	170			
	Drive (Edge)	Stable ter	mperature during driv-	100 to 200 (°C)	150	155	165			
	Wait (Center)	Stable ter (Center)	mperature during halt	130 to 200 (°C)	155	160	170			
	Wait (Edge)	Stable ter (Edge)	mperature during halt	100 to 200 (°C)	160	160	160			
	3. Press the star	t key. The v	alue is set.	1						

tem No.	Description									
U161	1.	ting: [Print] Select the item Change the set		using the +/- keys.						
		Display		Description		Setting	Ini	tial sett	ing	
				Decemption		range			55ppm	
		Full Speed Print(Center)	Temperat speed (C	ure at maximum pr enter)	int	130 to 200 (°C)	160	165	175	
		Full Speed Print(Edge)	Temperat speed (Ed	ure at maximum pr dge)	int	100 to 200 (°C)	170	175	185	
		Duplex Shift (Center)	Temperat (Center)	ure at duplex printi	ng	-20 to 20 (°C)	0	0	0	
	3.	Press the start	key. The v	alue is set.						
		npletion ss the stop key.	The scree	n for selecting a ma	ainter	nance item N	o. is displa	iyed.		
U163	Res	etting the fuse	er problem	data						
	Met 1. 2. 3.	hod Press the start Press [Execute Press the start	key.]. key. The fu	n abnormally high f Iser problem data is ch off and on. Allow	s initia	alized.	nds betwe	en Off a	nd On.	
U167	Checking/clearing the fuser count									
	Description Displays and clears the fuser count for checking. Purpose To check the fuser count after replacement of the fuser unit. Also to clear the counts after repla- ing unit.									
	Method 1. Press the start key. The fuser count is displayed.									
		Displa	ıy	Description						
		Cnt Clear	Fuser unit count value							
	Clearing 1. Press [Clear]. 2. Press the start key. The count is cleared.									
		npletion ss the stop key.	The scree	n for selecting a ma	ainter	nance item N	o. is displa	iyed.		

11400	Description				
U193	Setting the fu	ser drive cont	rol		
	DescriptionDetermines to switch the control of driving fusing on and off, when printing is completed.PurposeSet as a countermeasure against that the fuser claws affect the print output.				
	Setting 1. Press the s 2. Select On o	start key.			
	Di	splay	Description		
	On		Fuser drive control ON		
	Off		Fuser drive control OFF		
	Initial settir 3. Press the s	ig: On start key. The s	etting is set.		
	Completion Press the stop	key. The scree	en for selecting a maintenance item No. is displayed.		
U199	Displaying fus	ser heater tem	perature		
	To check the fuser temperature. Method 1. Press the start key. The fuser temperature is displayed.				
	Di	splay	Description		
			Description Heat roller edge temperature (°C)		
	Di Heat Rolle Heat Rolle	er Edge1	Description Heat roller edge temperature (°C) Heat roller center temperature (°C)		

Item No.		Description			
U200	Turning all LEDs on				
	Description Turns all the LEDs on the ope Purpose To check if all the LEDs on th				
	 Method 1. Press the start key. 2. Select [Execute]. 3. Press the start key.All the LEDs on the operation panel light. 4. Press the stop key. The LEDs turns off. 				
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			
	Initializing the touch panel Description Automatically correct the positions of the X- and Y-axes of the touch panel. Purpose To automatically correct the display positions on the touch panel after it is replaced. Method 1. Press the start key.				
	2. Select the [Initialize] or [Check].				
	Display	Description			
	Initialize Check	Adjusts the display on the panel automatically Checks the display on the touch panel			
	Method: [Initialize] 1. Press the start key. 2. Press the center of the + keys. Be sure to press three + keys displayed in order. The touch panel is adjusted automatically. 3. Press the indicated three + keys, and then check the display. 4. Press the stop key. Method: [Check] 1. Press the indicated three + keys, and then check the display. 2. Press the stop key. Method: [Check] 1. Press the start key. 2. Press the indicated three + keys, and then check the display. When adjusting the display, press [Initialize] to execute the adjustment automatically. 3. Press the stop key. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.				
		- • •			

tem No.	Description				
U202	Setting the KMAS host monitoring system				
	 Description Initializes or operates the KMAS host monitoring system. This is an optional device which is currently supported only by Japanese specification machines so no setting is necessary. Purpose Performed at installation, periodic maintenance, and/or repair. 				
	Method 1. Press the start key.				
	2. Select the item.				
	Display	Description			
	Init/Set TEL No.	Initialization/Phone Nbr. se			
	Call Service End	Outgoing at the end of service activities			
	Method: [Init/Set TEL No.] 1. Select the item to be input.				
	Display	Description			
	TEL No. 1	Sales companies			
	TEL No. 2 Call center				
	 Press the start key. The setting is set. Select [Initialize]. Select [Execute]. Press the start key. Communication with the host initiated. The result of communication will be displayed. (Refer to the result.) 				
	 Method: [Call Service End] 1. Select [Execute]. 2. Press the start key. Communication with the host initiated. 3. The result of communication will be displayed. (Refer to the result.) Result table				
	Display	Description			
	ОК	Communication properly terminated.			
		Communication error (Nbr. of calls exceeded)			
		Communication error (Communication timeout)			
	NG	Communication error (Communication trial timeout)			
		Communication error (Other)			
		KMAS unreachable			
	Completion				

Description Simulates the original conveying operation separately in the DP. Purpose To check the DP operation.			
e start key. original in the e speed to be o	DP if running this simulation with paper. operated.		
Display	Description		
Speed	Normal reading (600 dpi)		
eed	High-speed reading		
e item to be op	erated.		
Display	Description		
)P	With paper, single-sided original of CCD		
ADP	With paper, double-sided original of CCD		
	With paper, double-sided original of CIS		
DP (Non-P)	Without paper, single-sided original of CCD (continuous operation)		
ADP (Non-P)	Without paper, double-sided original of CCD (continuous operation)		
n-P)	Without paper, double-sided original of CIS (continuous operation)		
continuous ope	e operation starts. ration, press the stop key. een for selecting a maintenance item No. is displayed.		

U204 Setting the presence or absence of a key card or key counter Description Sets the presence or absence of the optional key card or key counter. Purpose To run this maintenance item if a key card or key counter is installed. Method 1. Press the start key. 2. Select the item to be set. Display Description Device Sets the presence or absence of the key card or key counter is installed. Device Sets the presence or absence of the key card or key counter is not installed. Setting: [Device] 1. Select the optional counter to be installed. Image: Setting: [Device] Description Key-Card The key card is installed Key-Counter The key counter is installed Off Not installed Initial setting: Off 2. Press the start key. The setting is set. 3. Turn the main power switch off and on. Allow more than 5 seconds between Off and
Sets the presence or absence of the optional key card or key counter. Purpose To run this maintenance item if a key card or key counter is installed. Method 1. Press the start key. 2. Select the item to be set. Display Description Device Sets the presence or absence of the key card or key cou Message Sets the message when optional equipment is not installed Setting: [Device] 1. Select the optional counter to be installed. Display Description Key-Card Key-Counter The key card is installed Key-Counter Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
 1. Press the start key. 2. Select the item to be set. Display Description Device Sets the presence or absence of the key card or key could Message Sets the message when optional equipment is not installed Setting: [Device] 1. Select the optional counter to be installed. Description Key-Card The key card is installed Key-Counter The key counter is installed Not installed Initial setting: Off 2. Press the start key. The setting is set.
Device Sets the presence or absence of the key card or key could sets the message when optional equipment is not installed Setting: [Device] 1. Select the optional counter to be installed. Display Description Key-Card The key card is installed Key-Counter The key counter is installed Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
Message Sets the message when optional equipment is not installed Setting: [Device] 1. Select the optional counter to be installed. Display Description Key-Card The key card is installed Key-Counter The key counter is installed Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
Setting: [Device] 1. Select the optional counter to be installed. Display Description Key-Card The key card is installed Key-Counter The key counter is installed Off Not installed Initial setting: Off Not installed 2. Press the start key. The setting is set.
Display Description Linitial setting: Off The key card is installed The key counter is installed Initial setting: Off Not installed Not installed Initial setting: Off 2. Press the start key. The setting is set.
Key-Card The key card is installed Key-Counter The key counter is installed Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
Key-Counter The key counter is installed Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
Off Not installed Initial setting: Off 2. Press the start key. The setting is set.
Initial setting: Off 2. Press the start key. The setting is set.
2. Press the start key. The setting is set.
 Setting: [MESSAGE] 1. Select the [Key Device] or [Coin Vender]. 2. Press the start key. The setting is set. 3. Turn the main power switch off and on. Allow more than 5 seconds between Off and

	Description				
U206	Setting the presence or absence of a coin vender				
	 Description Sets the presence or absence of the optional coin vender. This is an optional device which is currently supported only by Japanese specification machines Purpose To run this maintenance item if a coin vender is installed. Method Press the start key. Select the item to be set. 				
	Display	Description			
	On/Off Config	Sets the presence or absence of the coin vender			
	No Coin Action	Behavior when change runs out during copying			
	Price	Charge per copy by size and color			
	Boot Mode	Boot Mode setting			
	Setting: [On/Off Config] 1. Select On or Off.				
	Display	Description			
	On	The coin vender is installed			
	Off	The coin vender is not installed			
	Initial setting: Off 2. Press the start key. The setting is set. 3. Turn the main power switch off and on. Allow more than 5 seconds between Off and On. Setting: [No Coin Action] 1. Select the item.				
	3. Turn the main power s	switch off and on. Allow more than 5 seconds between Off and On.			
	3. Turn the main power s	switch off and on. Allow more than 5 seconds between Off and On.			
	 Turn the main power s Setting: [No Coin Action 1. Select the item. 	switch off and on. Allow more than 5 seconds between Off and On.			
	 3. Turn the main power s Setting: [No Coin Action 1. Select the item. Display 	witch off and on. Allow more than 5 seconds between Off and On. Description			
	3. Turn the main power s Setting: [No Coin Action 1. Select the item. Display All Clear	witch off and on. Allow more than 5 seconds between Off and On. Description All clear is performed			
	 3. Turn the main power s Setting: [No Coin Action 1. Select the item. Display All Clear Auto Clear Off Initial setting: Off 2. Press the start key. The 3. Turn the main power s 	witch off and on. Allow more than 5 seconds between Off and On. Description All clear is performed Auto clear is performed Clear is not performed			
	 3. Turn the main power s Setting: [No Coin Action 1. Select the item. Display All Clear Auto Clear Off Initial setting: Off 2. Press the start key. The 	witch off and on. Allow more than 5 seconds between Off and On. Description All clear is performed Auto clear is performed Clear is not performed clear is not performed witch off and on. Allow more than 5 seconds between Off and On.			
	 3. Turn the main power s Setting: [No Coin Action Select the item. Display All Clear Auto Clear Off Initial setting: Off Press the start key. Th Turn the main power s Setting: [Price] 	witch off and on. Allow more than 5 seconds between Off and On. Description All clear is performed Auto clear is performed Clear is not performed clear is not performed witch off and on. Allow more than 5 seconds between Off and On.			
	 3. Turn the main power s Setting: [No Coin Action Select the item. Display All Clear Auto Clear Off Initial setting: Off Press the start key. Th Turn the main power s Setting: [Price] Select the item to be s 	witch off and on. Allow more than 5 seconds between Off and On. J Description All clear is performed Auto clear is performed Clear is not performed Clear is not performed witch off and on. Allow more than 5 seconds between Off and On. set.			
	 3. Turn the main power s Setting: [No Coin Action Select the item. Display All Clear Auto Clear Off Initial setting: Off Press the start key. Th Turn the main power s Setting: [Price] Select the item to be s 	switch off and on. Allow more than 5 seconds between Off and On. J Description All clear is performed Auto clear is performed Clear is not performed Clear is not performed witch off and on. Allow more than 5 seconds between Off and On. set. Description			

Description						
Setting: [Normal / AD] 1. Select the item to be set.						
						
Display	1		Description			
B/W Black & White						
 Select the paper Change the setti 						
Display		Description	Setting range	Initial setting		
A3-Ledger	A3/Le	edger size	0 to 300	10		
B4	B4 siz	ze	0 to 300	10		
Card	Post	card	0 to 300	10		
Other	Other	r	0 to 300	10		
 Value of 0 allows non-restricted copying. (At a periodic maintenance, etc.) 4. Press the start key. The value is set. 5. Turn the main power switch off and on. Allow more than 5 seconds between Off and O Setting: [Print] 						
1. Select the item to be set. Display						
		Description				
B/W		Black & White				
 Select the paper size to be set. Change the setting value using the +/- keys. 						
			Setting range			
Change the setting v	value usir	ng the +/- keys.	-			
Change the setting v Display	value usir	ng the +/- keys. Description edger size	range	setting		
Change the setting v Display A3-Ledger	value usir A3/Le	ng the +/- keys. Description edger size ze	range 0 to 300	setting 10		
Change the setting V Display A3-Ledger B4	A3/Le B4 siz	ng the +/- keys. Description edger size ze card	range 0 to 300 0 to 300	10 10		
Change the setting V Display A3-Ledger B4 Card Other In 10-yen increments	A3/Le A3/Le B4 siz Post Other S n-restricte	ng the +/- keys. Description edger size ze card	range 0 to 300	setting 10 10 10 10		
Change the setting v Display A3-Ledger B4 Card Other In 10-yen increments Value of 0 allows not Setting: [Boot Mod	A3/Le A3/Le B4 si: Post Other S n-restricte	ng the +/- keys. Description edger size ze card r ed copying. (At a periodic m	range 0 to 300	setting 10 10 10 10		
Change the setting V Display A3-Ledger B4 Card Other In 10-yen increments Value of 0 allows not Setting: [Boot Mod 1. Select the item.	A3/Le A3/Le B4 si: Post Other S n-restricte	ng the +/- keys. Description edger size ze card r ed copying. (At a periodic m	range 0 to 300 naintenance, etc.)	setting 10 10 10 10		
Change the setting v Display A3-Ledger B4 Card Other In 10-yen increments Value of 0 allows not Setting: [Boot Mod 1. Select the item. Display	A3/Le A3/Le B4 si: Post Other S n-restricte	ng the +/- keys. Description edger size ze card r ed copying. (At a periodic m	range 0 to 300 o to 300 Description al mode.	setting 10 10 10 10		

Item No.	Description					
U207	Checking the operation panel keys					
	Description					
	Checks operation of the operation panel keys.					
	Purpose					
	To check operation of all the k	eys and LEDs on the operation panel.				
	 Method Press the start key. The screen for executing is displayed. [Count0] is displayed and the left most LED on the operation panel lights. As the keys lined up in the same line as the lit indicator are pressed in the order from the top to the bottom, the figure shown on the touch panel increases in increments of 1. When all the keys in that line are pressed and if there are any LEDs corresponding to the keys in the line on the immediate right, the top LED in that line will light. When all the keys on the operation panel have been pressed, all the LEDs light for up to 10 seconds. 					
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
U208	Setting the paper size for the side deck					
	 Description Sets the size of paper used in side deck. Purpose To change the setting when installing the side deck or the size of paper used in the side deck is changed. Setting Press the start key. Select the paper size (A4, B5 or Letter). Initial setting: Letter (Inch specifications) A4 (Metric specifications) Press the start key. The setting is set. Turn the main power switch off and on. Allow more than 5 seconds between Off and On. 					
U211	Setting the presence or absence of the job separator					
	 Description Sets the presence or absence of the inner job separator. Purpose To run this maintenance item if the inner job separator is installed. Method 1. Press the start key. 2. Select [Inner Job Separator]. 3. Select On or Off. 					
	Display	Description				
	On	The inner job separator is installed				
	Off	The inner job separator is not installed				
	Initial setting: Off					
	4. Press the start key. The se	•				
	5. Turn the main power swite	ch off and on. Allow more than 5 seconds between Off and On.				

Item No.	Description				
U221	Setting the USB host lock function				
	Description Specifies ON/OFF the USB host lock function. Setting this to ON causes the machine to be unable to recognize the device connected to the USB host. Purpose Set according to the preference of the user.				
	Method 1. Press the start key. 2. Select [Host Lock]. 3. Select On or Off.				
	Display	Description			
	On	USB host lock function ON			
	Off	USB host lock function OFF			
	Initial setting: Off 4. Press the start key. The s 5. Turn the main power swit	etting is set. ch off and on. Allow more than 5 seconds between Off and On.			
U222	Setting the IC card type				
	Sets the type of IC card. Purpose To change the type of IC card. Setting 1. Press the start key. 2. Select the item.				
	Display	Description			
	Other	Sets the type of IC cards to other than SSFC			
	SSFC	Sets the type of IC cards to SSFC			
	Initial setting: Other 3. Press the start key. The setting is set.				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.				

n No.	Description					
223	Operation panel lock					
	 Description Sets the operation panel lock function. Purpose This is performed to inhibit operating and canceling the system menu on the operation panel which may be done by others then an administrator. Setting 					
	 Press the start key. Select the item. 					
	Display		Desc	ription		
	Unlock	Release th	e lock of the operat	ion from the system	menu	
	Partial Lock	Lock the o	peration from the sy	stem menu		
	Lock	Lock the o	peration from the sy	stem menu and job	cancel	
	Initial setting: Unlock 3. Press the start key. Th	e setting is set	etting is set.			
	Item		Partial Lock	Lock		
	Entering maintenance	e mode	Prohibited	Prohibited		
	Entering system men	u	Prohibited	Prohibited		
	Transmission/transmi document boxes	ssion from	Prohibited	Prohibited		
	Entering Addressboo	k Add/Edit	Prohibited	Prohibited		
	Entering Document b	ox Add/Edit	Prohibited	Prohibited		
	Pressing Stop key		Permitted	Prohibited		
	Pressing Status/Job (Cancel	Permitted	Prohibited		
	Disconnecting FAX lir	nes	Permitted	Prohibited		
	Completion Press the stop key. The so	creen for select	ing a maintenance i	tem No. is displayed		

	. Description						
U224	Panel sheet extension						
	Description Changes the image data and the message of the opening screen at the machine startup a image data and the message of the service call screen to user specified data. Purpose Set according to the preference of the user.						
	 Setting 1. Write the image data or the message data 2. Insert USB memory in USB memory slot of 3. Turn the main power switch on. 4. Enter the maintenance item. 5. Press the start key. 6. Select the [Install] or [UnInstall]. 			B memory slot of the r ch on. m.	-		
		Display			Description		
		Install		-	a or the message data		
		UnInstall		Restores the original	image data or message dat	а	
	7. 9	Select the item.					
		Display		Description	Display area	l	
		Opening Img Startu		ip screen	Entire start display		
	Call Img Ser			rvice call screen Graphic display area			
		Call Msg Top	Servi	ce call message 1	Message display area (top)		
		Call Msg Detail	Servi	ce call message 2	I message 2 Message display area (descriptive area)		
	9. \ Sup	When normally cor plement 1 File information		ation or uninstallation i I, [OK] is displayed.		File format	
	-	Description		File name	Image size (in pixels)		
		Startup screen	open	ng_ext_image.png	Length: 480 Width : 800	PNG	
					Longth: 200	PNG	
	-	Service call screen	callwi	n_ext_image.png	Length: 200 Width : 180	1110	
				n_ext_image.png	-	TEXT (Unicode)	

Item No.		Description
U224	Graphics display on serv The pre-installed graphics f How to change the messa Entering #562 (4 letters) us call messages 1 and 2. How to reset the message Reverting the maintenance Caution The graphics file for start di recovering from sleeping.)	file is displayed at a service call. age sing the numeric keypad during a service call display will let service
	Completion Press the stop key. The scr	reen for selecting a maintenance item No. is displayed.
U234	Purpose	ch unit of 1000-sheet finisher or 4000-sheet finisher. different punch unit from the destination of the machine.
	Display	Description
	Auto	Conforms to destination settings.
	Japan Metric	Metric (Japan) specifications
	Inch	Inch (North America) specifications
	Europe Metric	Metric (Europe) specifications
	3. Press the start key. The	h specifications)/Europe Metric (Metric specifications) e setting is set. witch off and on. Allow more than 5 seconds between Off and On.

	. Description			
U237	Setting finisher stack quantity			
	finisher. Purpose	of each stack on the main tray and on the middle tray in 4000-sheet n a stack malfunction has occurred.		
	Method 1. Press the start key. 2. Select the item to be se	et.		
	Display	Description		
	Main Tray	Number of sheets of stack on the main tray		
	Middle Tray	Number of sheets of stack on the middle tray for staple mode		
	Setting: [Main Tray] 1. Change the setting usi	ng the +/- keys or numeric keys.		
	Display	Description		
	0	Number of sheets of stack on the main tray: 4000 sheets		
	1	Number of sheets of stack on the main tray: 1500 sheets		
	 Press the start key. The setting is set. Turn the main power switch off and on. Allow more than 5 seconds between Off and On. Setting: [Middle Tray] Change the setting using the +/- keys or numeric keys. 			
	Display	Description		
		Description		
	0	Description Number of sheets of stack on the middle tray for staple mode: 65 sheets		
	0	Number of sheets of stack on the middle tray for staple mode:		

Item No.	. Description					
U240	Checking the operation of the finisher Description Turns each motor and solenoid of 1000-sheet finisher or 4000-sheet finisher ON. Purpose To check the operation of each motor and solenoid of the 1000-sheet finisher or 4000-sheet finisher. Method 1. Press the start key. 2. Select the item to be checked.					
					Display	Description
					Motor	Checking the motor of the document finisher
	Solenoid	Checking the solenoid of the document finisher				
	Mail Box	Checking the motor of the mailbox				
	Booklet	Checking the motor of the center-folding unit				
	Method: [Motor] 1. Select the item to be c 2. Press the start key. Th Display					
	Feed In(H)	DF paper entry motor (DFPEM) is turned on at high speed				
	Feed In(L)	DF paper entry motor (DFPEM) is turned on at low speed				
	Middle(H)	DF middle motor (DFMM) is turned on at high speed				
	Middle(L)	DF middle motor (DFMM) is turned on at low speed				
	(L)					
	Fiect(H)	DE eject motor (DEEM) is turned on at high speed				
	Eject(H)	DF eject motor (DFEM) is turned on at high speed DF eject motor (DFEM) is turned on at low speed				
	Eject(L)	DF eject motor (DFEM) is turned on at low speed				
	Eject(L) Save(H)					
	Eject(L)	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed				
	Eject(L) Save(H) Save(L)	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed				
	Eject(L) Save(H) Save(L) Tray	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple Width Test(A3)	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on DF staple motor (DFSTM) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple Width Test(A3) Width Test(LD)	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple Width Test(A3) Width Test(LD) Beat	DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF paddle motor (DFPDM) is turned on				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple Width Test(A3) Width Test(LD) Beat Eject Unlock(HP)	 DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF paddle motor (DFPDM) is turned on DF paddle motor (DFPDM) is turned on 				
	Eject(L) Save(H) Save(L) Tray Staple Move Staple Width Test(A3) Width Test(LD) Beat Eject Unlock(HP) Sort Test	 DF eject motor (DFEM) is turned on at low speed DF drum motor (DFDRM) is turned on at high speed DF drum motor (DFDRM) is turned on at low speed DF tray motor (DFTM) is turned on DF slide motor (DFSLM) is turned on DF staple motor (DFSTM) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF side registration motor 1, 2 (DFSRM1, 2) is turned on DF paddle motor (DFPDM) is turned on DF eject release motor (DFERM) is turned on to home position DF shift motor 1, 2 (DFSFM1, 2) is turned on 				

	Description		
	Display		Description
	Eject Unlock(Ful)	DF eject release motor (DFERM) full-open drive position
	Punch		Punch motor (PUM) is turned on
	Punch Move		Punch slide motor (PUSLM) is turned on
	Method: [Solenoid] 1. Select the item to be operated. 2. Press the start key. The operation starts.		
	Display		Description
	Sub Tray		DF feedshift solenoid (DFFSSOL) is turned on
	Save Drum		DF drum solenoid (DFDRSOL) is turned on
	Booklet		DF center fold solenoid (DFCFSOL) is turned on
	Punch		Punch solenoid (PUSOL) is turned on
	Three Fold		CF feedshift solenoid (CFFSSOL) is turned on
	lethod: [Mail Box] 1. Select the item to 2. Press the start ke		rated.
	lethod: [Mail Box] 1. Select the item to 2. Press the start ke Display	y. The o	rated. operation starts. Description
	lethod: [Mail Box] 1. Select the item to 2. Press the start ke	y. The o MB d	rated.
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke	y. The o MB d MB d	rated. peration starts. Description Irive motor (MBDM) is turned on at paper conveying Irive motor (MBDM) is turned on at feedshift operation rated. peration starts.
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display	y. The o MB d MB d	rated. peration starts. Description rive motor (MBDM) is turned on at paper conveying rive motor (MBDM) is turned on at feedshift operation rated. perated. Description
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding	y. The o MB d MB d	rated. peration starts. Description Irive motor (MBDM) is turned on at paper conveying Irive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade	y. The o MB d MB d	rated. peration starts. Description rive motor (MBDM) is turned on at paper conveying rive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade Bundle Up	y. The o MB d MB d	rated. peration starts. Description rive motor (MBDM) is turned on at paper conveying rive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on CF adjustment motor 2 (CFADM2) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade	y. The o MB d MB d	rated. peration starts. Description rive motor (MBDM) is turned on at paper conveying rive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade Bundle Up	y. The o MB d MB d	rated. peration starts. Description rive motor (MBDM) is turned on at paper conveying rive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on CF adjustment motor 2 (CFADM2) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade Bundle Up Bundle Down	y. The o MB d MB d	rated. peration starts. Description Trive motor (MBDM) is turned on at paper conveying Irive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on CF adjustment motor 2 (CFADM2) is turned on CF adjustment motor 1 (CFADM1) is turned on CF staple motor (CFSTM) is turned on
M	Iethod: [Mail Box] 1. Select the item to 2. Press the start ke Display Conv Branch Iethod: [Booklet] 1. Select the item to 2. Press the start ke Display Folding Blade Bundle Up Bundle Down Staple	y. The o MB d MB d	rated. peration starts. Description lrive motor (MBDM) is turned on at paper conveying lrive motor (MBDM) is turned on at feedshift operation rated. peration starts. Description CF main motor (CFMM) is turned on CF blade motor (CFBM) is turned on CF adjustment motor 2 (CFADM2) is turned on CF adjustment motor 1 (CFADM1) is turned on

Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.	Description		
U241	Checking the operation of the switches of the finisher		
	Purpose	h switches and sensors of 1000-sheet finisher or 4000-sheet finisher each switches and sensors of the 1000-sheet finisher or 4000-sheet	
	Method 1. Press the start key.	shecked	
	2. Select the item to be checked. Display Description		
	Finisher	Checking the switch and sensor of the document finisher	
	Mail Box	Checking the switch and sensor of the mailbox	
	Booklet	Checking the switch and sensor of the center-folding unit	
	Punch	Checking the switch and sensor of the punch unit	
	When the on-status of reverse.	ensor on and off manually to check the status. a switch or sensor is detected, that switch or sensor is displayed in	
	Display	Description	
	Front Cover		
		DF front cover switch (DFFCSW)	
	MPT ^{*1}	DF eject cover switch (DFECSW)	
	MPT ^{*1} Top Cover ²	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW)	
	MPT ^{*1} Top Cover ² Tray U-Limit	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1}	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1}	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1}	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP Sub Tray Eject ^{*1}	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES) DF sub eject sensor (DFSES)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP Sub Tray Eject ^{*1} Middle Tray Eject	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES) DF sub eject sensor (DFSES) DF middle eject sensor (DFMES)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP Sub Tray Eject ^{*1} Middle Tray Eject Drum ^{*1}	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES) DF sub eject sensor (DFSES) DF middle eject sensor (DFMES) DF drum sensor (DFDRS)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP Sub Tray Eject ^{*1} Middle Tray Eject Drum ^{*1} Staple HP	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES) DF sub eject sensor (DFPES) DF middle eject sensor (DFMES) DF drum sensor (DFDRS) DF slide sensor (DFSLS)	
	MPT ^{*1} Top Cover ² Tray U-Limit Tray HP2 ^{*1} Tray Middle Tray L-Limit Tray L-Limit(BL) ^{*1} Tray Top HP Sub Tray Eject ^{*1} Middle Tray Eject Drum ^{*1} Staple HP Middle Tray	DF eject cover switch (DFECSW) DF top cover switch (DFTCSW) DF tray sensor 1 (DFTS1) DF tray sensor 2 (DFTS2) DF tray sensor 3 (DFTS3) DF tray sensor 4 (DFTS4) DF tray sensor 5 (DFTS5) DF tray upper surface sensor (DFTUSS) DF paper entry sensor (DFPES) DF sub eject sensor (DFPES) DF middle eject sensor (DFMES) DF drum sensor (DFDRS) DF slide sensor (DFSLS) DF middle tray sensor (DFMTS)	

Item No.	Description		
U241			
	Display	Description	
	Match Paddle	DF adjustment sensor (DFADS)	
	Lead Paddle	DF paddle sensor (DFPDS)	
	Shift Front HP ^{*1}	DF shift sensor 1 (DFSFS1)	
	Shift Tail HP	DF shift sensor 2 (DFSFS2)	
	Shift Unlock HP	DF shift release sensor (DFSFRS)	
	Sub Tray Full	DF sub tray full sensor (DFSTFS)	
	Shift Set	DF shift set sensor (DFSFSS)	

*1: 4000-sheet finisher only. *2: 1000-sheet finisher only.

Method: [Mail Box]

 Turn each switch or sensor on and off manually to check the status. When the on-status of a switch or sensor is detected, that switch or sensor is displayed in reverse.

Display	Description
Eject	MB eject sensor (MBES)
Cover	MB cover open/close switch (MBCOCSW)
Over Flow1	MB overflow sensor 1 (MBOFS1)
Over Flow2	MB overflow sensor 2 (MBOFS2)
Over Flow3	MB overflow sensor 3 (MBOFS3)
Over Flow4	MB overflow sensor 4 (MBOFS4)
Over Flow5	MB overflow sensor 5 (MBOFS5)
Over Flow6	MB overflow sensor 6 (MBOFS6)
Over Flow7	MB overflow sensor 7 (MBOFS7)
Motor HP	MB paper entry sensor (MBPES)

	Description		
J241	Method: [Booklet] 1. Turn each switch or sensor on and off manually to check the status.		
	When the on-status of reverse.	a switch or sensor is detected, that switch or sensor is displayed in	
	Display	Description	
	HP	CF paper entry sensor (CFPES)	
	Eject	CF eject sensor (CFES)	
	Paper	CF paper sensor (CFPS)	
	Tray Full	CF tray full sensor (CFTFS)	
	Bundle Up HP	CF adjustment sensor 1 (CFADS1)	
	Bundle Down HP	CF adjustment sensor 2 (CFADS2)	
	Width Up HP	CF side registration sensor 1 (CFSRS1)	
	Width Down HP	CF side registration sensor 2 (CFSRS2)	
	Blade HP	CF blade sensor (CFBLS)	
	Tray	CF tray switch (CFTSW)	
	Set	CF set switch (CFSSW)	
	Left Guide	CF left guide switch (CFLGSW)	
	Vertical Feed	CF paper conveying sensor (CFPCS)	
	Method: [Punch]	ansor on and off manually to check the status	
	1. Turn each switch or se	ensor on and off manually to check the status. a switch or sensor is detected, that switch or sensor is displayed in	
	1. Turn each switch or se When the on-status of	-	
	1. Turn each switch or se When the on-status of reverse.	a switch or sensor is detected, that switch or sensor is displayed in	
	1. Turn each switch or se When the on-status of reverse. Display	a switch or sensor is detected, that switch or sensor is displayed in Description	
	1. Turn each switch or se When the on-status of reverse. Display Punch HP	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS)	
	1. Turn each switch or se When the on-status of reverse. Display Punch HP Edge Face1	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES)	
	 Turn each switch or see When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 	Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES) Punch paper edge sensor (PUPES)	
	 Turn each switch or see When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 Edge Face3 	Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES)	
	1. Turn each switch or se When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 Edge Face3 Edge Face4	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES) Punch paper edge sensor (PUPES)	
	 Turn each switch or see When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 Edge Face3 Edge Face4 Tank Tank Full Completion 	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES) Punch tank set switch (PUTSSW)	
	 Turn each switch or see When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 Edge Face3 Edge Face4 Tank Tank Full Completion 	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES) Punch tank set switch (PUTSSW) Punch tank full sensor (PUTFS)	
	 Turn each switch or see When the on-status of reverse. Display Punch HP Edge Face1 Edge Face2 Edge Face3 Edge Face4 Tank Tank Full Completion 	a switch or sensor is detected, that switch or sensor is displayed in Description Punch home position sensor (PUHPS) Punch paper edge sensor (PUPES) Punch tank set switch (PUTSSW) Punch tank full sensor (PUTFS)	

Item No.	. Description		
U243	Checking the operation of	of the DP motors	
	Description		
	Turns the motors or solenoids in the DP on.		
	Purpose		
	To check the operation of the DP motors and solenoids.		
	Method		
	1. Press the start key.		
	2. Select the item to be op		
	3. Press the start key. The	e operation starts.	
	Display	Description	
	Feed Motor	DP original feed motor (DPOFM) is turned on	
	Conv Motor	DP original conveying motor (DPOCM) is turned on	
	Conv Motor Rev Motor ^{*1}	DP original conveying motor (DPOCM) is turned on DP switchback motor (DPSBM) is turned on	
	Rev Motor ^{∗1}	DP switchback motor (DPSBM) is turned on	
	Rev Motor⁺¹ Lift Motor	DP switchback motor (DPSBM) is turned on DP lift motor (DPLM) is turned on	
	Rev Motor ^{*1} Lift Motor Rev Press Sol ^{*1}	DP switchback motor (DPSBM) is turned on DP lift motor (DPLM) is turned on DP pressure solenoid (DPPSOL) is turned on	
	Rev Motor ^{*1} Lift Motor Rev Press Sol ^{*1} Rev Branch Sol ^{*1}	DP switchback motor (DPSBM) is turned on DP lift motor (DPLM) is turned on DP pressure solenoid (DPPSOL) is turned on DP feedshift solenoid (DPFSSOL) is turned on	
	Rev Motor ^{*1} Lift Motor Rev Press Sol ^{*1} Rev Branch Sol ^{*1} Eject Motor ^{*2}	DP switchback motor (DPSBM) is turned on DP lift motor (DPLM) is turned on DP pressure solenoid (DPPSOL) is turned on DP feedshift solenoid (DPFSSOL) is turned on DP eject motor (DPEM) is turned on	

4. To turn each motor off, press the stop key.

Completion

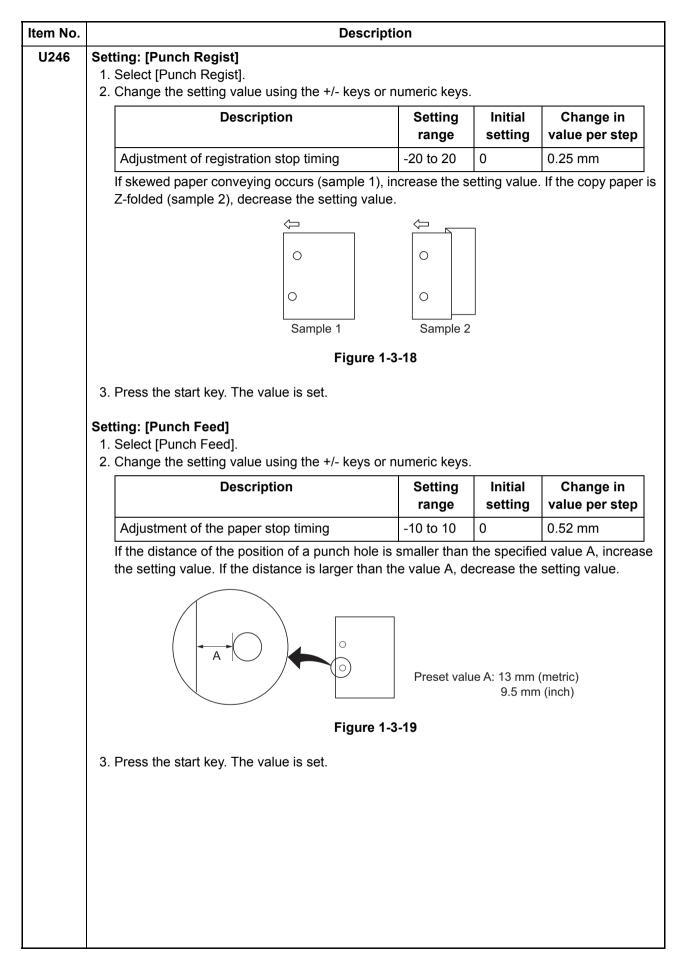
Press the stop key when operation stops. The screen for selecting a maintenance item No. is displayed.

tem No.	Description							
U244	Checking the DP switches Description Displays the status of the respective switches and sensors in the DP. Purpose To check if respective switches and sensors in the DP operate correctly. Method 1 Drage the start logy							
						 Press the start key. Turn each switch or sensor on and off manually to check the status. 		
						When the on-status of a	a switch or sensor is detected, that switch or sensor is displayed in	
						reverse.		
					Display	Description		
	Feed	DP feed sensor (DPFS)						
	Regist ^{*1}	DP registration sensor (DPRS)						
	Timing	DP timing sensor (DPTS)						
	CIS Head ^{*2}	DP CIS sensor (DPCS)						
	Tray ^{*1}	DP switchback sensor (DPSBS)						
	Set	DP original sensor (DPOS)						
	Longitudinal	DP original length switch (DPOLSW)						
	Lift U-Limit	DP lift sensor 1 (DPLS1)						
	Lift L-Limit	DP lift sensor 2 (DPLS2)						
	Cover Open	DP interlock switch (DPILSW)						
	Open	DP open/close switch (DPOCSW)						
	Eject	DP eject sensor (DPES)						
	Slant ^{*2}	DP slant sensor (DPSS)						
	*1: Reversed DP only.	*2: Dual scan DP only.						
	Completion							
		reen for selecting a maintenance item No. is displayed.						

Item No.	Description
U245	Checking messages
	Description
	Displays a list of messages on the touch panel of the operation panel.
	Purpose To check the messages to be displayed.
	Method 1. Press the start key.
	2. Change the message using the cursor up/down keys.
	When a message number is entered with the numeric keys and then the start key is pressed, the message corresponding the specified number is displayed.
	3. Change the language using the +/- keys.
	Completion
	Press the stop key. The screen for selecting a maintenance item No. is displayed.

		Description		
U246	Setting the finisher			
	Description			
	Provides various settings for the 1000-sheet finisher or 4000-sheet finisher, if furnished.			
	Purpose			
	Adjustment of registration stop timing in punch mode			
	Adjust if skewed paper conveying occurs or if the copy paper is Z-folded in punch mode.			
	Adjustment of paper stop timing in the punch mode			
	-	position of a punch hole is different from the specified one.		
		tion timing in the punch mode		
		of a punch hole in punch mode if the position is not proper. ide registration home position		
	-	-		
	Provides optimization when paper jam occurs due to an inferior fitting of the side registration guides to paper.			
	Adjustment of front/rear shift home position			
	Performed when adjustment is lost with the ejected paper			
	Adjusting of front/back sta	apling home position		
	, , , ,	in the staple mode if the position is not proper.		
		r side registration home position		
	-	paper jam occurs due to an inferior fitting of the side registration		
	guides to paper.			
	Adjustment of booklet star	position position position is not proper.		
	Adjustment of center folding position Adjusts the center folding position in the stitching mode if the position is not proper.			
	Adjustment of tri- folding position			
	Adjusts the tri-folding position in the stitching mode if the position is not proper.			
	Method			
	1. Press the start key.			
	2. Select the item to set.			
	Display	Description		
	Finisher	Adjustment of 1000-sheet finisher and 4000-sheet finisher		

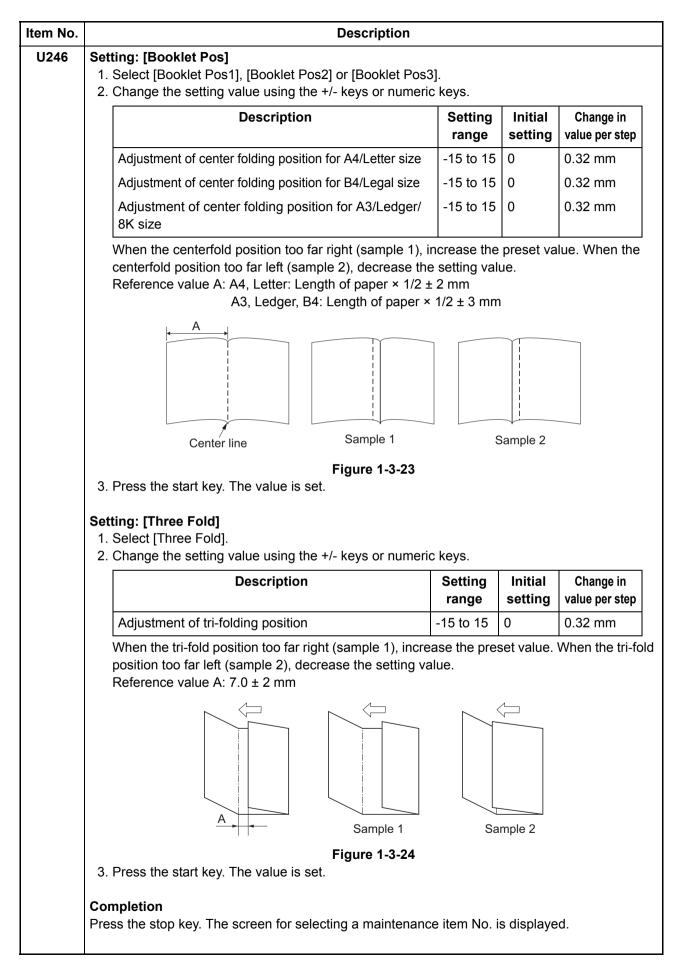
Display	Description
Punch Regist	Adjustment of registration stop timing in punch mode
Punch Feed	Adjustment of the paper stop timing in punch mode
Punch Width	Adjustment of the center position timing in punch mode
Width Front HP	Adjustment of front side registration home position
Width Tail HP	Adjustment of rear side registration home position
Shift Front HP	Adjustment of front shift home position
Shift Tail HP	Adjustment of rear shift home position
Staple HP	Adjustment of front and back stapling home position



em No.	Descripti	on						
U246	Setting: [Punch Width]1. Select [Punch Width].2. Change the setting value using the +/- keys or r	umeric key	5.					
	Description	Setting range	Initial setting	Change in value per step				
	Adjustment of the punch center position timing-4 to 400.52 mm							
	If the punch hole is too close to the front of the machine, increase the setting value. If the punch hole is too close to the rear of the machine, decrease the setting value.							
	Center line (within ± 0.5 mm)		0					
	Sar	mple 1	Sample 2					
	Figure 1-3	8-20						
	3. Press the start key. The value is set.							
	 Setting: [Width Front HP/Width Tail HP] 1. Select [Width Front HP] or [Width Tail HP]. 2. Change the setting value using the +/- keys or numeric keys. 							
	Description		ting Initia nge settii	•				
	Adjustment of front side registration home posi	tion -15 t	o 15 0	0.19 mm				
	Adjustment of rear side registration home posit	ion -15 f	o 15 0	0.19 mm				
	 Press the start key. The value is set. Press the stop key. The screen for selecting a m Enter maintenance mode U240 and select [Motor The width guides of the middle tray will move to Pull the middle tray, insert paper between the gu Repeat the above adjustment until paper is prop Setting: [Shift Front HP/Shift Tail HP] Select [Shift Front HP] or [Shift Tail HP]. Change the setting value using the +/- keys or r 	or], then [W A3-size pos ides and ch perly in posi	dth Test(A3)] sition. eck that pape tion.].				
	Description		ting Initia nge settii	•				
	Adjustment of front shift home position		io 15 0	0.19 mm				
	Adjustment of rear shift home position	-151	o 15 0	0.19 mm				
	Adjustment of rear shift home position-15 to 1500.19 mm3. Press the start key. The value is set.4. Press the stop key. The screen for selecting a maintenance item No. is displayed.5. Enter maintenance mode U240 and select [Motor], then [Sort Test].6. Repeat the above adjustment until eject paper is properly in position.							

		Des	cription			
U246	Setting: [Staple HP]					
	1. Select [Staple HP] 2. Change the setting	g value using the +/- key	s or numeri	c kevs.		
		Description		Setting	Initial	Change in
				range	setting	value per step
	Adjustment of fro	nt and back stapling hom	ne position	-15 to 15	0	0.19 mm
		ions are off toward the fr en staple positions are of ng value.			· ·	,
		$\langle -$				
					Ι	
		1			I	
		Sample 1		Sample 2		
		Figu	re 1-3-21			
	3. Press the start key	<i>.</i> . The value is set.				
	Method: [Booklet] 1. Select the item to	set.				
	Diamlass					
	Display		De	escription		
	Width Up HP	Adjustment of u		-	ome positi	ion
		Adjustment of u Adjustment of lo	pper side re	egistration h		
	Width Up HP	-	pper side re wer side re	egistration h	ome positi	on
	Width Up HP Width Down HP	Adjustment of Ic	pper side re wer side re ooklet stapl	egistration h gistration h ing position	ome positi for A4/Let	on tter size
	Width Up HP Width Down HP Staple Pos1	Adjustment of lo Adjustment of b	pper side re ower side re ooklet stapl ooklet stapl	egistration h gistration h ing position ing position	ome positi for A4/Let for B4/Let	on tter size gal size
	Width Up HP Width Down HP Staple Pos1 Staple Pos2	Adjustment of lo Adjustment of b Adjustment of b	pper side re ower side re ooklet stapl ooklet stapl ooklet stapl	egistration h gistration h ing position ing position ing position	ome positi for A4/Let for B4/Leg for A3/Leg	on tter size gal size dger/8K size
	Width Up HP Width Down HP Staple Pos1 Staple Pos2 Staple Pos3	Adjustment of lo Adjustment of b Adjustment of b Adjustment of b	pper side re ower side re ooklet stapl ooklet stapl ooklet stapl	egistration h gistration h ing position ing position ing position g position fo	ome positi for A4/Let for B4/Leg for A3/Leg or A4/Lette	on tter size gal size dger/8K size r size
	Width Up HP Width Down HP Staple Pos1 Staple Pos2 Staple Pos3 Booklet Pos1	Adjustment of lo Adjustment of b Adjustment of b Adjustment of b Adjustment of c	pper side re ooklet stapl ooklet stapl ooklet stapl ooklet stapl enter folding	egistration h gistration h ing position ing position ing position fo g position fo	ome positi for A4/Let for B4/Leg for A3/Leg or A4/Lette or B4/Lega	on tter size gal size dger/8K size r size I size

Item No.		Description					
U246	Setting: [Width Up HP/Width Down 1. Select [Width Up HP] or [Width I 2. Change the setting value using t	Down HP].	c keys.				
	Description	n	Setting range	Initial setting	Change in value per step		
	Adjustment of upper side registration home position-15 to 1500.34 mmAdjustment of lower side registration home position-15 to 1500.34 mm						
	 Adjustment of lower side registr Press the start key. The value is Press the stop key. The screen f Enter maintenance mode U240 a The width guides of the center-fc Pull the center-folding unit, inser guides. 	set. or selecting a mainter and select [Booklet], t olding unit will move to	nance item hen [Width ben [Width b A3-size po	No. is disp Test(A3)]. psition.	-		
	 Repeat the above adjustment un Setting: [Staple Pos] Select [Staple Pos1], [Staple Pos Change the setting value using the	s2] or [Staple Pos3].					
	Description	n	Setting range	Initial setting	Change in value per step		
	Adjustment of booklet stapling p A4/Letter size	-15 to 15	0	0.32 mm			
	Adjustment of booklet stapling p B4/Legal size	-15 to 15	0	0.32 mm			
	Adjustment of booklet stapling p A3/Ledger/8K size	position for	-15 to 15	0	0.32 mm		
	When staples are placed too far right (sample 1), decrease the preset value. When staples are placed too far left (sample 2), increase the preset value. Reference value: within ± 2 mm						
		2 mm 1 1 Sample 1		2 mm	2		
	3. Press the start key. The value is	Figure 1-3-22 set.					



m No.			Description			
J247	Setting the p	paper feed devid	ce			
	Description					
	-	or and clutches	of paper feeder device.			
	Purpose To check the operation of motor and clutches of paper feed device.					
	TO CHECK THE	operation of mot	tor and clutches of paper leed device.			
	Method					
	 Press the start key. Select the paper feed device. 					
	2PF	Display	Description			
	LCF		Paper feeder			
			Large capacity feeder			
	Side De	СК	Side deck			
	Method: [2P	E1				
	-	-	and select the item.			
		Display	Description			
	Motor	Off	PF paper feed motor (PFPFM) is turned off			
		On	PF paper feed motor (PFPFM) is turned on			
	Device	C1 Clutch	PF paper conveying clutch 1 (PFPCCL1) is turned on			
	Device	C1 Clutch C2 Clutch	PF paper conveying clutch 1 (PFPCCL1) is turned on PF paper conveying clutch 2 (PFPCCL2) is turned on			
	Device		PF paper conveying clutch 2 (PFPCCL2) is turned on			
	Device	C2 Clutch	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on			
	Device	C2 Clutch V Feed(H) Clut	PF paper conveying clutch 2 (PFPCCL2) is turned onPF paper feed clutch 1 (PFPFCL1) is turned onPF paper feed clutch 2 (PFPFCL2) is turned on			
	Device	C2 Clutch V Feed(H) Clut V Feed(L) Clute	 PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on 			
		C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole	 PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on 			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute].	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			
	2. Select [E: 3. Press the	C2 Clutch V Feed(H) Clut V Feed(L) Clut Cassette1 Sole Cassette2 Sole xecute]. e start key. The o	PF paper conveying clutch 2 (PFPCCL2) is turned on PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on PF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on			

U247 Method: [LCF] 1. Press [Motor] or [Device] and select the item. Display Description Motor Off PF paper feed motor (PFPFM) is turned off On PF paper feed motor (PFPFM) is turned on Device C1 Clutch PF paper conveying clutch 1 (PFPCCL1) is turned C2 Clutch PF paper conveying clutch 2 (PFPCCL2) is turned V Feed Clutch PF paper feed clutch 1 (PFPFCL1) is turned on H Feed1 Clutch PF paper feed clutch 1 (PFPFCL1) is turned on H Feed2 Clutch PF paper feed clutch 2 (PFPFCL2) is turned on Cassette1 Solenoid PF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 Solenoid PF pickup solenoid 2 (PFPUSOL2) is turned on 2. Select [Execute]. PF pickup solenoid 2 (PFPUSOL2) is turned on
DisplayDescriptionMotorOffPF paper feed motor (PFPFM) is turned offOnPF paper feed motor (PFPFM) is turned onDeviceC1 ClutchPF paper conveying clutch 1 (PFPCCL1) is turnedC2 ClutchPF paper conveying clutch 2 (PFPCCL2) is turnedV Feed ClutchPF paper conveying clutch 3 (PFPCCL3) is turned onH Feed1 ClutchPF paper feed clutch 1 (PFPFCL1) is turned onH Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned onCassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned onCassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on
MotorOffPF paper feed motor (PFPFM) is turned off OnDeviceC1 ClutchPF paper feed motor (PFPFM) is turned onDeviceC1 ClutchPF paper conveying clutch 1 (PFPCCL1) is turned C2 ClutchV Feed ClutchPF paper conveying clutch 2 (PFPCCL2) is turned PF paper conveying clutch 3 (PFPCCL3) is turned OnV Feed ClutchPF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on Cassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on
OnPF paper feed motor (PFPFM) is turned onDeviceC1 ClutchPF paper conveying clutch 1 (PFPCCL1) is turnedC2 ClutchPF paper conveying clutch 2 (PFPCCL2) is turnedV Feed ClutchPF paper conveying clutch 3 (PFPCCL3) is turnedH Feed1 ClutchPF paper feed clutch 1 (PFPFCL1) is turned onH Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned onCassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned onCassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on
DeviceC1 ClutchPF paper conveying clutch 1 (PFPCCL1) is turned C2 ClutchV Feed ClutchPF paper conveying clutch 2 (PFPCCL2) is turned PF paper conveying clutch 3 (PFPCCL3) is turned on H Feed1 ClutchH Feed1 ClutchPF paper feed clutch 1 (PFPFCL1) is turned on H Feed2 ClutchH Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned on Cassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on
C2 Clutch V Feed Clutch H Feed1 Clutch F paper conveying clutch 2 (PFPCCL2) is turned PF paper feed clutch 1 (PFPFCL1) is turned on H Feed2 Clutch Cassette1 Solenoid Cassette2 Solenoid PF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 Solenoid PF pickup solenoid 2 (PFPUSOL2) is turned on
V Feed ClutchPF paper conveying clutch 3 (PFPCCL3) is turned PF paper feed clutch 1 (PFPFCL1) is turned on PF paper feed clutch 2 (PFPFCL2) is turned on Cassette1 SolenoidH Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned on Cassette2 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned on PF pickup solenoid 2 (PFPUSOL2) is turned on
H Feed1 ClutchPF paper feed clutch 1 (PFPFCL1) is turned onH Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned onCassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned onCassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on
H Feed2 ClutchPF paper feed clutch 2 (PFPFCL2) is turned on Cassette1 SolenoidCassette1 SolenoidPF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 SolenoidCassette2 SolenoidPF pickup solenoid 2 (PFPUSOL2) is turned on
Cassette1 Solenoid PF pickup solenoid 1 (PFPUSOL1) is turned on Cassette2 Solenoid PF pickup solenoid 2 (PFPUSOL2) is turned on
Cassette2 Solenoid PF pickup solenoid 2 (PFPUSOL2) is turned on
2. Select [Execute].
 3. Press the start key. The operation starts. 4. To stop operation, press the stop key.
Method: [Side Deck] 1. Press [Motor] or [Device] and select the item.
Display Description
Motor Off SF paper feed motor (SFPFM) is turned off
On SF paper feed motor (SFPFM) is turned on
Device C1 Clutch SF paper conveying clutch (SFPCCL) is turned of
Cassette1 Solenoid SF pickup solenoid (PFPUSOL) is turned on
 2. Select [Execute]. 3. Press the start key. The operation starts. 4. To stop operation, press the stop key. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

		Description	
Finisher operation	on test		
Description			
Performs operatin	g tests on t	he 4000-sheet finisher.	
Purpose	ation of the	1000 sheet finisher	
TO CHECK THE OPEN			
Method			
	•		
		Description	
		Check the stop position of punching	
Booklet Pass	;	Check the paper paths to the center-foldi	ng unit
3. Press the star	t key.		-
	•	ey to make a test copy.	
Completion			
-	y. The scree	en for selecting a maintenance item No. is	displayed.
Checking/clearin	g the main	tenance cycle	
•	aluca for m	aintonance evole and automatic gravesale	adjuatmont
• •		antenance cycle and automatic grayscale	aujustment.
-	g the time w	hen the message to acknowledge to cond	uct maintenance and
automatic graysca	ale adjustme	ent is periodically displayed.	
Setting			
Setting 1. Press the star	t key.		
 Press the star Select the iter 	n to be set.		
 Press the star Select the iten Change the set 	n to be set.	the +- keys or numeric keys.	
 Press the star Select the item Change the se Display	n to be set. etting using	Description	Setting range
1. Press the star 2. Select the iten 3. Change the se Display M.Cnt A	n to be set. etting using Preset v	Description alues for maintenance cycle (kit A)	0 to 9999999
 Press the star Select the item Change the se Display	n to be set. etting using Preset v	Description	
1. Press the star 2. Select the iten 3. Change the se Display M.Cnt A	n to be set. etting using Preset v Preset v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment	0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star 	n to be set. etting using Preset v Preset v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment	0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
 Press the star Select the iten Change the se Display M.Cnt A M.Cnt HT Press the star Completion 	n to be set. etting using Preset v Preset v t key. The v	Description alues for maintenance cycle (kit A) alues for automatic grayscale adjustment ralue is set.	0 to 9999999 0 to 9999999
	To check the oper Method 1. Press the star 2. Select the iter Punch Position Booklet Pass 3. Press the star 4. Press the system Completion Press the stop key Checking/clearing Description Changes preset v Purpose Provides changing	To check the operation of the Method 1. Press the start key. 2. Select the item. Display Punch Position Booklet Pass 3. Press the start key. 4. Press the system menu k Completion Press the stop key. The screet Checking/clearing the main Description Changes preset values for main Purpose	To check the operation of the 4000-sheet finisher. Method 1. Press the start key. 2. Select the item. Display Description Punch Position Check the stop position of punching Booklet Pass Check the paper paths to the center-foldi 3. Press the start key. 4. Press the system menu key to make a test copy. Completion Press the stop key. The screen for selecting a maintenance item No. is Checking/clearing the maintenance cycle Description Changes preset values for maintenance cycle and automatic grayscale Purpose Provides changing the time when the message to acknowledge to cond Purpose

ltem No.		Description	
U251	Checking/clearing th	ne maintenance counter	
	count. Purpose	r changes the maintenance count and automati ance counter count and automatic grayscale cou ervice.	
	Setting 1. Press the start key 2. Select the item to 3. Change the settin		
	Display	Description	Setting range
	M.Cnt A	Count value for maintenance cycle (kit A)	0 to 9999999
	M.Cnt HT	Automatic grayscale adjustment count	0 to 9999999
	4. Press the start key	y. The value is set.	

		Description
U252	Setting the destination	
	Purpose	and screens of the machine according to the destination. Ilizing the backup RAM, in order to return the setting to the value befor on.
	Method 1. Press the start key.	
	2. Select the destination	I.
	Display	Description
	Japan Metric	Metric (Japan) specifications
	Inch	Inch (North America) specifications
	Europe Metric	Metric (Europe) specifications
	Asia Pacific	Metric (Asia Pacific) specifications
	Australia	Australia specifications
	China	China specifications
	Korea	Korea specifications
	* : An error code is di	switch off and on. Allow more than 5 seconds between Off and On. splayed in case of an initialization error. red, turn main power switch off then on, and execute initialization usin
	4. Turn the main power * : An error code is di	splayed in case of an initialization error. rred, turn main power switch off then on, and execute initialization usin
	 4. Turn the main power : * : An error code is di When errors occur maintenance item 	splayed in case of an initialization error. rred, turn main power switch off then on, and execute initialization usin
	 4. Turn the main power : * : An error code is di When errors occur maintenance item Error codes 	splayed in case of an initialization error. rred, turn main power switch off then on, and execute initialization usin U252.
	 4. Turn the main power : * : An error code is di When errors occur maintenance item Error codes Codes 	splayed in case of an initialization error. rred, turn main power switch off then on, and execute initialization usin U252. Description
	 4. Turn the main power s * : An error code is di When errors occur maintenance item Error codes Codes 0001 	isplayed in case of an initialization error. rred, turn main power switch off then on, and execute initialization usin U252. Description Entity error

ltem No.		Description
U253	Switching between double a	and single counts
	Purpose Used to select, according to the	r the total counter and other counters for every color mode. he preference of the user (copy service provider), if A3/Ledger e sheet (single count) or two sheets (double count).
	Setting 1. Press the start key. 2. Select the item to set.	
	Display	Description
	B/W	Count system of black/white mode
	Displayed only if the settir 3. Select the count system.	ng of U276 (Setting the copy count mode) is Mode1.
	Display	Description
	SGL(AII)	Single count for all size paper
	DBL(A3/Ledger)	Double count for A3/Ledger size or larger
	DBL(B4)	Double count for B4 size or larger
	DBL(Folio)	Double count for Folio size or larger
	Completion Press the stop key. The scree	n for selecting a maintenance item No. is displayed.

Item No.		Description			
U260	Selecting the timing for cop	by counting			
	Description Changes the copy count timing for the total counter and other counters. Purpose To be set according to user request.				
	 Setting Press the start key. Select the copy count tim 	ing.			
	Display	Description			
	Feed	When secondary paper feed starts			
	Eject	When the paper is ejected			
	Initial setting: Eject 3. Press the start key. The s	etting is set.			
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			
U265	Setting OEM purchaser cod	le			
	Description Sets the OEM purchaser code Purpose Sets the code when replacing				
	 Setting Press the start key. Change the setting value Press the start key. The s Turn the main power swit 				

Item No.		Description		
U271	Setting the page co	unt		
	Description Banner counting Purpose To change when mod	lifying counting Banner		
	Setting 1. Press the start ke 2. Select the item. 3. Change the settir	y. ng value using the +/- keys or numeric keys	s.	
	Display	Description	Setting range	Initial setting
	Banner A	Counting for Banner A (470.1mm to 915mm/18.51" to 36")	2 to 30	2
	Banner B	Counting for Banner B (915.1mm to 1,220mm/36.01" to 48")	2 to 30	3
	4. Press the start ke	y. The value is set.		
	Completion Press the stop key. T	he screen for selecting a maintenance iter	n No. is display	ed.
U278	Setting the delivery	-		
	Purpose To operate when insta Method 1. Press the start ke	month, day, and year. alling the machine. Perform this to confirm y.	the delivery da	te.
	 Select [Today]. Press the start ke 	y. The delivery date is set.		
	Clearing 1. Select [Clear]. 2. Press the start ke	y. The delivery date is cleared.		
	Completion Press the stop key. T	he screen for selecting a maintenance iter	n No. is display	ed.

ltem No.		Description	
U285	Setting service	status page	
	Description		
	Description	laying the print coverage report on reporting.	
	Purpose		
	According to use	er request, changes the setting.	
	Setting		
	1. Press the sta		
	2. Select On or	· Off.	
	Dis	play Description	
	On	Displays the print coverage	
	Off	Not to display the print coverage	
	Initial setting		
	3. Press the sta	art key. The setting is set.	
	Completion		
	Press the stop ke	ey. The screen for selecting a maintenance item No. is displayed.	
U323	Setting abnorm	al temperature and humidity warning	
0323	Description Specify whether	or not a notice is displayed on the operation panel when abnormal temperation	ature
0323	Description Specify whether and humidity is d Purpose	or not a notice is displayed on the operation panel when abnormal temperation	ature
0323	Description Specify whether and humidity is d Purpose According to use	or not a notice is displayed on the operation panel when abnormal temperated betected.	ature
0323	Description Specify whether and humidity is d Purpose According to use Setting	or not a notice is displayed on the operation panel when abnormal tempera detected. er request, changes the setting.	ature
0323	Description Specify whether and humidity is d Purpose According to use	or not a notice is displayed on the operation panel when abnormal tempera detected. er request, changes the setting. art key.	ature
0323	Description Specify whether and humidity is d Purpose According to use Setting 1. Press the sta 2. Select On or	or not a notice is displayed on the operation panel when abnormal tempera detected. er request, changes the setting. art key.	ature
0323	Description Specify whether and humidity is d Purpose According to use Setting 1. Press the sta 2. Select On or	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description	ature
0.020	Description Specify whether and humidity is d Purpose According to use Setting 1. Press the sta 2. Select On or Dis	or not a notice is displayed on the operation panel when abnormal tempera detected. er request, changes the setting. art key.	
0323	Description Specify whether and humidity is d Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. • Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning	
0323	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. • Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning	
0323	Description Specify whether and humidity is d Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. • Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On	
0323	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0323	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. • Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	
0.52.5	Description Specify whether and humidity is of Purpose According to use Setting 1. Press the sta 2. Select On or Dis On Off Initial setting 3. Press the sta	or not a notice is displayed on the operation panel when abnormal temperate detected. er request, changes the setting. art key. Off. play Description Displays the abnormal temperature and humidity warning Not to display the abnormal temperature and humidity warning : On art key. The setting is set.	

		Description						
U325	Setting the paper interval							
	Description Determines the interval between pages and the toner replenishment amount when printing page with high print coverage. Purpose Modify the settings only if a spotted background or uneven density appears when printing page with high print coverage.							
	Method 1. Press the start 2. Select the item	key.						
	Displa	ау	Descript	ion				
	Interval		Paper interval control ON/OFF set	ting				
	Mode		Setting mode of the paper interval	control				
	Setting: [Interval] 1. Select On or Off.		Ι					
	Displa	зy	Descripti					
	On Off		Paper interval control is performed Paper interval control is not performed					
	Initial setting: C 2. Press the start Setting: [Mode] 1. Change the se	key. The s	etting is set. using the +/- keys or numeric keys.					
	Display		Description	Setting range	Initial setting			
	Mode	Paper in	terval control mode	1 to 10	4			
					1			

No.		Description					
26	Setting the black line cleaning indication						
	Description Sets whether to display the cleaning guidance when detecting the black line. Purpose Displays the cleaning guidance in order to make the call for service with the black line decrease by the rubbish on the contact glass when scanning from the DP.						
	Method 1. Press the start key. 2. Select the item to set.						
	Displa		Description				
	Black Line Mo	-	Black line cleaning guidance ON/OFF				
	Black Line Cnt	:	Setting counts of the cleaning guidant	ce indication			
	Setting: [Black Lin 1. Select On or Of	-					
	Displa	y	Description				
	On		Displays the cleaning guidance				
	Off		Not to display the cleaning guidance				
	 Press the start Setting: [Black Lir 1. Change the set 	ne Cnt]	using the +/- keys or numeric keys.				
	Display		Description	Setting range	Initial setting		
	Cnt	-	counts of the cleaning guidance indi- x 1000 sheets)	0 to 255	8		
	When setting is 0, the black line cleaning indication is displayed only if the black line is detected.2. Press the start key. The value is set.						
	detected.		.	only if the bl	ack line is		

ltem No.	Description					
U327	Setting the cassette heater control					
	Description					
	Sets the cassette hea	ater contr	ol.			
	Purpose					
	To change the setting	g accordir	ng to the machine installation e	environment.		
	Setting					
	1. Press the start ke	•				
	2. Select the item to set.					
	Display		Desc	cription		
	Mode1		Setting On when the humidity waiting mode)	is 65%. (when slee	p mode and	
	Mode2		Setting On in full-time. (when	sleep mode and wa	iting mode)	
	Off		Cassette heater OFF			
	Initial setting: Off 3. Press the start ke		etting is set.			
		-	xit the maintenance mode onc n turn the main power switch C		e operation of	
	Completion					
	-	he scree	n for selecting a maintenance i	item No. is displaye	d.	
U332	Setting the size cor					
	-					
	Description	facatoa	dard cines in relation to the A4	/ ottor cine The co	officient oct be	
			dard sizes in relation to the A4 tio in relation to the A4/Letter s			
	simulation.					
	Purpose					
	To set the coefficient for converting the black ratio for nonstandard sizes in relation to the A4/L					
	ter size.					
	Setting					
	1. Press the start ke	∋y.				
	2. Change the setting	ng using t	the +/-keys or numeric keys.			
	Display		Description	Setting range	Initial setting	
	Rate	Size o	coefficient	0.1 to 3.0	1.0	
	3. Press the start ke	ey. The va	alue is set.	·	·	
	Completion	ho seroo	n for solocting a maintonance i	itom No. is displayo	d	
		ne sciee	n for selecting a maintenance i	nem no. is displaye	u.	

) .	Description						
S	Setting the applied mode						
A W P M	Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working area. Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs.						
	Method 1. Press the start key. 2. Select the item to set.						
	Display		Descript	ion			
	Adj Memory		Setting the memory allocation				
	Adj Max Job		Setting the maximum of multiple jo	bs			
	Image	image		0 to 50 (MB)	50		
	Display	l	the +/- keys or numeric keys. Description	Setting range	Initial setting		
	Image(Detail)Area temporarily used to hold down- loaded font and other data.0 to 50 (MB)1						
		loade	d font and other data.				
S TI S	Set the values belo (recommended val Image : +50 Image(Detaile) : +7 2. Press the start key 3. Turn the main pow upplement he work area for copy etting: [Adj Max Job	loade ow in ca ue) . The v er swite / is sma	d font and other data. ase print failure occurs with the mer	nory shortage.	Off and O		
S TI S	Set the values belo (recommended val Image : +50 Image(Detaile) : +7 2. Press the start key 3. Turn the main pow upplement he work area for copy etting: [Adj Max Job	loade ow in ca ue) . The v er swite / is sma	d font and other data. ase print failure occurs with the mer alue is set. ch off and on. Allow more than 5 se all and it may cause output failure if	nory shortage.	Off and O		
S TI S	Set the values belo (recommended val Image : +50 Image(Detaile) : +7 2. Press the start key 3. Turn the main pow upplement he work area for copy etting: [Adj Max Jok 1. Change the setting	loade ow in ca ue) . The v er swite / is sma / is sma / using	d font and other data. ase print failure occurs with the mer alue is set. ch off and on. Allow more than 5 se all and it may cause output failure if the +/-keys or numeric keys.	nory shortage. conds between the values are I	Off and O large.		

Press the stop key. The screen for selecting a maintenance item No. is displayed.

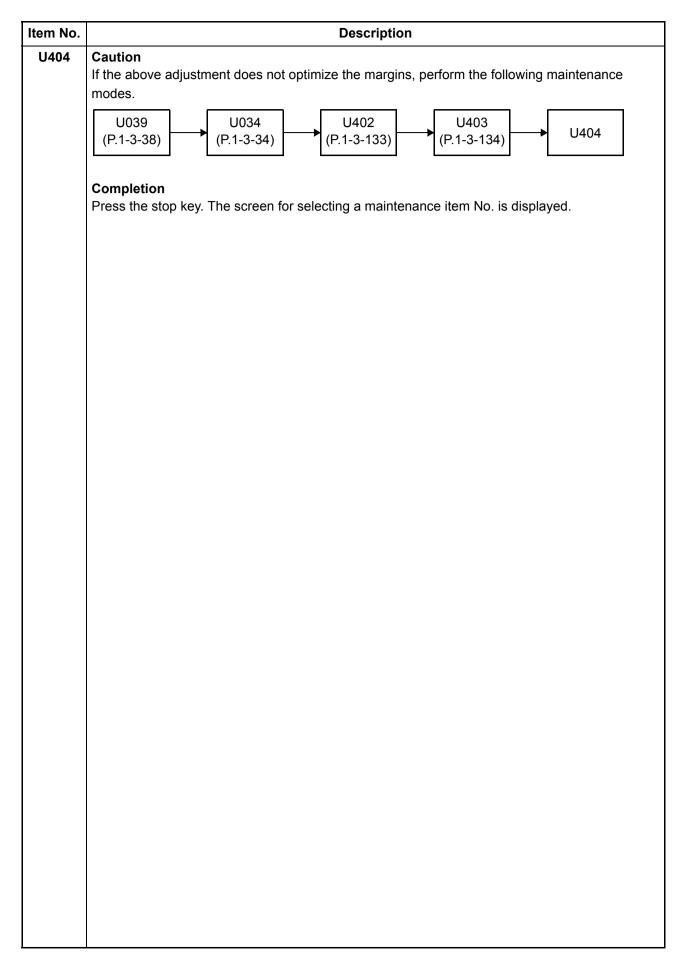
Description Sets a paper feed location sp Purpose To use a paper feed location A paper feed location specifi Method 1. Press the start key. 2. Select the paper feed loc Two or more cassette ca Display Cassette1 Cassette2 Cassette3 Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The scree Switching between duplex	ied for printer output cannot be used for copy output. cation for the printer. an be selected. Description Cassette 1 Cassette 2 Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis-				
Sets a paper feed location sp Purpose To use a paper feed location A paper feed location specifient Method 1. Press the start key. 2. Select the paper feed location Two or more cassette can Display Cassette1 Cassette2 Cassette3 Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The screents Switching between duplex	a only for printer output. ied for printer output cannot be used for copy output. cation for the printer. an be selected. Description Cassette 1 Cassette 2 Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dissetting is set.				
 Press the start key. Select the paper feed loo Two or more cassette can Display Cassette1 Cassette2 Cassette3 Cassette4 Cassette5 When an optional paper played. Press the start key. The scree Switching between duplex 	Description Cassette 1 Cassette 2 Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dissetting is set.				
Cassette1 Cassette2 Cassette3 Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The scree Completion Press the stop key. The scree Switching between duplex	Cassette 1 Cassette 2 Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis- setting is set.				
Cassette2 Cassette3 Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The scree Completion Press the stop key. The scree Switching between duplex	Cassette 2 Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis- setting is set.				
Cassette3 Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The s Completion Press the stop key. The scre Switching between duplex	Cassette 3 (paper feeder/large capacity feeder) Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis- setting is set.				
Cassette4 Cassette5 When an optional paper played. 3. Press the start key. The s Completion Press the stop key. The scre Switching between duplex	Cassette 4 (paper feeder/large capacity feeder) Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis- setting is set.				
Cassette5 When an optional paper played. 3. Press the start key. The s Completion Press the stop key. The scre Switching between duplex	Cassette 5 (side deck) feed device is not installed, the corresponding count is not dis- setting is set.				
When an optional paper played. 3. Press the start key. The Completion Press the stop key. The scre Switching between duplex	feed device is not installed, the corresponding count is not dis- setting is set.				
played. 3. Press the start key. The Completion Press the stop key. The scre Switching between duplex	setting is set.				
Purpose	d/ simplex copy mode etween duplex and simplex copy. ency of use: set to the more frequently used mode.				
Display	Description				
On	Duplex copy				
Off	Simplex copy				
Initial setting: Off 3. Press the start key. The setting is set.					
Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
	 Press the start key. Select On or Off. Display On Off Initial setting: Off Press the start key. The Completion 				

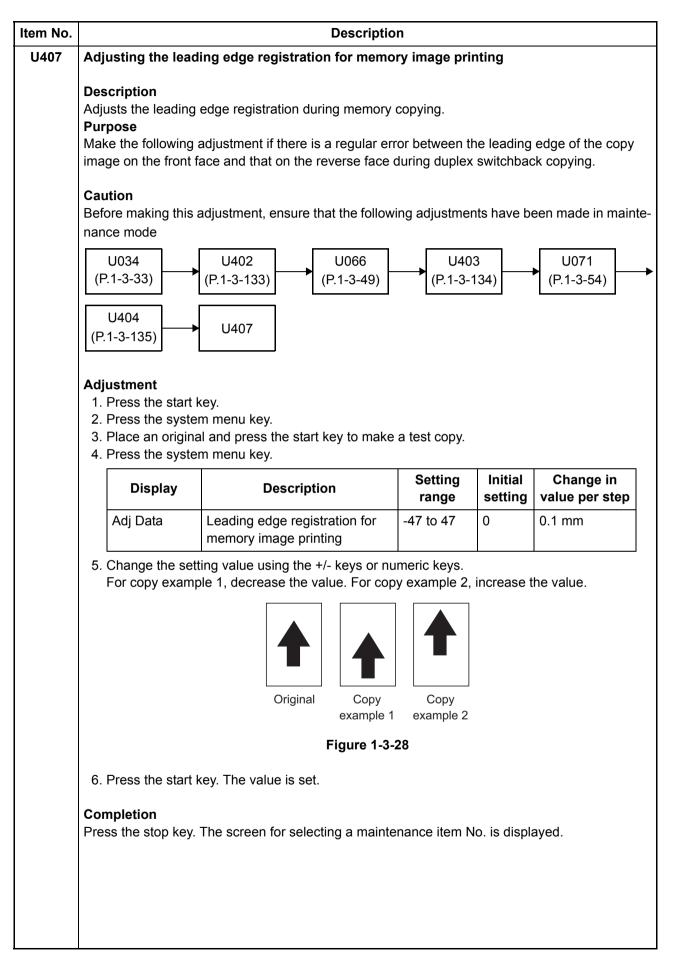
	Description						
U345	Setting the valu	ue for maintenance due indication					
	by setting the nu When the differe maintenance co Purpose	splay a message notifying that the time for maintena imber of copies that can be made before the currer ence between the number of copies of the maintena unt reaches the set value, the message is displayed me for maintenance due indication.	nt maintenanc ance cycle an	ce cycle ends.			
	Setting						
	 Press the standard standard state Change the 	art key. setting using the +/- keys or numeric keys.					
	Display	Description	Setting range	Initial setting			
	Cnt	Time for maintenance due indication (Remaining number of copies that can be made before the current maintenance cycle ends)	0 to 9999	0			
	3. Press the sta	art key. The value is set.		1			

Item No.		Description					
U402	Adjusting margins	s of image printing					
	Purpose	Adjusts margins for image printing.					
	Adjustment Press the start Press the syste Press the start Press the start Press the syste Select the item 	m menu key. key to output a test pattern. m menu key.					
	Display	Description	Setting range	Initial setting	Change in value per step		
	Lead	Printer leading edge margin	0.0 to 10.0	4.0	0.1 mm		
	A Margin	Printer left margin	0.0 to 10.0	3.0	0.1 mm		
	C Margin	Printer right margin	0.0 to 10.0	3.0	0.1 mm		
	Trail	Printer trailing edge margin	0.0 to 10.0	3.9	0.1 mm		
	6. Change the setting value using the +/- keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrows Printer leading edge margin (4.0 +1.5/-0 mm) Printer - Printer left margin (2.5 +1.5/-2.0 mm) Printer trailing edge margin (2.5 +1.5/-2.0 mm) Figure 1-3-25						
	7. Press the start	key. The value is set.					
	Caution	U034 (P.1-3-34)	s, perform the	e following	maintenance		
	Completion Press the stop key.	The screen for selecting a mainte	nance item N	o. is displa	ayed.		

Item No.		Description					
U403	Adjusting margins	s for scanning an original on the	e contact glas	SS			
	Description Adjusts margins for scanning the original on the contact glass. Purpose Make the adjustment if margins are incorrect.						
	Adjustment Press the start Press the syste Place an origina Press the syste Select the item 	m menu key. al and press the start key to make m menu key.	a test copy.				
	Display	Description	Setting range	Initial setting	Change in value per step		
	A Margin	Scanner left margin	0.0 to 10.0	2.0	0.5 mm		
	B Margin	Scanner leading edge margin	0.0 to 10.0	2.0	0.5 mm		
	C Margin	Scanner right margin	0.0 to 10.0	2.0	0.5 mm		
	D Margin	Scanner trailing edge margin	0.0 to 10.0	2.0	0.5 mm		
	6. Change the setting value using the +/- keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrow Leading edge margin of the copy image (4.0 +1.5/-1.0 mm) Left margin of						
	7 Droop the stort	kov The value is est					
		key. The value is set.					
	Caution If the above adjustr modes. U039 (P.1-3-38)	U034 (P.1-3-34) U034 (P.1-3-133)	s, perform the		maintenance		
	Completion Press the stop key.	The indication for selecting a main	ntenance item	n No. appe	ears.		

Item No.		Descriptio	n				
U404	Adjusting margins	for scanning an original from t	the DP				
	Description Adjusts margins for scanning the original from the DP. Purpose Make the adjustment if margins are incorrect. Adjustment 1. Press the start key. 2. Press the system menu key. 3. Place an original on the DP and press the start key to make a test copy. 4. Press the system menu key. 5. Select the item to be adjusted.						
	Display	Description	Setting range	Initial setting	Change in value per step		
	A Margin	DP left margin	0.0 to 10.0	3.0	0.5 mm		
	B Margin	DP leading edge margin	0.0 to 10.0	2.5	0.5 mm		
	C Margin	gin DP right margin		3.0	0.5 mm		
	D Margin	DP trailing edge margin	0.0 to 10.0	4.0	0.5 mm		
	A Margin (Back)*	DP left margin (second side)	0.0 to 10.0	3.0	0.5 mm		
	B Margin (Back)*	DP leading edge margin (second side)	0.0 to 10.0	2.5	0.5 mm		
	C Margin (Back)*	DP right margin (second side)	0.0 to 10.0	3.0	0.5 mm		
	D Margin (Back)*	DP trailing edge margin (second side)	0.0 to 10.0	4.0	0.5 mm		
	 * : Dual scan DP only 6. Change the setting value using the cursor left/right keys or numeric keys. Increasing the value makes the margin wider, and decreasing it makes the margin nar DP leading edge margin (4.0 +1.5/-1.0 mm) DP left margin 						
		(2.5 +1.5/-2.0 mm)	dge margin ess)	+1.5/-2.0 n	nm)		
	7. Press the start	key. The value is set.					





	Description						
J410	Adjusting the halftone automatically						
	Description						
	Carries out processing for the data acquisition that is required in order to perform either auto-						
	-	nt of the halftone or the ID correct	ion operatio	n.			
	Purpose Performed when the quality of reproduced halftones has dropped.						
	Method						
	1. Press the st	tart kev					
	2. Select [Norr	-					
	-	tart key. A test patterns 1 and 2 ar	e outputted				
		utput test pattern 1 as the original					
		eximately 20 sheets of white paper	r on the test	pattern 1 and set them.			
	5. Press the st	-					
		is made (first time). utput test pattern 2 as the original.					
		eximately 20 sheets of white paper		pattern 2 and set them.			
	7. Press the st						
	Adjustment	is made (second time).					
		ally completed, [Finish] is displaye					
	If a problem occurs during auto adjustment, error code is displayed.						
	-	i occurs during auto adjustment, e	fror code is	displayed.			
	Error code		error code is	displayed.			
	Error code		Codes	displayed. Description			
		s					
	Codes	s Description Patch not detected Original deviation in the main	Codes	Description			
	Codes S001	s Description Patch not detected	Codes E001	Description Engine status error			
	Codes S001	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxil-	Codes E001 E002	Description Engine status error Engine sensor error			
	Codes S001 S002	s Description Patch not detected Original deviation in the main scanning direction	Codes E001 E002 EFFF	DescriptionEngine status errorEngine sensor errorEngine other error			
	Codes S001 S002	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxil-	Codes E001 E002 EFFF C001	Description Engine status error Engine sensor error Engine other error Controller error			
	Codes S001 S002 S003	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxil- iary scanning direction	Codes E001 E002 EFFF C001 C100	DescriptionEngine status errorEngine sensor errorEngine other errorController errorAdjustment value error			
	Codes S001 S002 S003 S004	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxiliary scanning direction Original inclination error	Codes E001 E002 EFFF C001 C100 C200	DescriptionEngine status errorEngine sensor errorEngine other errorController errorAdjustment value errorAdjustment value error			
	Codes S001 S002 S003 S004 S005 SFFF	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxiliary scanning direction Original inclination error Original type error	Codes E001 E002 EFFF C001 C100 C200	DescriptionEngine status errorEngine sensor errorEngine other errorController errorAdjustment value errorAdjustment value error			
	Codes S001 S002 S003 S004 S005 SFFF Completion	S Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxil- iary scanning direction Original inclination error Original type error Scanner other error	Codes E001 E002 EFFF C001 C100 C200 CFFF	Description Engine status error Engine sensor error Engine other error Controller error Adjustment value error Adjustment value error Controller other error			
	Codes S001 S002 S003 S004 S005 SFFF Completion	s Description Patch not detected Original deviation in the main scanning direction Original deviation in the auxiliary scanning direction Original inclination error Original type error	Codes E001 E002 EFFF C001 C100 C200 CFFF	Description Engine status error Engine sensor error Engine other error Controller error Adjustment value error Adjustment value error Controller other error			

tem No.	Description								
U411	Adjusting the scanner automatically								
	Description Uses a specified original and automatically adjusts the following items in the scanner and the D scanning sections. Purpose								
	To perform automatic	adjustment of various items in the scanner ar using a new test chart (chart 1) when replacin nain PWB.	-						
	Method 1. Press the start ke 2. Select the item.	?у.							
	Display	Description	Original to be used for adjustment (P/N)						
	Table (Chart1)	Automatic adjustment in the scanner sec- tion (chart 1)	7505000005						
	DP FaceUp (Chart1)	Do not use. Automatic adjustment in the DP scanning section (first side) (chart 1)	7505000005						
	DP FaceDown (Chart1)	Automatic adjustment in the DP scanning section (second side) (chart 1)	7505000005						
	Table (Chart2)	Automatic adjustment in the scanner sec- tion (chart 2)	302FZ56990						
	DP FaceUp (Chart2)	Automatic adjustment in the DP scanning section (first side) (chart 2)	302AC68243						
	DP FaceDown (Chart2)	Automatic adjustment in the DP scanning section (second side) (chart 2)	302AC68243/ 303JX57010/ 303JX57020						
	Target	Set-up for obtaining the target value	-						
	DP Auto Adj	Automatic adjustment of automatic docu- ment processor using the chart printed from the machine	-						
	(P/N: 750500000	e target value values which are shown at the bottom of the sp 5) executing maintenance item U425. riginal on the platen.	ecified original						

- 6. Select [Table (Chart1)].
 7. Select the item.

Item No.		Description				
U411	 To automatically enter the target value 1. Enter the value for [Adjust Original] using maintenance item U425. 2. Set a specified original (P/N: 7505000005) on the platen. 3. Enter maintenance item U411. 4. Select [Target]. 5. Select [Auto] and press the start key. 6. Select [Table (Chart1)]. 7. Select the item. 					
	Display	Description				
	All	Executing the all scanner adjustment				
	LED/AGC	Executing the adjustment for LED light quantity/AGC				
	White	Executing the white reference compensation coefficient				
	Input	Executing the adjustment for magnification, leading edge tim- ing and center line				
	C.A.	Executing the adjustment for chromatic aberration filter				
	MTF	Executing the adjustment for MTF filter				
	Gamma	Executing the adjustment for input gamma				
	Matrix	Executing the adjustment for matrix				
	happen, determin ning. Method: [DP FaceUp (C To manually enter the tau 1. Enter the target value (P/N: 7505000005) e 2. Set a specified origin 3. Enter maintenance it 4. Select [Target]. 5. Select [U425] and pr 6. Select [DP FaceUp (7. Select [Input].	rget value es which are shown at the bottom of the specified original executing maintenance item U425. Inal on the DP face up. em U411. ess the start key. Chart1)].				
	 To automatically enter the target value 1. Enter the value for [Adjust Original] using maintenance item U425. 2. Set a specified original (P/N: 7505000005) on the DP face up. 3. Enter maintenance item U411. 4. Select [Target]. 5. Select [Auto] and press the start key. 6. Select [DP FaceUp (Chart1)]. 7. Select [Input]. 					

em No.	Description				
U411					
	Display	Description			
	Input	Executing the adjustment for input gamma and matrix			
	 Press the start key. Auto adjustment starts. * When automatic adjustment has normally completed, [OK] is displayed. If a problem occurs during auto adjustment, error code is displayed and operation stops. Should this happen, determine the details of the problem and repeat the procedure from the beginning. 				
	Method: [DP FaceDow	wn (Chart1)]			
	 (P/N: 7505000005) 2. Set a specified orig 3. Enter maintenance 4. Select [Target]. 5. Select [U425] and p 6. Select [DP FaceDo 7. Select [All]. To automatically enter t 1. Enter the value for 	 a which are shown at the bottom of the specified original b executing maintenance item U425. b executing maintenance down. b executing maintenance item U411. b press the start key. c press the start key. 			
	Display	Description			
	All	Executing the adjustment in the DP scanning section (second side) for magnification, leading edge timing, center line, MTF filter, input gamma and matrix			
	 filter, input gamma and matrix 8. Press the start key. Auto adjustment starts. * : When automatic adjustment has normally completed, [OK] is displayed. If a problem occurs during auto adjustment, error code is displayed and operation stops. Should happen, determine the details of the problem and repeat the procedure from the be ning. 				

Item No.		Description			
U411	Method: [Table (Chart2)]				
	 Enter the target values which are shown on the back of the specified original (P/N: 302FZ56990) executing maintenance item U425. 				
	2. Set a specified original or	•			
	3. Enter maintenance item L	•			
	4. Select [Target].				
	5. Select [U425] and press t	he start key.			
	6. Select [Table (Chart2)].				
	7. Select the item.				
	Display	Description			
	All	Executing the all scanner adjustment			
	Input	Executing the adjustment for magnification, leading edge tim- ing and center line			
	C.A.	Executing the adjustment for chromatic aberration filter			
	MTF	Executing the adjustment for MTF filter			
	Gamma	Executing the adjustment for input gamma			
	Matrix	Executing the adjustment for matrix			
	 * : When automatic adjustment has normally completed, [OK] is displayed. If a problem occurs during auto adjustment, error code is displayed and operation stops. Should this happen, determine the details of the problem and repeat the procedure from the beginning. Method: [DP FaceUp (Chart2)] 1. Measure the leading edge, main scanning, and auxiliary scanning of the specified original (P/N: 302AC68243) and enter the values by executing maintenance item U425. 2. Set a specified original (P/N: 302AC68243) on the DP. Cut the trailing edge of the original. 				
	F R R T T T T T T T T				
	Figure 1-3-29				
	3. Enter maintenance item U411.				
	4. Select [Target].				
	 Select [U425] and press the start key. Select [DP FaceUp (Chart2)]. 				
	7. Select [INPUT].				
	Display	Description			
	Input	Executing the adjustment in the DP scanning section (first side) for magnification, leading edge timing and center line			

Item No.		Description	
U411	* : When automa occurs during	ey. Auto adjustment starts. tic adjustment has normally completed, [OK] is auto adjustment, error code is displayed and c mine the details of the problem and repeat the	operation stops. Should thi
	platen, and press 2. Place the specific and press the sta	ed original for acquiring gamma target data (P/l s the start key. ed original for acquiring matrix target data (P/N:	
	Display	Description	Original to be used for adjustment (P/N)
	All	Executing the adjustment in the DP scan- ning section (second side) for magnifica- tion, leading edge timing, center line, MTF filter, input gamma and matrix	302AC68243/ 303JX57010/ 303JX57020
	Input	Executing the adjustment in the DP scan- ning section (second side) for magnifica- tion, leading edge timing and center line	302AC68243
	MTF/Gamma	Executing the adjustment in the DP scan- ning section (second side) for MTF filter and input gamma	303JX57010
	Matrix	Executing the adjustment in the DP scan- ning section (second side) for matrix	303JX57020
		riginal (P/N: 302AC6824) on the DP face down ey. Auto adjustment starts.	

1. Select [MTF/Gamma].

- 2. Set a specified original (P/N: 303JX57010) on the DP face down.
- 3. Press the start key. Auto adjustment starts.

[Matrix]

- 1. Select [Matrix].
- 2. Set a specified original (P/N: 303JX57020) on the DP face down.
- 3. Press the start key. Auto adjustment starts.

When [ALL] is selected, the adjustment of [Input], [MTF/Gamma] and [Matrix] can be executed at once. When adjusting, place the three specified originals on the DP face down, and then press the start key.

Set the original 303JX57020, and then place 303JX57010 and 302AC68243 in order on the top of the original.

ltem No.		Description
U411	occurs	automatic adjustment has normally completed, [OK] is displayed. If a problem s during auto adjustment, error code is displayed and operation stops. Should this en, determine the details of the problem and repeat the procedure from the begin-
	Method: [DP 1. Load A4/I	
		e start key to output the original for adjustment.
		utput the original for adjustment and press the start key.
		utput the original for adjustment on the DP face up. e start key to scan documents.
		e start key. Auto adjustment of first side starts.
		utput the original for adjustment on the DP face down.
		e start key to scan documents. e start key. Auto adjustment of second side starts.
	* : When	automatic adjustment has normally completed, [OK] is displayed. If a problem
		s during auto adjustment, error code is displayed and operation stops. Should this on, determine the details of the problem and repeat the procedure from the begin-
	ning.	
	Error Co	des
	Codes	Description
	01	Black band detection error (scanner auxiliary scanning direction leading edge skew)
	02	Black band detection error (scanner main scanning direction far end skew)
	03	Black band detection error (scanner main scanning direction near end skew)
	03	Black band detection error (scanner auxiliary scanning direction trailing edge skew)
	04	Black band is not detected (scanner auxiliary scanning direction leading edge)
	05	Black band is not detected (scanner main scanning direction far end)
	06	Black band is not detected (scanner main scanning direction near end)
	07	Black band is not detected (scanner auxiliary scanning direction trailing edge)
	08	Black band is not detected (DP main scanning direction far end)
	09	Black band is not detected (DP main scanning direction near end)
	0a	Black band is not detected (DP auxiliary scanning direction leading edge)
	0b	Black band is not detected (DP auxiliary scanning direction leading edge original check)
	0c	Black band is not detected (DP auxiliary scanning direction trailing edge)
	0d	White band is not detected (DP auxiliary scanning direction trailing edge)
	0e	DMA time out
	0e Of	DMA time out Auxiliary scanning direction magnification error

Item No.		Description
U411	Error Co	des
	Codes	Description
	12	DP uxiliary scanning direction skew error
	13	Maintenance request error
	14	Main scanning direction center line error
	15	DP main scanning direction skew error
	16	Main scanning direction magnification error
	17	Service call error
	18	DP paper misfeed error
	19	PWB replacement error
	1a	Original error
	1b	Input gamma adjustment original error
	1c	Matrix adjustment original error
	1d	Original for the white reference compensation coefficient error
	1e	Lab value searching error
	1f	Lab value comparing error
	63	Completed to obtain a test RAW

Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

U412		Description		
••••	Adjusting the uneven density			
	density distribution of test p Purpose To perform when replacing	per/transfer density in the drum axis direction by scanning directly the pattern with the scanner and adjusting LSU light quantity. the drum unit or laser scanner unit. maintenance mode U464, Calibration.		
	Method 1. Press the start key. 2. Select the item.			
	Display	Description		
	Normal Mode	Executing the uneven density correction		
	On/Off Config	Uneven density correction ON/OFF setting		
	 Place approximately 20 original. Press the start key. the After the correction is contraction is outputted that the correction is outputted. Place approximately 20 original. Press the start key. the After the correction is contracted. Press the start key. the After the correction is contracted. Place approximately 20 original. Place approximately 20 original. Place approximately 20 original. Press the start key. The correction result is Retry (1st time) 	ompleted, and press the start key. ed. (2nd sheet) ed with light quantity setting lower than the 1st test pattern by 20%. sheets of white paper on the output test pattern and place as the correction starts. ompleted, and press the start key. ed. (3rd sheet) sheets of white paper on the output test pattern and place as the checked. When normally completed, [OK] is displayed.		
	10 If the correction is not c	ompleted normally, [Retry] is displayed.		

Item No.	Description			
U412	Error codes	5		
	Codes	Description	Codes	Description
	S001	Patch not detected	E001	Engine status error
	S002	Original deviation in the main	E002	Spotted background error
		scanning direction	E003	Density error
	S003	Original deviation in the auxil-	E004	Uneven density error
		iary scanning direction	EFFF	Engine other error
	S004	Original inclination error	C001	Controller error
	S005	Original type error	CFFF	Controller other error
	SFFF	Scanner other error		

Setting: [On/Off Config]

1. Select On or Off.

Display	Description
On	Uneven density correction is enabled
Off	Uneven density correction is disabled

ON is automatically set after the correction is complete.

2. Press the start key. The setting is set.

Completion

Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.		Description		
U415	Adjusting the print	position automatically		
	Description			
	Automatically adjusts	s timings at the print engine.		
	-	ng edge timing, center line and margin.		
	Purpose Used to make respec	ctive auto adjustments for the print engine.		
	Method	aner		
	 Load A3/ledger paper. Load A4/Letter when the large capacity feeder is used. Press the start key. 			
	3. Select [Execute].	ey. A test pattern is outputted		
		st pattern as the original.		
	 6. Press the start key. Automatically performs adjustment from the top to bottom cassettes. 7. When normally completed, [OK] is displayed. If a problem occurs during auto adjustment, error code is displayed. Error Codes 			
	Codes	Description		
	S001	Black band is not detected (main scanning direction far end)		
	S002	Black band is not detected (main scanning direction near end)		
	S003	Black band is not detected (auxiliary scanning direction leading edge)		
	S004	Black band is not detected (auxiliary scanning direction trailing edge)		
	S005	Auxiliary scanning direction skew error (1.5 mm or more)		
	S006	Main scanning direction skew error (1.5 mm or more)		
	S007	Original error (detection of reverse original paper)		
	S008	Original error (page mismatch)		
	SFFF	Scanner other error		
	C101	Adjustment value error (main scanning direction magnification)		
	C102	Adjustment value error (auxiliary scanning direction magnification)		
	C103	Adjustment value error (leading edge timing)		
	C104	Adjustment value error (center line)		
	C105	Adjustment value error (B margin)		
	C106	Adjustment value error (A margin)		
	C107	Adjustment value error (C margin)		
	C108	Adjustment value error (D margin)		
	CFFF	Controller other error		

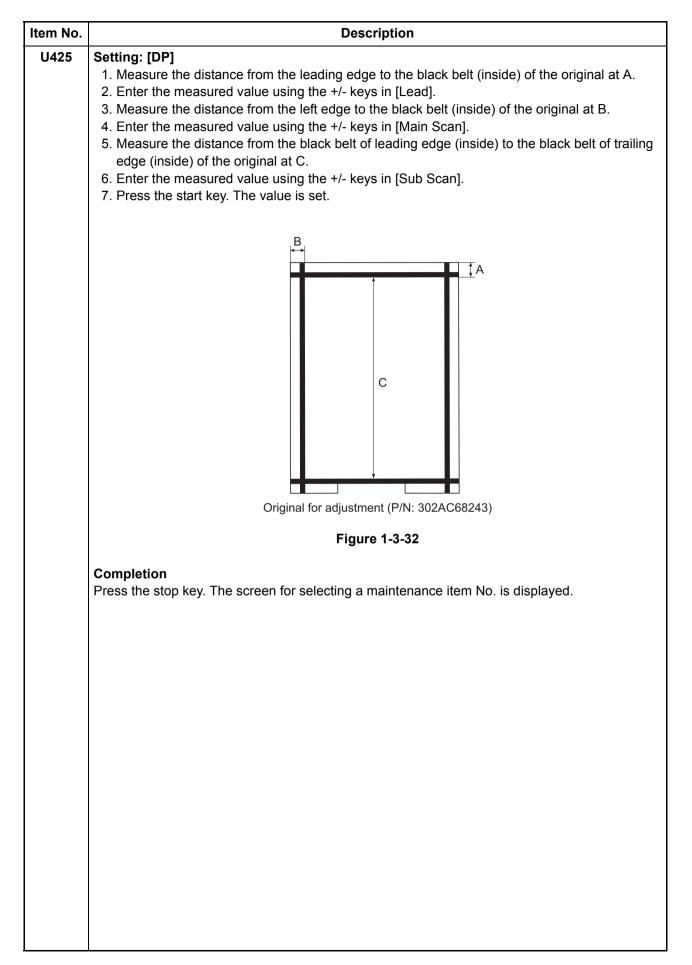
Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

11405		Description		
U425	Setting the target			
	(P/N: 302FZ56990) used Purpose		7505000005) or chart 2 iginals during automatic adjustment	
	Method 1. Press the start key. Select the chart to be use	d.		
	Display		scription	
	Chart1	Chart 1 (P/N: 7505000005)	•	
	Chart2	Chart 2 (P/N: 302FZ56990)		
	Method: [Chart1] 1. Press the start key. 2. Select the item to be s Display		scription	
	White	Setting the white patch for the	-	
	Black	Setting the black patch for the	he original for adjustment	
	Gray1	Setting the Gray1 patch for	Setting the Gray1 patch for the original for adjustment	
	Gray2	Setting the Gray2 patch for	the original for adjustment	
	Gray3	Setting the Gray3 patch for	the original for adjustment	
	С	Setting the cyan patch for the	ne original for adjustment	
	М	Setting the magenta patch f	or the original for adjustment	
	Y	Setting the yellow patch for	the original for adjustment	
	R	Setting the red patch for the	original for adjustment	
	G	Setting the green patch for t		
	В	Setting the blue patch for th	o	
	Adjust Original	Setting the main and auxilia	ry scanning directions	
	3. Select the item to be s			
	Display	Description	Setting range	
		Setting the L value	0.0 to 100.0	
	a	Setting the a value	-200.0 to 200.0	
	b	Setting the b value	-200.0 to 200.0	
	 Enters the value that I Press the start key. The start key. 		art using the +/- keys or numeric ke	

Item No.	Description
U425	Setting: [Adjust Original] 1. Measure the distance from the leading edge to the top of black belt 1 of the original at A, B and C. Measurement procedure
	 Measure the distance from the leading edge to the top of black belt 1 of the original at A (30 mm from the left edge), B (148.5 mm from the left edge) and C (267 mm from the left edge), respectively.
	 2) Apply the following formula for the values obtained: ((A + B + C) / 3) 2. Enter the values solved using the cursor left/right keys or numeric keys in [Dist1]. 3. Press the start key. The value is set.
	 4. Measure the distance from the left edge to the right edge black belt 2 of the original at F. Measurement procedure 1) Measure the distance from the left edge to the right edge black belt 2 of the original at F
	(15 mm from the top edge of black belt 1).5. Enter the values using the cursor left/right keys or numeric keys in [Dist2].6. Press the start key. The value is set.
	 7. Measure the distance from the top edge of black belt 1 to the bottom of black belt 3 of the original at D and E. 1) Measure the distance from the top edge of black belt 1 to the bottom of black belt 3 of the original at D (30 mm from the left edge) and E (267 mm from the left edge), respectively. 2) Apply the following formula for the values obtained: (D/2 + E/2)
	 8. Enter the measured value using the cursor left/right keys or numeric keys in [Dist3]. 9. Press the start key. The value is set.
	30mm 148.5mm 267mm A Black belt 1 B C Leading edge
	Black belt 2 D E
	Boo B
	COLOR SCANNER CHART A4 No.302RX357010 Black belt 3
	Original for adjustment (P/N: 7505000005)
	Figure 1-3-30

m No.		Description			
J425	Method: [Chart2]				
	 Press the start key. Select the item. 				
	Display	Desc	Description		
	CCD	Entering the target values of th used for adjustment	-		
	DP	Entering the measurement valu 302AC68243) used for adjustm			
	CIS	Execution is not required			
	Method: [CCD] 1. Select the item to be	set.			
	Display	Desc	ription		
	N875	Setting the N875 patch for the	original for adjustment		
	N475	Setting the N475 patch for the	original for adjustment		
	N125	Setting the N125 patch for the	original for adjustment		
	С	Setting the cyan patch for the c	Setting the cyan patch for the original for adjustment		
	М	Setting the magenta patch for the original for adjustment			
	Y	Setting the yellow patch for the original for adjustment			
	R	Setting the red patch for the original for adjustment Setting the green patch for the original for adjustment			
	G				
	В	Setting the blue patch for the o	Setting the blue patch for the original for adjustment		
	Adjust Original	Adjust Original Setting the main and auxiliary scanning directions			
	2. Select the item to be	set.			
	Display	Description	Setting range		
	L	Setting the L value	0.0 to 100.0		
	а	Setting the a value	-200.0 to 200.0		
	b	Setting the b value	-200.0 to 200.0		
	 Enters the value that Press the start key. T 	is indicated on the back of the chart he value is set.	using the +/- keys or numeric k		

Item No.	Description						
Item No. U425	 Description Setting: [Adjust Original] Measure the distance from the left edge to the black belt (a) of the original at A, B and C. Measurement procedure Measure the distance from the edge to the black belt (a) of the original at A (30 mm from the leading edge), B (148.5 mm from the leading edge) and C (267 mm from the leading edge), respectively. Apply the following formula for the values obtained: ((A + C) / 2 + B) / 2 Enter the values solved using the cursor left/right keys or numeric keys in [Lead]. Press the start key. The value is set. Measure the distance from the leading edge to the black belt (b) of the original at D, E and F. Measurement procedure Measure the distance from the edge to the black belt (b) of the original at D, E and F. Measurement procedure Measure the distance from the left edge) and F (185 mm from the left edge), respectively. Apply the following formula for the values obtained: ((D + F) / 2 + E) / 2 Enter the values solved using the cursor left/right keys or numeric keys in [Main Scan]. 						
	 6. Press the start key. The value is set. 7. Measure the length (G) from the edge of the black belt (a) to edge of N475 of the original. 8. Enter the measured value using the cursor left/right keys or numeric keys in [Sub Scan]. 9. Press the start key. The value is set. 						
	Leading edge 30 mm 148.5 mm 267 mm Left edge A B C C						
	$35 \text{ mm} \stackrel{\bullet}{\rightarrow} D \stackrel{\bullet}{\rightarrow} Black \\ belt (a) \\ 110 \text{ mm} \stackrel{\bullet}{\rightarrow} E \stackrel{\bullet}{\leftarrow} \\ 110 \text{ mm} \stackrel{\bullet}{\rightarrow} \\ 110 \text{ mm} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} \\ 110 \text{ mm} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} 110 \text{ mm} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\leftarrow} 110 \text{ mm} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\leftarrow} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\bullet} \stackrel{\bullet}{\bullet} \bullet$						
	Original for adjustment (P/N: 302FZ56990)						
	Figure 1-3-31						



tem No.		Description					
U464	Setting the ID correction	n operation					
	 Description Turns ID correction (calibration) on or off. Also, this allows individual settings for calibration ation. Purpose Implements various settings of calibration when poor image quality is caused or to allow settings of calibration depending on the user preference. To perform the calibration when replacing the maintenance kit. 						
	Method						
	 Press the start key. Select the item to be 	set					
	Display	Description					
	Permission	Setting to turn calibration on/off					
	Time Interval	Setting the interval time of calibration after printing					
	Mode	Setting the calibration execution mode					
	On/Sleep Out*	Setting execution parameters for calibration when powered up or reverted from auto-sleep					
	AP/NE*	Paper interval calibration ON/OFF setting at the time of cali- bration/near end after toner feed					
	Leaving Time*	Setting the standard time for judging whether or not to carry out calibration based on the sleep time when the machine recovers from the sleep mode					
	Driving Time*	Setting the standard time for judging whether or not to carry out paper interval calibration based on the driving time during printing					
	Timing*	Setting the standard time for judging whether or not to carry out calibration based on the continuous print driving time dur- ing printing					
	Target Value	Setting the sensor target values for toner thick layer calibration and light amount calibration					
	Calib	Executing the calibration					
	*: Enabled when Mode is set to Custom.						
	Setting: [Permission] 1. Select On or Off.						
	Display	Description					
	On	Turns calibration ON					
	Off	Turns calibration OFF					
	Initial setting: On						

m No.			Description				
J464	Setting: [Time Inter	-					
	1. Change the setti	ng value	using the +/- keys or numeric keys	<u>.</u>	-		
	Display		Description	Setting range	Initial setting		
	Time(sec)Setting the interval time of calibration0 to 9999 (s)480						
	2. Press the start k	ey. The v	value is set.				
	Setting: [Mode] 1. Select the item.						
	Display	1	Descrip	tion			
	Short		Setting the calibration execution r	node: short			
	Normal		Setting the calibration execution mode: normal Setting the calibration execution mode: long Setting the calibration execution mode: custom				
	Long						
	Custom						
	Initial setting: No						
	2. Press the start key. The setting is set.						
	Setting: [On/Sleep 1. Select On or Off	-					
	Display	1	Descrip	tion			
	On		Executes calibration if fuser temp 122°F at power-up or recovery fro				
	Off		Not to execute calibration regardless of fuser temperature at power-up or recovery from auto sleep mode				
	Initial setting: Or 2. Press the start k Setting: [AP/NE] 1. Select On or Off	ey. The s	etting is set.				
	Display	1	Descrip	tion			
	On		Paper interval calibration at the tir after toner feed is carried out	me of calibration/	near end		
	Off		Paper interval calibration at the tir after toner feed is not carried out	me of calibration/	near end		
	Initial setting: Or 2. Press the start k		etting is set.				

_	-	S.									
_	g value using the +/- keys or numeric key	S.									
Diamlay		1. Change the setting value using the +/- keys or numeric keys.									
Display	Description	Setting range	Initial setting								
Time(min)Setting the standard time of sleep mode0 to 480 (min)480											
2. Press the start key. The value is set.											
Setting: [Driving Time] 1. Change the setting value using the +/- keys.											
Display Description Setting range Initia setting											
Time(sec)	Setting the drive standard time	300 to 3000 (s)	300								
2. Press the start key. The value is set.											
Setting: [Timing] 1. Change the setting value using the +/- keys. Display Description Setting range Initial											
	-		setting								
Time(sec)	-	0 to 3600 (s)	3600								
2. Change the settin			Initial								
	-		setting								
			750								
	-	0 to 500	330								
3. Press the start ke	y. The value is set.										
 Method: [Calib] Select [Execute]. Press the start key. Calibration is executed.											
	2. Press the start ke etting: [Driving Tim 1. Change the settin Time(sec) 2. Press the start ke etting: [Timing] 1. Change the settin Display Time(sec) 2. Press the start ke etting: [Target Value 1. Select the item. 2. Change the settin Display Thickness(K) Gamma(K) 3. Press the start ke thickness the start ke * : Duplicates sele The same ope completion	2. Press the start key. The value is set. etting: [Driving Time] 1. Change the setting value using the +/- keys. Display Description Time(sec) Setting the drive standard time 2. Press the start key. The value is set. etting: [Timing] 1. Change the setting value using the +/- keys. Display Description Time(sec) Setting the drive standard time of continuous print 2. Press the start key. The value is set. etting: [Target Value] 1. Select the item. 2. Change the setting value using the +/- keys or numeric key Display Description Thickness(K) Toner thick layer calibration Light amount calibration Gamma(K) Light amount calibration 3. Press the start key. The value is set. lethod: [Calib] 1. Select [Execute]. 2. Press the start key. Calibration is executed. * : Duplicates selecting [System Menu] - [Adjustment/Maint The same operation as System menu.	2. Press the start key. The value is set. etting: [Driving Time] 1. Change the setting value using the +/- keys. Display Description Setting range Time(sec) Setting the drive standard time 300 to 3000 (s) 2. Press the start key. The value is set. etting: [Timing] 1. Change the setting value using the +/- keys. Display Description Setting range Time(sec) Setting the drive standard time of con- 0 to 3600 (s) 1. Change the setting value using the +/- keys. Display Description Setting range Time(sec) Setting the drive standard time of con- 0 to 3600 (s) 2. Press the start key. The value is set. etting: [Target Value] 1. Select the item. 2. Change the setting value using the +/- keys or numeric keys. Display Description Setting range Thickness(K) Toner thick layer calibration Gamma(K) Light amount calibration 1. Select [Execute]. 2. Press the start key. Calibration is executed. * : Dupl								

n No.		Description					
465	Data reference for ID correction						
	Description References the Purpose To check the co		ted to ID correction.				
	Method	·					
	1. Press the st 2. Select the it		reference.				
	Disp	lay	Description				
	TCONT		Developer bias control value after ID correction				
	Laser Power		Scaling factor to the value determined in light amount calibration				
	Bias Calib		Sensor value for toner thick layer calibration				
	T7 CTD		T7 control value				
	Displaying: [TC 1. Select [TCO	-	e current value is displayed.				
	Disp	lay	Description				
	Before(K)		Developer bias control value for black before ID correction				
	After(K)		Developer bias control value for black after ID correction				
	Displaying: [Laser Pov 1. Select [Laser Power Display		wer] r]. The current value is displayed. Description				
	K	Secline	factor to the value determined in light amount calibration				
	Displaying: [Bi	as Calib					
	Displa	ıy	Description				
	K Sensor value for toner thick layer calibration						
	Display		he current value is displayed. Description				
			Γ7 control value				
	Completion Press the stop key. The s		screen for selecting a maintenance item No. is displayed.				

U470 Setting the JPEG compression ratio Description Sets the compression ratio for JPEG images in each image quality mode. Purpose To change the setting in accordance with the image that the user is copying. For example, in order to soften the coarseness of the image when making copies at over 200% magnification, change the level of compression by raising the value. Lowering the value will increase the cor pression and thereby lower the image quality: Raising the value will increase image quality bu lower the image processing speed. Method 1. Press the start key. 2. Select the item to be set. Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Image: System Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Setting Display Description Photo Compression ratio in the text mode 2. Select the item to be set. <td< th=""><th>Description Sets the compression ratio for JPEG images in each image quality mode. Purpose To change the setting in accordance with the image that the user is copying. For example, in order to soften the coarseness of the image when making copies at over 200% magnification, change the level of compression by raising the value. Lowering the value will increase the coor pression and thereby lower the image quality; Raising the value will increase image quality be lower the image processing speed. Method 1. Press the start key. 2. Select the item to be set. Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. 1. Select the item to be set. Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Change the setting value using the +/- keys or numeric keys. Display Description Setting <th>ltem No.</th><th></th><th></th><th></th><th>Description</th><th></th><th></th></th></td<>	Description Sets the compression ratio for JPEG images in each image quality mode. Purpose To change the setting in accordance with the image that the user is copying. For example, in order to soften the coarseness of the image when making copies at over 200% magnification, change the level of compression by raising the value. Lowering the value will increase the coor pression and thereby lower the image quality; Raising the value will increase image quality be lower the image processing speed. Method 1. Press the start key. 2. Select the item to be set. Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. 1. Select the item to be set. Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Change the setting value using the +/- keys or numeric keys. Display Description Setting <th>ltem No.</th> <th></th> <th></th> <th></th> <th>Description</th> <th></th> <th></th>	ltem No.				Description			
Sets the compression ratio for JPEG images in each image quality mode. Purpose To change the setting in accordance with the image that the user is copying. For example, in order to soften the coarseness of the image when making copies at over 200% magnification, change the level of compression by raising the value. Lowering the value will increase the corpression and thereby lower the image quality; Raising the value will increase image quality bu lower the image processing speed. Method 1. Press the start key. 2. Select the item to be set. Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio in the photo mode Text Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Display Description Initial range Y Compression ratio of brightness 1 to 100 90	Sets the compression ratio for JPEG images in each image quality mode. Purpose To change the setting in accordance with the image that the user is copying. For example, in order to soften the coarseness of the image when making copies at over 200% magnification, change the level of compression by raising the value. Lowering the value will increase the corpression and thereby lower the image quality; Raising the value will increase image quality bulower the image processing speed. Method 1. Press the start key. 2. Select the item to be set. Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Display Description Setting Y Compression ratio of brightness 1 to 100 90 <th>U470</th> <th>Set</th> <th>ting the JPEG co</th> <th>mpress</th> <th>ion ratio</th> <th></th> <th></th>	U470	Set	ting the JPEG co	mpress	ion ratio			
Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Compression ratio in the text mode 2. Select the item to be set. Setting value using the +/- keys or numeric keys. Image: Display Description Setting value using the the value value value value using the the value valu	Display Description Copy Compression ratio for copying Send Compression ratio for sending System Compression ratio for temporary storage in system Setting: [Copy] 1. Select the item to be set. Display Description Setting: [Copy] 1. Select the item to be set. Display Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Compression ratio in the text mode 2. Select the item to be set. Setting value using the +/- keys or numeric keys. Display Description Setting value using the +/- keys or numeric keys. V Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90		Seta Pur To c orde cha pres	s the compression pose change the setting er to soften the co nge the level of co ssion and thereby	in acco arsenes ompress lower th	rdance with the image that the use s of the image when making copies ion by raising the value. Lowering he image quality; Raising the value	r is copying. Fo s at over 200% the value will ir	magnification, ncrease the com	
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Setting: [Copy] Description 1. Select the item to be set. Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Change the setting value using the +/- keys or numeric keys. Display Description Setting Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90	Setting: [Copy] Description 1. Select the item to be set. Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Compression ratio in the text mode 3. Change the setting value using the +/- keys or numeric keys. Display Description Setting range Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90			Send		Compression ratio for sending			
I. Select the item to be set. Description Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Display Description Setting range setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90	I. Select the item to be set. Display Description Photo Compression ratio in the photo mode Compression ratio in the text mode 2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Initial setting Display Description Setting range Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90			System		Compression ratio for temporary	storage in syst	em	
Photo Compression ratio in the photo mode Text Compression ratio in the text mode 2. Select the item to be set. Change the setting value using the +/- keys or numeric keys. Display Description Setting range range Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90	Photo Text Compression ratio in the photo mode Compression ratio in the text mode 2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Display Description Setting range Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90			Select the item to	be set.	Descrite	tion		
TextCompression ratio in the text mode2. Select the item to be set.3. Change the setting value using the +/- keys or numeric keys.DisplayDescriptionSetting rangeInitial settingYCompression ratio of brightness1 to 10090CbCrCompression ratio of color differential1 to 10090	TextCompression ratio in the text mode2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys.DisplayDescriptionSetting rangeInitial settingYCompression ratio of brightness1 to 10090CbCrCompression ratio of color differential1 to 10090					-			
Display Description Setting range range Initial setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90	2. Select the item to be set. 3. Change the setting value using the +/- keys or numeric keys. Display Description Setting range setting Y Compression ratio of brightness 1 to 100 90 CbCr Compression ratio of color differential 1 to 100 90								
DisplayDescriptionrangesettingYCompression ratio of brightness1 to 10090CbCrCompression ratio of color differential1 to 10090	DisplayDescriptionrangesettingYCompression ratio of brightness1 to 10090CbCrCompression ratio of color differential1 to 10090			Select the item to					
CbCr Compression ratio of color differential 1 to 100 90	CbCr Compression ratio of color differential 1 to 100 90			Display		Description	-		
				Y	Com	pression ratio of brightness	1 to 100	90	
4. Press the start key. The value is set.	4. Press the start key. The value is set.			CbCr	Com	pression ratio of color differential	1 to 100	90	
			4.	Press the start ke	y. The v	alue is set.			

b.	•								
Setting: [Send] 1. Select the item to be set.									
	Display		Descr	riptio	on				
	Photo		Compression ratio in the photo	mod	le				
	Text		Compression ratio in the text m	node					
	HC-PDF(BG)		Compression ratio of high com	Compression ratio of high compression PDF					
	HC-PDF(Char)		Setting the compression rate of (text color)	f the	high-comp	ores	sion PDF		
 Select the item to be set. Change the setting value using the +/- keys or numeric keys. [Photo] or [Text] 									
	Display		Description		Setting range		Initial setting		
	Y1 to Y5	Compr	ession ratio of brightness	1 to	o 100	30/4	40/51/70/90		
	CbCr1 to CbCr5	Compr	ession ratio of color differential	1 to	o 100	30/4	40/51/70/90		
	[HC-PDF(BG)]			-					
	Display		Description		Setting range		Initial setting		
	Y3 to Y3	Compr	ession ratio of brightness	1 to	o 100	15/2	25/90		
	CbCr3 to CbCr3	Compr	ession ratio of color differential	1 to	o 100	15/2	25/90		
	[HC-PDF(Char)]								
	Display		Description		Setting range		Initial setting		
	Y3 to Y3	Compression ratio of brightness			o 100	15/2	25/90		
	CbCr3 to CbCr3	Compr	ession ratio of color differential	1 to	o 100	15/2	25/90		
4	4. Press the start key	. The v	alue is set.						
1	etting: [System] I. Select the item to 2. Change the setting		using the +/- keys or numeric ke	eys.					
	Display		Description		Setting range	-	Initial setting		
	Y	Comp	pression ratio of brightness		1 to 100		90		
	CbCr	Comp	pression ratio of color differential		1 to 100		90		
Su W cc	3. Press the start key upplement hile this maintenanc opying mode (which ompletion		-	vaila	ble in inter				

guard function. Also, sets the process PDF images are rotated. Purpose To change the detection level when the confidential document guard is not printed well f tion in scanning. Also, changes the process of how PDF images are rotated. Method 1. Press the start key. 2. Select the item. Display Description Conf. Doc. Detection Confidential document guard detection level PDF Rotation Processing the rotation of PDF images Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Display Description				Description					
Sets the detection level for scanning printed matter outputted with the confidential docurguard function. Also, sets the process PDF images are rotated. Purpose To change the detection level when the confidential document guard is not printed well fition in scanning. Also, changes the process of how PDF images are rotated. Method 1. Press the start key. 2. Select the item. Display Description Conf. Doc. Detection Confidential document guard detection level PDF Rotation Processing the rotation of PDF images Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Image the setting value using +/- keys or numeric keys. 1 to 5 1 Conf. Doc. Confidential document guard detection Detection level A smaller value raises the detection sensitivity but increases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lowers the detection sensitivity but decreases the possibility of false of a larger value lower the detection sensitivity but decreases the possibility of false of a larger value	35	Setting the image pro	ocessii	ng mode					
1. Press the start key. 2. Select the item. Display Description Conf. Doc. Detection Confidential document guard detection level PDF Rotation PDF Rotation Processing the rotation of PDF images Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Display Description Setting range Conf. Doc. Confidential document guard detection 1 to 5 Detection level 1 A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowere detectinty and the larger value lowers detection sensitity and		Sets the detection level for scanning printed matter outputted with the confidential document guard function. Also, sets the process PDF images are rotated. Purpose To change the detection level when the confidential document guard is not printed well for det							
Conf. Doc. Detection Confidential document guard detection level PDF Rotation Processing the rotation of PDF images Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Display Description Setting range Conf. Doc. Confidential document guard detection 1 to 5 1 Detection level 1 to 5 1 A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the value is set. Setting: [PDF Rotation] 1. Change the setting value using +/- keys or numeric keys. Display Description 0 Assigns the image rotation with the internal parameter (CTM rotation) 1 Assigns the image rotation with the internal parameter (CTM rotation) Initial setting: 0 2. Press the start key. The value is set. Completion 0		1. Press the start key.							
PDF Rotation Processing the rotation of PDF images Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Display Description Setting range Conf. Doc. Confidential document guard detection 1 to 5 1 A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of 2. Press the start key. The value is set. Setting: [PDF Rotation] 1. Change the setting value using +/- keys or numeric keys. Display Description 0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Press the start key. The value is set. Completion		Display		Description					
Setting: [Conf. Doc. Detection] 1. Change the setting value using +/- keys or numeric keys. Display Description Setting Initial setting Conf. Doc. Confidential document guard detection 1 to 5 1 Detection level 1 to 5 1 A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of 2. Press the start key. The value is set. Setting: [PDF Rotation] 1. Change the setting value using +/- keys or numeric keys. Display Description 0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Press		Conf. Doc. Detect	ion	Confidential document guard detect	ction level				
Display Description Setting range Initial setting Conf. Doc. Confidential document guard detection 1 to 5 1 Detection level 1 to 5 1 A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of A larger value lowers the value is set. Setting: [PDF Rotation] 1 1. Change the setting value using +/- keys or numeric keys. Description 0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2. Press the start key. The value is set. Completion		PDF Rotation		Processing the rotation of PDF ima	ages				
A smaller value raises the detection sensitivity but increases the possibility of false of A larger value lowers the detection sensitivity but decreases the possibility of false of 2. Press the start key. The value is set. Setting: [PDF Rotation] 1. Change the setting value using +/- keys or numeric keys. Display Description 0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the internal parameter 2 CTM rotation) Initial setting: 0 2. Press the start key. The value is set. Completion		Conf. Doc.	Conf. Doc. Confidential document guard d			setting			
Display Description 0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the actual image 2 Assigns the image rotation with the internal parameter (CTM rotation) Initial setting: 0 2. Press the start key. The value is set. Completion Completion		2. Press the start key. The value is set. Setting: [PDF Rotation]							
0 Assigns the image rotation with the internal parameter 1 Assigns the image rotation with the actual image 2 Assigns the image rotation with the internal parameter (CTM rotation) Initial setting: 0 Press the start key. The value is set. Completion Completion					on				
2 Assigns the image rotation with the internal parameter (CTM rotation) Initial setting: 0 2. Press the start key. The value is set. Completion				•		meter			
(CTM rotation) Initial setting: 0 2. Press the start key. The value is set. Completion		1		Assigns the image rotation with the	e actual image	9			
2. Press the start key. The value is set. Completion		2							
•		2. Press the start key. The value is set.							
		•							

	Description					
U901	Checking copy counts by	paper feed locations				
	 Description Displays or clears paper feed counts by paper feed locations. Performs backup when the counters on the engine PWB and PF main PWB do not match. Purpose To check the time to replace consumable parts. Also to clear the counts after replacing the consumable parts. Backup the counter values after completing changing the PF main PWB and the paper feed unit 					
	Method 1. Press the start key. The counts by paper feed locations are displayed.					
	Display Description					
	MPT	MP tray				
	Cassette1	Cassette 1				
	Cassette2	Cassette 2				
	Cassette3	Cassette 3 (paper feeder/large capacity feeder)				
	Cassette4	Cassette 4 (paper feeder/large capacity feeder)				
	Cassette5 Cassette 5 (side deck)					
	Duplex Duplex unit					
	 played. Clearing Select the counts to be cleared. [Cassette3], [Cassette4] and [Cassette5] cannot be cleared. Select the counts for all and press [Clear]. Press the start key. The counts is cleared. 					
	Backup the [Engine] cou Select [Enhancement] v Backup the [Enhanceme 3. Select [Execute]. 4. Press the start key. Bac 5. Turn the main power sw * : The values of cassed	hanging the PF main PWB. unter values to [Enhancement]. when changing the paper feed unit. ent] counter values to [Engine]. k up the counter values. witch off and on. Allow more than 5 seconds between Off and On. tte 4 counter vary in accordance with the cassette 3 counter.				
	Completion	counter values are not backed up. een for selecting a maintenance item No. is displayed.				

ltem No.	Description					
U903	Checking/clearing the p	paper jam counts				
	Purpose	n counts by jam locations. tatus. Also to clear the jam counts after replacing consumable parts.				
	Method 1. Press the start key. 2. Select the item.					
	Display	Description				
	Cnt	Displays/clears the jam counts				
	Total Cnt	Displays the total jam counts				
	 Method: [Cnt] 1. Select [Cnt]. The count of jam code by type is displayed. Codes for which the count value is 0 are not displayed. 2. Change the screen using the cursor up/down keys. 3. Select the count value for jam code and press [Clear]. The individual counter cannot be cleared. 					
	 Method: [Total Cnt] 1. Select [Total Cnt]. The total number of jam code by type is displayed. 2. Change the screen using the cursor up/down keys. The total number of jam count cannot be cleared. 					
	How to display the history of paper jams [Function] To check the variation in the occurrences of paper jams as a consequence of firmware upgrad [Procedure]					
	 Retrives versions of system and engine software at the timing of clearing. Displays comparison of the occurrences of paper jams before and after firmware upgrades Displays the date of clearing. 					
	 [Method] At firmware upgrade 1. Perform clearance of the counter following the above before performing firmware upgrade. 2. Clearing the counter records the date of clearing. 3. Perform firmware upgrade. 					
	At performing service Print a maintenance repo jams after firmware upgra	rt using mode U000 and check the variance of occurrence of paper ade was done.				
	-					

2LL/2LJ/2LH-3

tem No.		Des	cription			
U903	Detail of history of paper jams					
	ME	aintenance Report	17/Apr/2011 08:40			
	Firmware version 2LH_2000.000.000 2011.04.17 [XXXXXXXX] [XXXXXXX] [XXXXXXX] [XXXXXXX] [XXXXXXX] [XXXXXXX] [XXXXXXXX		[XXXXXXXX] [XXXXXXXX] [XXXXXXXX]			
	Мас	Machine No.: SPXXX00001 Life Count : 001234				
		(a) Paper Jam Log (b) 20 JAM0000 JAM0100 JAM0101 JAM0110 (c) 1 0 0 1 1 0 1 0 1 0 5 5 JAM0210 2 0 1 2 2	$\begin{bmatrix} 10 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 1 \\ 89 \\ 7 \end{bmatrix} (d)$			
		Figu	re 1-3-33			
	No.		Description			
	а	Paper jam numbers				
	b	Date of clearing counter records				
	C C	Occurrences of paper jams after cl	earing the paper jam counts			
	d	Total number of paper jams				
	1. Select 2. Chang	[Total Cnt] t [Total Cnt]. The total number of jam ge the screen using the cursor up/do otal number of jam count cannot be c	wn keys.			
	Completi Press the	on stop key. The screen for selecting a	maintenance item No. is displayed.			

tem No.		Description			
U904	Checking/clearing the call for service counts				
	Description				
	Displays or clears the service	call code counts by types.			
	Purpose				
	To check the service call code	e status by types. ode counts after replacing consumable parts.			
		oue counts after replacing consumable parts.			
	Method				
	 Press the start key. Select the item. 				
	Display	Description			
	Cnt	Displays/clears the call for service counts			
	Total Cnt				
		Displays the total call for service counts			
	Method: [Cnt]				
		r service call detection by type is displayed.			
		t value is 0 are not displayed.			
	2. Change the screen using 3. Select the count value for	the cursor up/down keys. service call code and press [Clear].			
	The individual counter car				
	4. Press the start key. The co	ounter value is cleared.			
	Method: [Total Cnt]				
	1. Select [Total Cnt]. The total number of service call counts by type is displayed.				
	2. Change the screen using the cursor up/down keys.				
	The total number of service call count cannot be cleared.				
	How to display the history o	of service counts			
	[Function]	courrences of convice cells on a consequence of firmware ungrad			
		ccurrences of service calls as a consequence of firmware upgrade			
	[Procedure]				
	-	m and engine software at the timing of clearing.			
	 Displays comparison of the occurrences of service calls before and after firmware upgrades Displays the date of clearing. 				
	3. Displays the date of cleari	ng.			
	[Method]	ng.			
	[Method] At firmware upgrade				
	[Method] At firmware upgrade	counter following the above before performing firmware upgrade. rds the date of clearing.			
	[Method] At firmware upgrade 1. Perform clearance of the o 2. Clearing the counter recor 3. Perform firmware upgrade At performing service	counter following the above before performing firmware upgrade. rds the date of clearing.			
	[Method] At firmware upgrade 1. Perform clearance of the o 2. Clearing the counter recor 3. Perform firmware upgrade At performing service	counter following the above before performing firmware upgrade. rds the date of clearing.			

2LL/2LJ/2LH-3

ltem No.		De	escription			
U904	Detail of history of service counts					
	Ma	aintenance Report	17/Apr/2011 08:40			
	Fi	Firmware version 2LH_2000.000.000 2011.04.17 [XXXXXXX] [XXXXXXX] [XX				
	Мас	hine No.: SPXXX00001	Life Count : 001234			
			2011.12.12 10 1			
		C0630 C1000 C1950 C2840 C4300 C9000 C9060	$\begin{bmatrix} 2011.12.12 \\ 1 & 1 \\ 0 & 50 \\ 0 & 1 \\ 3 & 17 \\ 1 & 2 \\ 0 & 1 \\ 5 & 20 \\ 2 & 1 \end{bmatrix} (d)$			
	Figure 1-3-34					
	No	Service call numbers	Description			
	a b					
		Date of clearing counter records	clearing the service calls			
	c d	Occurrences of paper jams after of Total number of service calls				
		<u> </u>				
	1. Select 2. Chang	[Total Cnt] t [Total Cnt]. The total number of se ge the screen using the cursor up/d otal number of service call count ca				
	Completi Press the		a maintenance item No. is displayed.			

Item No.		Description		
U905	Checking counts by optional devices			
	Purpose	1000-sheet or 4000-sheet finisher. 00-sheet or 4000-sheet finisher.		
	Method 1. Press the start key. 2. Select the device, the c The count of the selecte	ount of which is to be checked. ed device is displayed.		
	Display	Description		
	DP	Counts of DP		
	DF	Counts of 1000-sheet or 4000-sheet finisher		
	Method: [DP]			
	Display	Description		
	ADP	No. of single-sided originals that has passed through the DP		
	RADP	No. of double-sided originals that has passed through the DP		
	CIS	No. of dual scan originals that has passed through the DP		
	Method: [DF]			
	Display	Description		
	Sorter	No. of copies that has passed		
	Staple	Frequency the stapler has been activated		
	Punch	Frequency the punch has been activated		
	Stack*	Frequency the main tray eject has been activated		
	Saddle*	Frequency the saddle eject has been activated		
	Fold*	Frequency the center folding has been activated		
	Three Fold*	Frequency the tri-folding has been activated		
	* : 4000-sheet finisher	only		
	Completion Press the stop key. The scr	een for selecting a maintenance item No. is displayed.		

Item No.	Description
U906	Resetting partial operation control
	Description
	Resets the service call code for partial operation control.
	Purpose
	To be reset after partial operation is performed due to problems in the cassettes or other sec- tions, and the related parts are serviced.
	Method
	1. Press the start key.
	2. Press [Execute].
	 Press the start key to reset partial operation control. Turn the main power switch off and on. Allow more than 5 seconds between Off and On.
U908	Checking the total counter value
	Description
	Displays the total counter value.
	Purpose
	To check the total counter value.
	Method
	1. Press the start key. The total count value is displayed.
	Completion
	Press the stop key. The screen for selecting a maintenance item No. is displayed.
U910	Clearing the print coverage data
	Description
	Clears the accumulated data for the print coverage per A4 size paper and its period of time (as
	shown on the service status report).
	Purpose
	To clear data as required at times such as during maintenance service.
	Method
	1. Press the start key.
	2. Select [Execute].
	3. Press the start key. The print coverage data is cleared.
	Completion
	Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.	Description					
U911	Checking copy counts by paper sizes					
	Description Displays the paper feed counts by paper sizes. Purpose To check the counts after replacing consumable parts.					
	Method 1. Press the start key. The screen for the paper feed counts by paper size is displayed.					
	Display (metric)	Description	Display (inch)	Description		
			Ladaar			
	A3	Paper feed counts for A3	Ledger	Paper feed counts for Ledger		
	A3 B4	Paper feed counts for A3 Paper feed counts for B4	Legal	Paper feed counts for Ledger Paper feed counts for Legal		
			-			
	B4	Paper feed counts for B4	Legal	Paper feed counts for Legal		
	B4 A4	Paper feed counts for B4 Paper feed counts for A4	Legal Letter	Paper feed counts for Legal Paper feed counts for Letter		
	B4 A4 B5	Paper feed counts for B4 Paper feed counts for A4 Paper feed counts for B5	Legal Letter	Paper feed counts for Legal Paper feed counts for Letter Paper feed counts for State-		

Clearing

1. Select the paper size of counts to be cleared.

2. Press the start key. The counts is cleared.

Completion

Press the stop key. The screen for selecting a maintenance item No. is displayed.

tem No.	Description					
U917	Setting backup data reading/writing					
	Description Retrieves the backup data to a USB memory from the machine; or writes the data from the USB memory to the machine. Purpose To store and write data when replacing the HDD.					
	Method					
	 Press the power key on the operation panel, and after verifying the power indicator has goff, switch off the main power switch. Insert USB memory in USB memory slot. Turn the main power switch on. Wait for 10 seconds to allow the machine to recognize the USB memory. Enter maintenance item U917. Select [Import] or [Export]. 					
	Display			Description		
	Import		Writing data from the U	SB memory to the machine		
	Export		C C	chine to a USB memory		
	6. Select the item.		, , , , , , , , , , , , , , , , , , ,	· · · · ·		
	Display		Description	Depending data		
	Address Book	Addres	s book	-		
	Job Account	Job ac	counting	-		
	One Touch	Inform	ation on one-touch key	Address book		
	User	User m	nanagements	Job accounting		
	Program	Progra	m information	Job accountings and user manage- ments		
	Shortcut	Shortc	ut information	Job accountings, user managements and document box information		
	Fax Forward	FAX tra	ansfer information	Job accountings, user managements and document box information		
	Document Box	Docum	nent box information	Job accountings and user manage- ments		
	IC Card	IC card	d information	-		
	retrieved or wr 7. Press the start ke The progress of s When an error oc 8. When normally co	itten in. y. Starts elected curs, the ompleted	reading or writing. item is displayed in %. e operation is canceled a d, [Finish] is displayed.	a other than those assigned are also and an error code is displayed. leting writing when selecting [Import].		

tem No.		Desc	ription	
U917	Error Cod	es		
	Codes	Description	Codes	Description
	e002	Parameter error	e31e	User managements error
	e003	File write error	e31f	User managements open error
	e004	File initialization error	e320	User managements error
	e005	File error	e321	User managements open error
	e006	Processing error	e322	User managements list error
	e010	Address book clear error (contact)	e324	Shortcut open error
	e011	Address book open error (contact)	e325	Shortcut list error
	e012	Address book list error (contact)	e410	Box file open error
	e013	Address book list error (contact)	e411	Box error in writing
	e014	Address book clear error (group)	e412	Box error in reading
	e015	Address book open error (group)	e413	Box list error
	e016	Address book list error (group)	e414	Box list error
	e017	Address book list error (group)	e415	Box error
	e110	Job accounting clear error	e416	Box error
	e111	Job accounting open error	e417	Box open error
	e112	Job accounting open error	e418	Box close error
	e113	Job accounting error in writing	e419	Box creation error
	e114	Job accounting list error	e41a	Box creation error
	e115	Job accounting list error	e41b	Box deletion error
	e210	One-touch open error	e41c	Box movement error
	e211	One-touch list error	e510	Program error in writing
	e212	One-touch list error	e511	Program error in reading
	e310	User managements backup error	e610	Shortcut error in writing
	e311	User managements clear error	e611	Shortcut error in reading
	e312	User managements open error	e710	Fax memory open error
	e313	User managements open error	e711	Fax memory initialization error
	e314	User managements open error	e712	Fax memory list error
	e315	User managements error in writing	e713	Fax memory error
	e316	User managements list error	e714	Fax memory error
	e317	User managements list error	e715	Fax memory mode error
	e318	User managements list error	e716	Fax memory error
	e319	User managements list error	e717	Fax memory error
	e31a	User managements open error	e718	Fax memory mode error
	e31b	User managements error	e910	File reading error
	e31c	User managements error	e911	File writing error
	e31d	User managements open error	e912	Data mismatch

Item No.		Descripti	on	
U917	Error Cod	es		
	Codes	Description	Codes	Description
	e913	Log file open error	d008	File rename error
	e914	Log file error in writing	d009	File open error
	e915	Directory open error	d00a	File close error
	e916	Directory error in reading	d00b	File reading error
	e917	Synchronization error	d00c	File writing error
	e918	Synchronization error	d00d	File copy error
	d000	Unspecified error	d00e	File compressed error
	d001	HDD unavailable	d00f	File decompressed error
	d002	USB memory is not inserted	d010	Directory open error
	d003	File for writing is not found in the USB	d011	Directory creation error
	d004	File for reading is not found in the HDD	d012	File writing error
	d005	USB error in writing	d013	File reading error
	d006	USB error in reading	d014	File deletion error
	d007	USB unmount error	d015	File copy error to the USB

Completion

Press the stop key. The screen for selecting a maintenance item No. is displayed.

Item No.		Description		
U920	Checking the copy counts			
	Description Checks the copy counts. Purpose To check the copy counts.			
	Method 1. Press the start key. The	current counts are displayed.		
	Display	Description		
	B/W Copy	Count value of black/white copy		
	B/W Prn	Count value of black/white print		
	B/W Fax	Count value of black/white FAX		
	Completion	· · · · · · · · · · · · · · · · · · ·		
		een for selecting a maintenance item No. is displayed.		
U927	Clearing the all copy coun	ts and machine life counts (one time only)		
	Description Resets all of the counts back Supplement The total account counter ar ues are 1000 or less. Method 1. Press the start key.	k to zero. Ind the machine life counter can be cleared only once if all count val-		
	 Select [Execute]. Press the start key. All copy counts and machine life counts are cleared. 			
	Completion Press the stop key. The scre	een for selecting a maintenance item No. is displayed.		

ltem No.	Description				
U928	Checking machine life counts				
	Description Displays the machine life counts. Purpose To check the machine life counts.				
	Method 1. Press the start key. The c	current machine life counts is displayed.			
	Display	Description			
	Cnt	Machine life counts			
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			
U930	Checking/clearing the char	ger roller count			
	Displays the counts of the charger roller counter for checking, setting or clearing. Purpose To check the count after replacement of the charger roller unit. To clear the counter value when replacing the charger roller unit. Method				
	Display	current counts of the charger roller count for each color is displaye Description			
	K	Count value of charger roller			
	 Setting Change the setting value using the +/- keys or numeric keys. Press the start key. The value is set. Clearing Select [Clear]. Press the start key. The counts is cleared. Completion 				
		en for selecting a maintenance item No. is displayed.			

		Description			
U935	Relay board maintenance				
	Description				
	Description Sets the mode when call for a	service (C0060) occurs.			
	Purpose				
		porarily when call for service (C0060) occurs. However, after the se			
	ting, call for service (C0060)	occurs again when progress of period.			
	Setting				
	1. Press the start key.				
	2. Select Mode using the +/	-			
	Display Mode0	Description			
		Setting mode: OFF			
	Mode1	Setting mode: ON (Usable up to three times of use)			
	* : Initial setting: Mode0	acting is act			
	3. Press the start key. The s	tch off and on. Allow more than 5 seconds between Off and On.			
	Supplement				

De Ad Pu Us do Se 1 2 3 4 5 6 7 7 Cc	escription ljusts the deflect arpose se this mode if a cument process etting . Press the star . Press the syst . Press the syst . Press the syst . Select the iter . Change the se . Change the se . Change the se . Change the se . Select the iter . Change the set . Select the iter . Select the iter . Select the iter . Select the iter . Select the iter	t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original	or wrinkling to make a factorial to make a factorial to the smaller of the smalle	of originatest copy.	Change in value per step 0.17 mm 0.17 mm 0.17 mm
Ad Pu Us do Se 1 2 3 4 5 6 7 7 Cc	ijusts the deflect irpose se this mode if a cument process etting . Press the star . Press the syst . Place an origi . Press the syst . Select the iter . Change the se . Change the se . Change the se . Select the iter . Select the iter . Change the se . Select the iter . Change the se . Select the iter . Change the se . Select the iter . Select the iter . Select the iter . Select the iter . Select t	an original non-feed jam, oblique feed sor is used. t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	or wrinkling to make a factorial to make a factorial to the smaller of the smalle	of originatest copy.	Change in value per step 0.17 mm 0.17 mm 0.17 mm
Ad Pu Us do Se 1 2 3 4 5 6 7 7 Cc	ijusts the deflect irpose se this mode if a cument process etting . Press the star . Press the syst . Place an origi . Press the syst . Select the iter . Change the se . Change the se . Change the se . Select the iter . Select the iter . Change the se . Select the iter . Change the se . Select the iter . Change the se . Select the iter . Select the iter . Select the iter . Select the iter . Select t	an original non-feed jam, oblique feed sor is used. t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	or wrinkling to make a factorial to make a factorial to the smaller of the smalle	of originatest copy.	Change in value per step 0.17 mm 0.17 mm 0.17 mm
Us do 1 2 3 4 5 6 7 7 C c	ethis mode if a cument process atting Press the star Press the syst Place an origi Press the syst Select the iter Change the se Display Front Back* Mix *1: Reversed * : The greate deflection. If an origin	sor is used. t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	to make a freeric keys.I Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	Change in value per step 0.17 mm 0.17 mm 0.17 mm
do Se 1 2 3 4 5 6 7 7 C c	etting Press the star Press the system Press the system Press the system Press the system Press the system Change the system Change the second Display Front Back* Mix *1: Reversed * : The greated deflection. If an original	sor is used. t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	to make a freeric keys.I Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	Change in value per step 0.17 mm 0.17 mm 0.17 mm
Se 1 2 3 4 5 6 7 7 C c	etting Press the star Press the system Press the system Press the system Select the iter Change the set Display Front Back* Mix *1: Reversed * : The greated deflection. If an original	t key. tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
1 2 3 4 5 6 7 7 C c	 Press the star Press the systematic systemate systematic systematic systematic systematic systematic syste	tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
2 3 4 5 6 7 7 C c	 Press the system Place an original Press the system Select the iter Change the set Change the set Display Front Back* Mix *1: Reversed * The greated deflection. If an original 	tem menu key. nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
3 4 5 6 7 7 C c	 B. Place an origi Press the syst Select the iter Change the set Display Front Back* Mix *1: Reversed * The greated deflection. If an origin of original 	nal on the DP and press the start key tem menu key. n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	Initial setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
5 6 7 C c	5. Select the iter 5. Change the set Display Front Back* Mix *1: Reversed * : The greate deflection. If an original	n to be adjusted. etting value using the +/- keys or num Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
6 7 Сс	5. Change the se Display Front Back* Mix *1: Reversed * : The greate deflection. If an origin of original	Description Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
7 Сс	Display Front Back* Mix *1: Reversed * : The greate deflection. If an origin of original	Description Deflection of single-sided original Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	Setting range -31 to 31 -31 to 31 -31 to 31 the smaller	setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
Co	Front Back* Mix *1: Reversed * : The greate deflection. If an origin of original	Deflection of single-sided original Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	range -31 to 31 -31 to 31 -31 to 31 the smaller	setting 0 0 0 the value,	value per step 0.17 mm 0.17 mm 0.17 mm
Co	Back* Mix *1: Reversed * : The greate deflection. If an origin of original	Deflection of double-sided original Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	-31 to 31 -31 to 31 the smaller	0 0 the value,	0.17 mm 0.17 mm
Co	Mix *1: Reversed * : The greate deflection. If an origin of original	Deflection of mixed original DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	-31 to 31	0 the value,	0.17 mm
Co	*1: Reversed * : The greate deflection. If an origin of original	DP only. er the value, the larger the deflection; al non-feed jam or oblique feed occur	the smaller	the value,	
Co	* : The greate deflection. If an origin of original	er the value, the larger the deflection; al non-feed jam or oblique feed occur			the smaller the
		t key. The value is set.			
		,			
	ompletion	. The encounter collecting a maintain	anaa itam N	la ia diank	avad
	ess the stop ke	y. The screen for selecting a mainten	ance item in	io. is displa	ayeu.

		Description
U952	Maintenance mode work	flow
	executed in succession. Purpose	configured in the machine or a USB flash device as a workflow must be mode to be preset as a template.
	Display	Description
	Continue	Restarting an abandoned workflow
	Execute(USB)	Executes a workflow housed in a USB flash device
	Execute	Executes a worknow housed in a COD hash device
	Entry(USB)	Exports a workflow housed in a USB flash device to the machine
	Entry	Assigns a workflow in the machine manually
	Log	Displays a list of workflows recently executed
	Display Description	
	Data1 - 6	The area to store workflows in the machine
	 Press the start key. Executes maintenance Method: [Entry] Select [Entry]. Select the area to store 	e modes defined in a workflow in succession. re workflow.
	Display	Description
	Data1 - 6	The area to store workflows in the machine
	3. Press the +/- keys or r	numeric keys to assign a maintenance Nbr. into a workflow.
	Display	Description
	Flow1 - 14	Assign a maintenance Nbr.
	4. Press the start key. Th 5. Press the start key.	ne setting is set.

Item No.		Description
U952	 Method: [Execute(USB)] 1. Press the power key on gone off, switch off the n 2. Insert USB memory in U 3. Turn the main power sw 4. Enter maintenance item 5. Select [Execute(USB)]. 6. Select the workflow. 	SB memory slot. itch on.
	Display	Description
	WorkFlowData01 - 07	Workflow data in the USB flash device
	7. Press the start key. Executes maintenance r	nodes defined in a workflow in succession.
	 Method: [Entry(USB)] 1. Press the power key on gone off, switch off the n 2. Insert USB memory in U 3. Turn the main power sw 4. Enter maintenance item 5. Select [Entry(USB)]. 6. Select the workflow. 	SB memory slot. itch on.
	Display	Description
	WorkFlowData01 - 07	Workflow data in the USB flash device
	7. Select the work flow sav	e area.
	Display	Description
	Data1 - 6	The area to store workflows in the machine
	8. Select [Execute]. Exports a workflow hous	ed in a USB flash device to the machine.
	Example Registration is feasible when nance ID (editable) is inserte File Format: xxx.mwf !R! MNFC "WFPS"; 1, SET UP, 464, 410, 000, 9 2, WARRANTY, 089, 000	
	3, MK-A, 119, 140, 127, 167 WRED;EXIT;	, 464, 412, 464, 410, 251
	Completion Press the stop key. The scre	en for selecting a maintenance item No. is displayed.

Item No.	Description					
U964	Checking of log					
	Description					
	Sends a log file saved on	he HDD to a l	JSB memory.			
	Purpose					
	 To transfer a log file saved on the HDD to a USB memory as a means of investigating malfunctions. Method Press the power key on the operation panel, and after verifying the main power indicator has gone off, switch off the main power switch. Insert USB memory in USB memory slot. Turn the main power switch on. Enter maintenance item U964. 					
	Display		D	escription		
	Execute	Transer th memory	e Log file which i	is stored into HDD in	to the USB	
	Jam Log	-	the Log acquisio	on function when JAN	M occures	
	 6. Press the start key. Starts sending the log file saved on the HDD to the USB memory. Processing is displayed for approximately 3 to 5 minutes. 7. When normally completed, [Completed] is displayed. 8. Turn the main power switch off and on. Allow more than 5 seconds between Off and If a problem occurs during auto correction, error code is displayed. Setting: [Jam Log] Press the start key. Select On or Off. 				en Off and On.	
	Display		D	escription		
	On	Acquire th	e Log when JAM	loccurs		
	Off	Do not ac	quire the Log who	en JAM occurs		
	 Initial setting: Off 3. Press the start key. The setting is set. * : When U964 JAM setting turns ON, please explain the user make sure to turn OFF/ON main power switch when the Log has been acuired completely after clearing jammed paper when JAM occures. 					
	(f) 4 5 6 (iii) (Display	During Log	After Log	
		art		Retrieval	Retrieval	
		Attentic	n indicator	Blinking	Lighting	
	Memory Attention	E Proces	sing indicator	Blinking	Blinking	
		Memor	/ indicator	Blinking	Lighting	
	* : When U964 JAM s tion if the main pov	-		l may appear wrongl I after clearing jamm		

ltem No.	Description				
	Simultaneously press and h	otain a log when the operation panel has frozen hold the *, 8, 6, and Clear keys for 3 to 6 seconds to start logging. Is lighting during a log is generated and goes off when completed.			
	Error codes				
	Display	Description			
	No Usb Storage	USB memory is not inserted			
	No File	File is not found			
	Mount Error	USB memory mount error			
	File Delete Error	File deletion error			
	Copy Error	File copy error			
	Unmount Error	USB memory unmount error			
	Other Error	Other error			
U969	Checking of toner area co				
	Displays the toner area code. Purpose To check the toner area code. Method 1. Press the start key. The toner area code is displayed. Completion Press the stop/clear key. The screen for selecting a maintenance item No. is displayed.				
U977	 Data capture mode Description Store the print data sent to the machine into USB memory. Purpose In case to occur the error at printing, check the print data sent to the machine. Method 1. Press the power key on the operation panel, and after verifying the main power indicator har gone off, switch off the main power switch. 2. Insert USB memory in USB memory slot. 3. Turn the main power switch on. 4. Enter maintenance item U977. 5. Select [Execute]. 6. Press the start key. 7. Send the print data to the machine. Once the print data is stored into USB memory, [Finish] will be displayed. 				
	Completion Press the stop key. The scr	een for selecting a maintenance item No. is displayed.			

Item No.		Description			
U984	Checking the developer un	it number			
	Description				
	Description Displays the developer unit number.				
	Purpose				
	To check the developer unit n	umber.			
	Method 1. Press the start key. The d	leveloper unit number for each color is displayed.			
	Display	Description			
	К	Developer unit number			
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			
U985	Displaying the developer u				
	Description				
	Displays the past record of m Purpose	achine number and the developer counter.			
	•	nachine number and the developer counter.			
	Method				
	 Press the start key. Select [K]. 				
	Display	Description			
	K	Developer unit past record			
	The history of a machine three cases.	number and a developer counter for each color is displayed by			
	Display	Description			
	Machine History1 - 3	Historical records of the machine number			
	Cnt History1 - 3	Historical records of developer counter			
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.			

Item No.		Description			
U989	HDD Scan disk				
	Description Restores data in the hard d Purpose	isk by scanning the disk.			
	If power is turned off while a	accessing to the hard disk is performed, the control information in the naged. Use this mode to restore the data.			
	Method 1. Press the start key. 2. Select [Execute].				
	3. Press the start key. Wh	en scanning of the disk is complete, the execution result is displayed vitch off and on. Allow more than 5 seconds between Off and On.			
U990	Checking the time for the	exposure lamp to light			
	Description				
	Displays the accumulated t	ime for the CIS to light.			
	Purpose	4 OIO			
	To check duration of use of	the CIS.			
	Method				
	1. Press the start key.				
		or the CIS to light is displayed in minutes.			
	Display	Description			
	CIS	The accumulated time for the CIS to light			
	Completion				
	Press the stop key. The screen for selecting a maintenance item No. is displayed.				
U991	Checking the scanner op	eration count			
	Description				
	Displays the scanner opera	tion count.			
	Purpose				
	To check the status of use	of the scanner.			
	Method				
	1. Press the start key. The	e current operation counts is displayed.			
	Display	Description			
	Copy Scan	Scanner operation counts for copying			
	Fax Scan	Scanner operation counts for fax			
	Other Scan	Scanner operation counts except for copying			
	Completion				
	Press the stop key. The scr	een for selecting a maintenance No. item is displayed.			

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1-4-1 Paper misfeed detection

(1) Paper misfeed indication

When a paper misfeed occurs, the machine immediately stops printing and displays the paper misfeed message on the operation panel. To remove paper misfed in the machine, pull out the cassette, open the paper conveying unit or paper conveying cover.

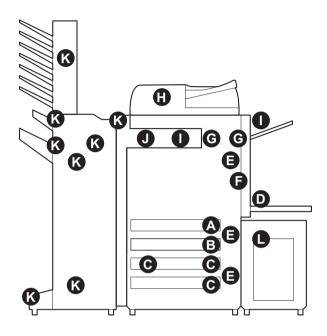


Figure 1-4-1 Paper misfeed indication

- A. Misfeed in cassette 1
- B. Misfeed in cassette 2
- C. Misfeed in cassette 3 or 4 (option)
- D. Misfeed in the MP tray
- E. Misfeed in paper conveying unit, paper conveying cover or PF paper conveying cover
- F. Misfeed in the duplex section
- G. Misfeed in the fuser section
- H. Misfeed in document processor (option)
- I. Misfeed in job separator (option)
- J. Misfeed in bridge unit (option)
- K. Misfeed in document finisher (option)
- L. Misfeed in cassette 5 (option)

(2) Paper misfeed detection condition

Machine + Option1

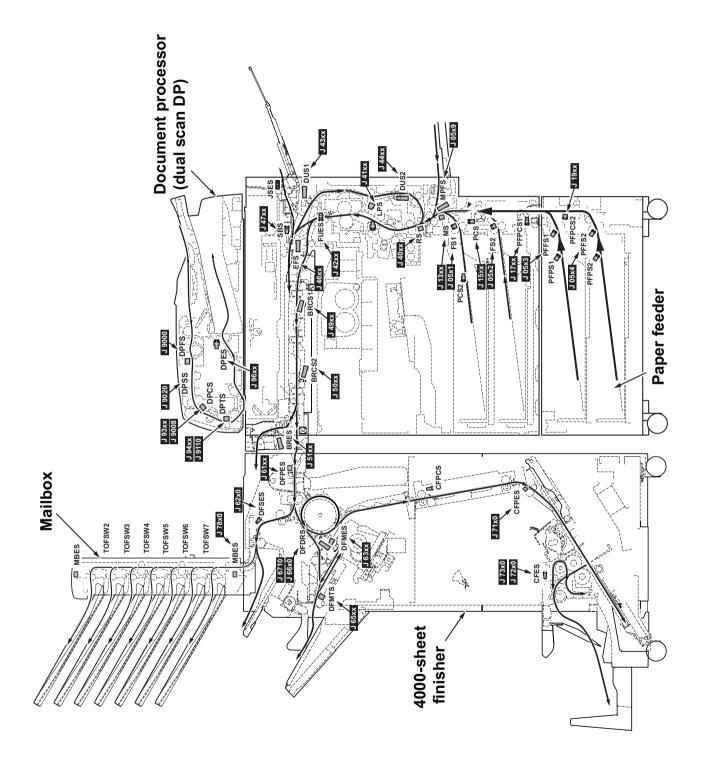


Figure 1-4-2 Paper jam location 1

Machine + Option2

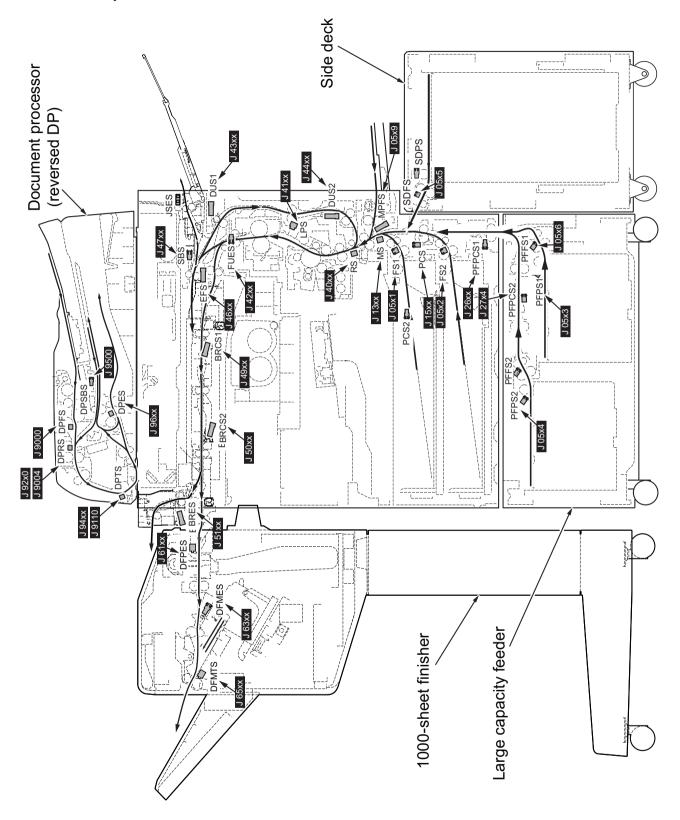


Figure 1-4-3 Paper jam location 2

* : This model does not support the following codes:

0132 /0211 /0212 /0214 /0215 /0505 /0506 /0507 /0515 /0516 /0517 /0525 /0526 /0527 /0535 /0536 / 0537 /1306 /1307 /1316 /1317 /2106 /2107 /2116 /2117 /2307 /2317 /2606 /2607 /2616 /2617 /2707 / 2717 /3106 /3107 /3116 /3117 /3307 /3317 /3405 /3406 /3407 /3415 /3416 /3417 /3505 /3506 /3507 / 3515 /3516 /3517 /3605 /3606 /3607 /3615 /3616 /3617 /3705 /3706 /3707 /3715 /3716 /3717 /4006 / 4007 /4016 /4017 /4106 /4107 /4116 /4117 /4206 /4207 /4216 /4217 /4306 /4307 /4316 /4317 /4406 / 4407 /4416 /4417 /4606 /4607 /4616 /4617 /4706 /4707 /4716 /4717 /4906 /4907 /4916 /4917 /5006 / 5007 /5016 /5017 /5106 /5107 /5116 /5117 /9030

Code	Contents	Conditions	Jam location*
0000	Initial jam	The power is turned on when a sensor in the conveying system is on.	-
0100	Secondary paper feed request time out	Secondary paper feed request given by the con- troller is unreachable.	-
0101	Waiting for process package to become ready	Process package won't become ready.	-
0102	Waiting for toner package to become ready	Toner package won't become ready.	-
0103	Waiting for the image-sustain- ing package to become ready	The image-sustaining package won't become ready.	-
0104	Waiting for conveying pack- age to become ready	Conveying package won't become ready.	-
0106	Paper feeding request for duplex printing time out	Paper feeding request for duplex printing given by the controller is unreachable.	-
0107	Waiting for fuser package to become ready	Fuser package won't become ready.	-
0108	Waiting for option package to become ready	Option package won't become ready.	-
0110	Paper conveying unit open	The paper conveying unit is opened during print- ing.	E
0111	Front cover open	The front cover is opened during printing.	-
0112	Duplex cover open	The duplex cover is opened during printing.	F
0113	Paper conveying cover open	The paper conveying cover is opened during printing.	Е
0114	BR conveying unit open	The BR conveying unit is opened during printing.	J
0115	BR eject cover open	The BR eject cover is opened during printing.	J
0131	MP lift sensor upper limit detection	MP lift sensor 1 (MPLS1) does not turn on within specified time of the MP lift plate rising.	D
0200	Machine sequence error	A sequence error has occurred.	-
0210	PF paper conveying cover open	The PF paper conveying cover is opened during printing.	E
0213	SD cover open	The SD cover is opened during printing.	L
0300	Ejection uncompleted	An ejection-completed error has occurred.	-

Code	Contents	Conditions	Jam location*
0501	No paper feed from cassette 1	Feed sensor 1 (FS1) does not turn on during paper feed from cassette 1.	A
0502	No paper feed from cassette 2	Feed sensor 2 (FS2) does not turn on during paper feed from cassette 2.	В
0503	No paper feed from cassette 3	PF feed sensor 1 (PFFS1) does not turn on dur- ing paper feed from cassette 3 (paper feeder).	С
0504	No paper feed from cassette 4	PF feed sensor 2 (PFFS2) does not turn on dur- ing paper feed from cassette 4 (paper feeder).	С
0508	No paper feed from duplex section	Registration sensor (RS) does not turn on during paper feed from duplex section.	F
0509	No paper feed from MP tray	MP feed sensor (MPFS) does not turn on during paper feed from MP tray.	D
0511	Multiple sheets in cassette 1	Feed sensor 1 (FS1) does not turn off during paper feed from cassette 1.	A
0512	Multiple sheets in cassette 2	Feed sensor 2 (FS2) does not turn off during paper feed from cassette 2.	В
0513	Multiple sheets in cassette 3	PF feed sensor 1 (PFFS1) does not turn off dur- ing paper feed from cassette 3 (paper feeder).	С
0514	Multiple sheets in cassette 4	PF feed sensor 2 (PFFS2) does not turn off dur- ing paper feed from cassette 4 (paper feeder).	С
0518	Multiple sheets in duplex sec- tion	Registration sensor (RS) does not turn off during paper feed from duplex section.	F
0519	Multiple sheets in MP tray	MP feed sensor (MPFS) does not turn off during paper feed from MP tray.	D
0523	No paper feed from cassette 3	PF feed sensor 1 (PFFS1) does not turn on dur- ing paper feed from cassette 3 (large capacity feeder).	С
0524	No paper feed from cassette 4	PF feed sensor 2 (PFFS2) does not turn on dur- ing paper feed from cassette 4 (large capacity feeder).	С
0533	Multiple sheets in cassette 3	PF feed sensor 1 (PFFS1) does not turn off dur- ing paper feed from cassette 3 (large capacity feeder).	С
0534	Multiple sheets in cassette 4	PF feed sensor 2 (PFFS2) does not turn off dur- ing paper feed from cassette 4 (large capacity feeder).	С
0545	No paper feed from side deck	SD feed sensor (SDFS) does not turn on during paper feed from side deck.	L
0555	Multiple sheets in side deck	SD feed sensor (SDFS) does not turn off during paper feed from side deck.	L

Code	Contents	Conditions	Jam location*
1301	Middle sensor non arrival jam	Middle sensor (MS) does not turn on during paper feed from cassette 1.	A
1302		Middle sensor (MS) does not turn on during paper feed from cassette 2.	В
1303		Middle sensor (MS) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	С
1304		Middle sensor (MS) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	С
1305	_	Middle sensor (MS) does not turn on during paper feed from cassette 5 (side deck).	L
1311	Middle sensor stay jam	Middle sensor (MS) does not turn off during paper feed from cassette 1.	Е
1312		Middle sensor (MS) does not turn off during paper feed from cassette 2.	E
1313		Middle sensor (MS) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	E
1314		Middle sensor (MS) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	E
1315	_	Middle sensor (MS) does not turn off during paper feed from cassette 5 (side deck).	Е
1502	Paper conveying sensor non arrival jam	Paper conveying sensor (PCS) does not turn on during paper feed from cassette 2.	В
1503		Paper conveying sensor (PCS) does not turn on during paper feed from cassette 3 (paper feeder/ large capacity feeder).	С
1504		Paper conveying sensor (PCS) does not turn on during paper feed from cassette 4 (paper feeder/ large capacity feeder).	С
1512	Paper conveying sensor stay jam	Paper conveying sensor (PCS) does not turn off during paper feed from cassette 2.	E
1513		Paper conveying sensor (PCS) does not turn off during paper feed from cassette 3 (paper feeder/ large capacity feeder).	E
1514		Paper conveying sensor (PCS) does not turn off during paper feed from cassette 4 (paper feeder/ large capacity feeder).	E

Code	Contents	Conditions	Jam location*
1703	PF paper conveying sensor 1 non arrival jam	PF paper conveying sensor 1 (PFPCS1) does not turn on during paper feed from cassette 3 (paper feeder).	C
1704		PF paper conveying sensor 1 (PFPCS1) does not turn on during paper feed from cassette 4 (paper feeder).	С
1713	PF paper conveying sensor 1 stay jam	PF paper conveying sensor 1 (PFPCS1) does not turn off during paper feed from cassette 3 (paper feeder).	E
1714		PF paper conveying sensor 1 (PFPCS1) does not turn off during paper feed from cassette 4 (paper feeder).	E
1904	PF paper conveying sensor 2 non arrival jam	PF paper conveying sensor 2 (PFPCS2) does not turn on during paper feed from cassette 4 (paper feeder).	С
1914	PF paper conveying sensor 2 stay jam	PF paper conveying sensor 2 (PFPCS2) does not turn off during paper feed from cassette 4 (paper feeder).	E
2603	PF paper conveying sensor 1 non arrival jam	PF paper conveying sensor 1 (PFPCS1) does not turn on during paper feed from cassette 3 (large capacity feeder).	С
2604		PF paper conveying sensor 1 (PFPCS1) does not turn on during paper feed from cassette 4 (large capacity feeder).	С
2613	PF paper conveying sensor 1 stay jam	PF paper conveying sensor 1 (PFPCS1) does not turn off during paper feed from cassette 3 (large capacity feeder).	E
2614	_	PF paper conveying sensor 1 (PFPCS1) does not turn off during paper feed from cassette 4 (large capacity feeder).	E
2704	PF paper conveying sensor 2 non arrival jam	PF paper conveying sensor 2 (PFPCS2) does not turn on during paper feed from cassette 4 (large capacity feeder).	С
2714	PF paper conveying sensor 2 stay jam	PF paper conveying sensor 2 (PFPCS2) does not turn off during paper feed from cassette 4 (large capacity feeder).	E

Code	Contents	Conditions	Jam location*
4001	Registration sensor non arrival jam	Registration sensor (RS) does not turn on during paper feed from cassette 1.	E
4002		Registration sensor (RS) does not turn on during paper feed from cassette 2.	E
4003		Registration sensor (RS) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	E
4004		Registration sensor (RS) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	E
4005		Registration sensor (RS) does not turn on during paper feed from cassette 5 (side deck).	E
4009		Registration sensor (RS) does not turn on during paper feed from MP tray.	E
4011	Registration sensor stay jam	Registration sensor (RS) does not turn off during paper feed from cassette 1.	E
4012	_	Registration sensor (RS) does not turn off during paper feed from cassette 2.	E
4013		Registration sensor (RS) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	E
4014		Registration sensor (RS) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	E
4015		Registration sensor (RS) does not turn off during paper feed from cassette 5 (side deck).	E
4019		Registration sensor (RS) does not turn off during paper feed from MP tray.	E

Code	Contents	Conditions	Jam location*
4101	Loop sensor non arrival jam	Loop sensor (LPS) does not turn on during paper feed from cassette 1.	E
4102		Loop sensor (LPS) does not turn on during paper feed from cassette 2.	E
4103		Loop sensor (LPS) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	E
4104		Loop sensor (LPS) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	E
4105	_	Loop sensor (LPS) does not turn on during paper feed from cassette 5 (side deck).	E
4108	_	Loop sensor (LPS) does not turn on during paper feed from duplex section.	E
4109	_	Loop sensor (LPS) does not turn on during paper feed from MP tray.	E
4111	Loop sensor stay jam	Loop sensor (LPS) does not turn off during paper feed from cassette 1.	E
4112	-	Loop sensor (LPS) does not turn off during paper feed from cassette 2.	E
4113		Loop sensor (LPS) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	E
4114		Loop sensor (LPS) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	E
4115	_	Loop sensor (LPS) does not turn off during paper feed from cassette 5 (side deck).	E
4118	_	Loop sensor (LPS) does not turn off during paper feed from duplex section.	E
4119		Loop sensor (LPS) does not turn off during paper feed from MP tray.	E

Code	Contents	Conditions	Jam location*
4201	Fuser eject sensor non arrival jam	Fuser eject sensor (FUES) does not turn on dur- ing paper feed from cassette 1.	E
4202	_	Fuser eject sensor (FUES) does not turn on dur- ing paper feed from cassette 2.	E
4203		Fuser eject sensor (FUES) does not turn on dur- ing paper feed from cassette 3 (paper feeder/ large capacity feeder).	E
4204		Fuser eject sensor (FUES) does not turn on dur- ing paper feed from cassette 4 (paper feeder/ large capacity feeder).	E
4205	_	Fuser eject sensor (FUES) does not turn on dur- ing paper feed from cassette 5 (side deck).	E
4208		Fuser eject sensor (FUES) does not turn on dur- ing paper feed from duplex section.	E
4209	_	Fuser eject sensor (FUES) does not turn on dur- ing paper feed from MP tray.	E
4211	Fuser eject sensor stay jam	Fuser eject sensor (FUES) does not turn off dur- ing paper feed from cassette 1.	G
4212	_	Fuser eject sensor (FUES) does not turn off dur- ing paper feed from cassette 2.	G
4213		Fuser eject sensor (FUES) does not turn off dur- ing paper feed from cassette 3 (paper feeder/ large capacity feeder).	G
4214		Fuser eject sensor (FUES) does not turn off dur- ing paper feed from cassette 4 (paper feeder/ large capacity feeder).	G
4215	_	Fuser eject sensor (FUES) does not turn off dur- ing paper feed from cassette 5 (side deck).	G
4218		Fuser eject sensor (FUES) does not turn off dur- ing paper feed from duplex section.	G
4219		Fuser eject sensor (FUES) does not turn off dur- ing paper feed from MP tray.	G

Code	Contents	Conditions	Jam location*
4301	Duplex sensor 1 non arrival jam	Duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 1.	G
4302		Duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 2.	G
4303		Duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	G
4304		Duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	G
4305		Duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 5 (side deck).	G
4309		Duplex sensor 1 (DUS1) does not turn on during paper feed from MP tray.	G
4311	Duplex sensor 1 stay jam	Duplex sensor 1 (DUS1) does not turn off during paper feed from cassette 1.	F
4312		Duplex sensor 1 (DUS1) does not turn off during paper feed from cassette 2.	F
4313		Duplex sensor 1 (DUS1) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	F
4314		Duplex sensor 1 (DUS1) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	F
4315		Duplex sensor 1 (DUS1) does not turn off during paper feed from cassette 5 (side deck).	F
4319		Duplex sensor 1 (DUS1) does not turn off during paper feed from MP tray.	F
4401	Duplex sensor 2 non arrival jam	Duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 1.	F
4402		Duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 2.	F
4403		Duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	F
4404		Duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	F
4405		Duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 5 (side deck).	F
4409		Duplex sensor 2 (DUS2) does not turn on during paper feed from MP tray.	F

Code	Contents	Conditions	Jam location*
4411		Duplex sensor 2 (DUS2) does not turn off during paper feed from cassette 1.	F
4412	-	Duplex sensor 2 (DUS2) does not turn off during paper feed from cassette 2.	F
4413		Duplex sensor 2 (DUS2) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	F
4414		Duplex sensor 2 (DUS2) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	F
4415		Duplex sensor 2 (DUS2) does not turn off during paper feed from cassette 5 (side deck).	F
4418	-	Duplex sensor 2 (DUS2) does not turn off during paper feed from duplex section.	F
4419		Duplex sensor 2 (DUS2) does not turn off during paper feed from MP tray.	F
4601	Eject full sensor non arrival jam	Eject full sensor (EFS) does not turn on during paper feed from cassette 1.	G
4602		Eject full sensor (EFS) does not turn on during paper feed from cassette 2.	G
4603		Eject full sensor (EFS) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	G
4604		Eject full sensor (EFS) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	G
4605	-	Eject full sensor (EFS) does not turn on during paper feed from cassette 5 (side deck).	G
4608		Eject full sensor (EFS) does not turn on during paper feed from duplex section.	G
4609		Eject full sensor (EFS) does not turn on during paper feed from MP tray.	G

Code	Contents	Conditions	Jam location*
4611	Eject full sensor stay jam	Eject full sensor (EFS) does not turn off during paper feed from cassette 1.	G
4612		Eject full sensor (EFS) does not turn off during paper feed from cassette 2.	G
4613		Eject full sensor (EFS) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	G
4614		Eject full sensor (EFS) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	G
4615	_	Eject full sensor (EFS) does not turn off during paper feed from cassette 5 (side deck).	G
4618		Eject full sensor (EFS) does not turn off during paper feed from duplex section.	G
4619	_	Eject full sensor (EFS) does not turn off during paper feed from MP tray.	G
4701	Switchback sensor non arrival jam	Switchback sensor (SBS) does not turn on during paper feed from cassette 1.	G
4702		Switchback sensor (SBS) does not turn on during paper feed from cassette 2.	G
4703		Switchback sensor (SBS) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	G
4704		Switchback sensor (SBS) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	G
4705	_	Switchback sensor (SBS) does not turn on during paper feed from cassette 5 (side deck).	G
4708	_	Switchback sensor (SBS) does not turn on during paper feed from duplex section.	G
4709		Switchback sensor (SBS) does not turn on during paper feed from MP tray.	G

Code	Contents	Conditions	Jam location*
4711	Switchback sensor stay jam	Switchback sensor (SBS) does not turn off during paper feed from cassette 1.	I
4712		Switchback sensor (SBS) does not turn off during paper feed from cassette 2.	I
4713		Switchback sensor (SBS) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	I
4714		Switchback sensor (SBS) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	I
4715		Switchback sensor (SBS) does not turn off during paper feed from cassette 5 (side deck).	I
4718		Switchback sensor (SBS) does not turn off during paper feed from duplex section.	I
4719		Switchback sensor (SBS) does not turn off during paper feed from MP tray.	I
4901	BR conveying sensor 1 non arrival jam	BR conveying sensor 1 (BRCS1) does not turn on during paper feed from cassette 1.	G
4902		BR conveying sensor 1 (BRCS1) does not turn on during paper feed from cassette 2.	G
4903		BR conveying sensor 1 (BRCS1) does not turn on during paper feed from cassette 3 (paper feeder/ large capacity feeder).	G
4904		BR conveying sensor 1 (BRCS1) does not turn on during paper feed from cassette 4 (paper feeder/ large capacity feeder).	G
4905	_	BR conveying sensor 1 (BRCS1) does not turn on during paper feed from cassette 5 (side deck).	G
4908		BR conveying sensor 1 (BRCS1) does not turn on during paper feed from duplex section.	G
4909		BR conveying sensor 1 (BRCS1) does not turn on during paper feed from MP tray.	G

Code	Contents	Conditions	Jam location*
4911	BR conveying sensor 1 stay jam	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from cassette 1.	J
4912	_	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from cassette 2.	J
4913	_	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from cassette 3 (paper feeder/ large capacity feeder).	J
4914		BR conveying sensor 1 (BRCS1) does not turn off during paper feed from cassette 4 (paper feeder/ large capacity feeder).	J
4915	_	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from cassette 5 (side deck).	J
4918	_	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from duplex section.	J
4919	_	BR conveying sensor 1 (BRCS1) does not turn off during paper feed from MP tray.	J
5001	BR conveying sensor 2 non arrival jam	BR conveying sensor 2 (BRCS2) does not turn on during paper feed from cassette 1.	J
5002	-	BR conveying sensor 2 (BRCS2) does not turn on during paper feed from cassette 2.	J
5003		BR conveying sensor 2 (BRCS2) does not turn on during paper feed from cassette 3 (paper feeder/ large capacity feeder).	J
5004		BR conveying sensor 2 (BRCS2) does not turn on during paper feed from cassette 4 (paper feeder/ large capacity feeder).	J
5005		BR conveying sensor 2 (BRCS2) does not turn on during paper feed from cassette 5 (side deck).	J
5008		BR conveying sensor 2 (BRCS2) does not turn on during paper feed from duplex section.	J
5009		BR conveying sensor 2 (BRCS2) does not turn on during paper feed from MP tray.	J

Code	Contents	Conditions	Jam location*
5011	BR conveying sensor 2 stay jam	BR conveying sensor 2 (BRCS2) does not turn off during paper feed from cassette 1.	J
5012	_	BR conveying sensor 2 (BRCS2) does not turn off during paper feed from cassette 2.	J
5013		BR conveying sensor 2 (BRCS2) does not turn off during paper feed from cassette 3 (paper feeder/ large capacity feeder).	J
5014		BR conveying sensor 2 (BRCS2) does not turn off during paper feed from cassette 4 (paper feeder/ large capacity feeder).	J
5015	_	BR conveying sensor 2 (BRCS2) does not turn off during paper feed from cassette 5 (side deck).	J
5018	_	BR conveying sensor 2 (BRCS2) does not turn off during paper feed from duplex section.	J
5019	_	BR conveying sensor 2 (BRCS2) does not turn off during paper feed from MP tray.	J
5101	BR eject sensor non arrival jam	BR eject sensor (BRES) does not turn on during paper feed from cassette 1.	J
5102		BR eject sensor (BRES) does not turn on during paper feed from cassette 2.	J
5103		BR eject sensor (BRES) does not turn on during paper feed from cassette 3 (paper feeder/large capacity feeder).	J
5104		BR eject sensor (BRES) does not turn on during paper feed from cassette 4 (paper feeder/large capacity feeder).	J
5105		BR eject sensor (BRES) does not turn on during paper feed from cassette 5 (side deck/large capacity feeder).	J
5108		BR eject sensor (BRES) does not turn on during paper feed from duplex section.	J
5109		BR eject sensor (BRES) does not turn on during paper feed from MP tray.	J

Code	Contents	Conditions	Jam location*
5111	BR eject sensor stay jam	BR eject sensor (BRES) does not turn off during paper feed from cassette 1.	J
5112	_	BR eject sensor (BRES) does not turn off during paper feed from cassette 2.	J
5113		BR eject sensor (BRES) does not turn off during paper feed from cassette 3 (paper feeder/large capacity feeder).	J
5114		BR eject sensor (BRES) does not turn off during paper feed from cassette 4 (paper feeder/large capacity feeder).	J
5115	_	BR eject sensor (BRES) does not turn off during paper feed from cassette 5 (side deck).	J
5118		BR eject sensor (BRES) does not turn off during paper feed from duplex section.	J
5119		BR eject sensor (BRES) does not turn off during paper feed from MP tray.	J
6000	DF paper entry error	DF paper entry sensor (DFPES) turns on before the eject signal is output from the machine (4000- sheet finisher).	К
6001		DF paper entry sensor (DFPES) turns on before the eject signal is output from the machine (1000- sheet finisher).	К
6020	DF front cover open	DF front upper cover is opened during operation (4000-sheet finisher).	К
6021		DF front cover is opened during operation (1000-sheet finisher).	К
6041	DF top cover open	DF top cover is opened during operation (1000- sheet finisher).	К
6050	CF eject cover open	CF eject cover is opened during operation (4000- sheet finisher).	К
6060	MB cover open	MB cover is opened during operation (4000-sheet finisher).	К
6070	Center folding unit open	Center folding unit is opened during operation (4000-sheet finisher).	К
6080	CF left guide open	CF left guide is opened during operation (4000- sheet finisher).	K

Code	Contents	Conditions	Jam location*
6100	DF paper entry sensor non arrival jam	DF paper entry sensor (DFPES) does not turned on even if a specified time has elapsed after the machine eject signal was received (4000-sheet finisher).	К
6101		DF paper entry sensor (DFPES) does not turned on even if a specified time has elapsed after the machine eject signal was received (1000-sheet finisher).	К
6110	DF paper entry sensor stay jam	DF paper entry sensor (DFPES) does not turned off within specified time of its turning on (4000- sheet finisher).	К
6111		DF paper entry sensor (DFPES) does not turned off within specified time of its turning on (1000-sheet finisher).	К
6200	DF sub eject sensor non arrival jam	DF sub eject sensor (DFSES) does not turn on within specified time of DF paper entry sensor (DFPES) turning on.	К
6210	DF sub eject sensor stay jam	DF sub eject sensor (DFSES) does not turned off within specified time of its turning on.	К
6300	DF middle eject sensor non arrival jam	DF middle eject sensor (DFMES) does not turn on within specified time of DF paper entry sensor (DFPES) turning on (4000-sheet finisher).	К
6301		DF middle eject sensor (DFMES) does not turn on within specified time of DF paper entry sensor (DFPES) turning on (1000-sheet finisher).	К
6310	DF middle eject sensor stay jam	DF middle eject sensor (DFMES) is not turned off within specified time of its turning on (4000-sheet finisher).	К
6311		DF middle eject sensor (DFMES) is not turned off within specified time of its turning on (1000-sheet finisher).	К
6400	DF tray upper surface sensor non arrival jam	DF tray upper surface sensor (DFTUSS) does not turn on within specified time of DF middle eject sensor (DFMES) turning on (4000-sheet finisher).	К
6401		DF tray upper surface sensor (DFTUSS) does not turn on within specified time of DF middle eject sensor (DFMES) turning on (1000-sheet finisher).	К

Code	Contents	Conditions	Jam location*
6410	DF tray upper surface sensor stay jam	DF tray upper surface sensor (DFTUSS) is not turned off within specified time of its turning on (4000-sheet finisher).	К
6411		DF tray upper surface sensor (DFTUSS) is not turned off within specified time of its turning on (1000-sheet finisher).	К
6500	DF eject paper sensor non arrival jam	DF bundle discharge sensor (DFBDS) does not turn on within specified time of DF middle eject sensor (DFMES) turning on.	К
6510	DF eject paper sensor stay jam	DF bundle discharge sensor (DFBDS) is not turned off since the bundle discharge starts (4000-sheet finisher).	К
6511		DF bundle discharge sensor (DFBDS) is not turned off since the bundle discharge starts (1000-sheet finisher).	K
6600	DF drum sensor non arrival jam	DF drum sensor (DFDRS) does not turn on within specified time of DF paper entry sensor (DFPES) turning on.	K
6610	DF drum sensor stay jam	DF drum sensor (DFDRS) is not turned off within specified time of its turning on.	К
6710	Center folding unit stay jam	During paper conveying to center folding unit, DF drum sensor (DFDRS) is not turned off within specified time of its turning on.	К
6810	DF side registration sensor 1 stay jam	DF side registration sensor 1 (DFSRS1) is not turned off within specified time after driving the DF side registration motor 1 (DFSRM1) (4000- sheet finisher).	К
6811		DF side registration sensor 1 (DFSRS1) is not turned off within specified time after driving the DF side registration motor 1 (DFSRM1) (1000- sheet finisher).	К
6910	DF side registration sensor 2 stay jam	DF side registration sensor 2 (DFSRS2) is not turned off within specified time after driving the DF side registration motor 2 (DFSRM2) (4000- sheet finisher).	К
6911		DF side registration sensor 2 (DFSRS2) is not turned off within specified time after driving the DF side registration motor 2 (DFSRM2) (1000- sheet finisher).	К

Code	Contents	Conditions	Jam location*
7000	DF staple operation error	DF staple sensor (DFSTS) is not turned on within specified time after driving the DF staple motor (DFSTM) (4000-sheet finisher).	К
7001		DF staple sensor (DFSTS) is not turned on within specified time after driving the DF staple motor (DFSTM) (1000-sheet finisher).	К
7100	CF paper entry sensor non arrival jam	CF paper entry sensor (CFPES) is not turned on even if a specified time has elapsed after the machine eject signal was received.	К
7110	CF paper entry sensor stay jam	CF paper entry sensor (CFPES) is not turned off within specified time of its turning on.	K
7200	CF eject sensor non arrival jam	CF eject sensor (CFES) is not turned on within specified time since centerfold operation starts.	К
7210	CF eject sensor stay jam	During centerfold operation, CF eject sensor (CFES) is not turned off within specified time of its turning on.	К
7300	CF eject sensor non arrival jam	CF eject sensor (CFES) is not turned on within specified time since three fold operation starts.	К
7310	CF eject sensor stay jam	During three fold operation, CF eject sensor (CFES) is not turned off within specified time of its turning on.	K
7400	CF side registration sensor 2 non arrival jam	CF side registration sensor 2 (CFSRS2) is not turned on within specified time after driving the CF side registration motor 2 (CFSRM2).	К
7500	CF side registration sensor 1 non arrival jam	CF side registration sensor 1 (CFSRS1) is not turned on within specified time after driving the CF side registration motor 1 (CFSRM1).	К
7600	CF staple operation error	CF staple sensor (CFSTS) is not turned on within specified time after driving the CF staple motor (CFSTM).	К
7700	CF paper conveying sensor non arrival jam	CF paper conveying sensor (CFPCS) is not turned on even if a specified time has elapsed after the machine eject signal was received.	К
7710	CF paper conveying sensor stay jam	CF paper conveying sensor (CFPCS) is not turned off within specified time of its turning on.	K

Code	Contents	Conditions	Jam location*
7800	MB eject sensor non arrival jam	MB eject sensor (MBES) is not turned on even if a specified time has elapsed after the machine eject signal was received.	К
7810	MB eject sensor stay jam	MB eject sensor (MBES) is not turned off within specified time of its turning on.	К
7950	Paper interval error jam	An illegal inter-page or inter-copy interval has occurred (4000-sheet finisher).	К
7951		An illegal inter-page or inter-copy interval has occurred (1000-sheet finisher).	К
9000	No original feed jam	DP feed sensor (DPFS) does not turn on within specified time during the first sheet feeding (Retry 5 times).	Н
9001	DP original conveying jam	DP timing sensor (DPTS) turns off within the specified time since the sensor turns on.	Н
9002	DP sensor stay jam	Sensor in the conveying system is on since original feeding starts.	Н
9004	DP switchback jam 2	DP registration sensor (DPRS) is not turned on within specified time since original switchback operation starts.	Н
9005	No original feed 2	DP lift sensor 1 (DPLS1) does not turn on within specified time of the lift plate rising.	
9006	DP switchback jam 3	DP eject sensor (DPES) is not turned on within specified time since original switchback operation starts.	Н
9007	DP switchback jam 4	DP eject sensor (DPES) is not turned off within specified time since original switchback operation starts.	Н
9008	No original feed jam 3	DP CIS sensor (DPCS) does not turn on within specified time of the paper feed starting	Н
9009	DP original conveying jam 2	Next feed original became the stand-by states of paper feed while reading the image.	Н
9010	Document processor open	Document processor is opened during original feeding.	
9011	DP top cover open	The DP top cover is opened during original feed- ing.	Н
9020	Original skew feed jam	DP skew sensor (DPSS) does not turn on within specified time of DP registration sensor (DPRS) turning on.	H
9110	DP feed sensor stay jam	DP feed sensor (DPFS) does not turn off within specified time of DP timing sensor (DPTS) turning on.	Н

Code	Contents	Conditions	Jam location*
9200	DP registration sensor non arrival jam	DP registration sensor (DPRS) does not turn on within specified time of DP feed sensor (DPFS) turning on.	Н
9210	DP registration sensor stay jam	DP registration sensor (DPRS) does not turn off within specified time of DP timing sensor (DPTS) turning on.	Н
9300	DP CIS sensor non arrival jam	DP CIS sensor (DPCS) does not turn on within specified time of DP registration sensor (DPFS) turning on.	Н
9310	DP CIS sensor stay jam	DP CIS sensor (DPCS) does not turn off within specified time of DP registration sensor (DPFS) turning off.	Н
9400	DP timing sensor non arrival jam	DP timing sensor (DPTS) does not turn on within specified time of DP feed sensor (DPFS) turning on.	Н
9410	DP timing sensor stay jam	DP timing sensor (DPTS) does not turn off within specified time of DP feed sensor (DPFS) turning off.	Н
9500	DP switchback sensor non arrival jam	DP switchback sensor (DPSBS) does not turn on within specified time of DP timing sensor (DPTS) turning on.	Н
9600	DP eject sensor non arrival jam	DP eject sensor (DPES) does not turn on within specified time of DP timing sensor (DPTS) turning on.	Н
9610	DP eject sensor stay jam	DP eject sensor (DPES) does not turn off within specified time of DP timing sensor (DPTS) turning off.	Η

1-4-2 Troubleshooting

(1) First check items

If the paper is fed askew, jammed, curled, or leading-edge dog-eared, first perform to check the following items.

Check items	Check description	Corrective measures
Paper	 Check the paper delivered is dog-eared, skewed, rumpled, loosely fused, or curled. 	If a dog-ear has happened, check there are no objects existing in the conveying paths and, if any, fix. If the paper is fed askew or crumpled, perform the fol- lowing No.2.If an inferior fusing or curling is observed and the fuser temperature is set to a abnormal value, when measured by performing maintenance mode U161, reset to the default. (see page 1-3-89)
	 Check how paper is loaded in the cassette (deck). Check that the paper has been properly aligned with width adjuster cursor and the rear guide; it has been loaded without skewing; or it is not damaged. (Crumpled paper, main unit/DF jam) 	Adjust the cursors to the size of the paper. (If paper is fed askew, perform a skew cancellation adjustment of the width adjuster cursor.) (see page 1-5- 87)
	 Check how paper is loaded. Check if the cutting edge of the paper bundle inside is cumpled or bent. 	If the cutting edge of the paper bundle is crumpled, fan the paper before loading. If the paper is folded, stretch before loading in the cassette
	 4. If a large-capacity deck is being used, check how paper is loaded in the deck. Check if the paper inside the deck is placed above the guide. 	Reloard the paper so that its edges won't be situated above the platform.
	5. Check the paper is damp, wavy, or curled.	 Load the paper bundle in the cassette upside down. Load the paper bundle after rotating it 180°and reload. Change the paper.
	6. Check if the paper loaded was stored in a continuously humid place.	Instruct the user to store paper in a dry, less humid place. Install a cassette heater and configure using U327. (see page 1-3-129)
	7. Check if the paper conforms to the requirements.	Isolate the cause of the problem by replacing the paper with the recommended paper. (see page 1-1-1)

Check items	Check description	Corrective measures
Paper	8. Check the paper ejected is dog-eared, skewed, rumpled, loosely fused, or curled.	If the maintenance mode U161 shows that the fuser temperature is set to an abnormal value, reset it to the default. (see page 1-3-89)
Settings/ Detection	 Check if the margin is 4.0+1.5/-1.0mm from the leading edge of paper. Perform U034 to check the reference mark is situated at 20mm±1mm from the edge. (Fuser jam) (see page 1-3-33) 	If the check line is not situated at 20mm±1mm from the leading edge, adjust the leading margin by U402. (see page 1-3-133)
	2. Check the panel if the paper size is correctly detected and the cassette size is not fixed.(Paper jam caused by continously fed paper, DF Jam J611X) Perform U000 to obtain a Event Log to check if the paper size and the size of the paper loaded are met when jam has occurred and if the size of the original document and the paper size are met. see page 1-3-9)	If the paper size is incorrectly displayed, adjust the positions of the paper set guide cursors in accordance with the paper size, making sure that the paper is not askew to activate the size detector switch.
	 Check that paper settings are made in accordance with the paper being used. (Jam caused by faulty separation) 	Select Original/Paper settings under common settings in the system menu to set media type and weight of paper.
Coveying unit	Check the main unit vertical conveying unit or the front and back parts and right and left parts of the deck's horizontal conveying unit are slightly strained and closed.	To open, first open the right-side conveying unit and close firmly. (Check the position of the safery switch)

Check items	Check description	Corrective measures
Conveying guide, approaching guide, feed-	 Check that the foreign objects including scrips, paper clips, etc., do not exist in the paper conveying paths. 	If foreign objects such as scrips, etc., remain in the paper conveying path, remove.
shift guide	 Check that the paper conveying guide and the separation needles are not contaminated with toner, paper dusts, etc. 	If dirty, clean the guide, ribs (by a cloth), and the separation needles (by a cleaning brush). If the ribs of the conveying guides were broken or deposited with toner, replace.
	3. Check that the paper conveying guide has no barrs, deformations, or abrasions; and it is properly mounted without being floated.	Clean the conveying guide or the paper approaching guide.Remove any protrusions including barrs.If floated, fix it properly.If deformation or abrasion is observed, replace.
	 Check that the guide. Check that the guide is smoothly operative when manipulated. 	If the guide is inoperative or won't operate smoothly, replace the guide or the unit.
	 5. Check that the guide. Perform U033 to check the operation of the solenoid to sight-check or audio-check its action. (see page 1-3-32) 	If the guide is inoperative or won't operate smoothly, re- assemble the guide or replace the solenoid or the unit.

Check items	Check description	Corrective measures
Conveying roller, feed roller	 Check the conveying rollers have no paper dusts, toner, or foreign objects stucked.Check a variation of the external diameter of the roller or abrasion is not observed with the coveying roller. 	Clean the conveying rollers or the pollyes. If variation in the external diameter or abrasion is observed, replace.
	 2. Turn the cover safety switch on and perform U030 - Motor, U032 - Clutch, and U240 - Finished, check they operate normally. * : At checking the clutch by U032, confirm that the roller won't turn when the motor is turned on. (see page 1-3-29,1-3-31,1-3- 104) 	If the conveying motor or the clutch is inoperative, replace. If stained, replace the clutch. If the clutch is kept turned on due to a tensioned wire, reroute wires.
	 Check the conveying roller rotates without overloading. Check the axle holder or the roller shaft are not contaminated. Check that the spring has not fallen off and is mounted so that it is properly applying pressure against the rollers or pulleys. 	Clean the roller axle or the axle holder.Re-assemble it while checking the pressure of the spring.
Sensor	 Check if it does not operate with smoothness due to an abnormal move or dropping off of the actuator of the coveying switch. 	Re-assemble the actuator or the return spring.
	2. Check that the surface of the sensor and the recveptor black felt pieces are not contaminated with toner, paper dusts, etc.	If dirty, clean the sensor or the black felt piece.
	3. Perform U031 - Conveying switch and U241 - Finisher switch to check the sensors are normal without flickering, etc. (see page1-3-30, 1-3- 106)	If U031has revealed that the sensor is inoperative, replace the switch.

Check items	Check description	Corrective measures
Static	Check if the location is	Re-assemble and re-wire the static discharge sheet at
	susceptible to build static discharge at the conveying guide	the ejection unit or the metal guide at the tranfer unit so that they are properly grounded.
	during printing.	

(2) Items and corrective actions relating to the device that will cause paper jam

Jam types	Check description	Corrective measures
No-paper-feed jam or the leading edge of paper is curled back at the position of the roller	 Check if the jammed paper or the printed paper has a tear caused by the roller at its leading edge. 	Replace the primary feed roller.(Service life of rubber roller is 150k.) Increase the spring pressure to pinch the separation rollers if the component is undue to its expected life.Replace the spring.
(J0501,J0502, J0503,J0504,J0509, J0523, J0524,J0545)	 Check abrasion and paper dusts on the feed roller and forward rollers. 	Clean the feed roller and the forward roller.Or, if not amended, replace.
	 Perform U032 to check the forward roller and feed roller are rotating. 	If disconnected or or stained, replace the primary feed clutch.
	4. Check if a primary feed roller of a wrong material of rubber is installed.	Distinguished by color: White x 2, black x 1 Check that the feed rollers are installed at (1) Feed Roller (Collar is white.), (2) Retard roller (black), and (3) Pickup Roller (white). 45-ppm/55-ppm devices * : If not, install then at the correct positions.
	5. Check that the conveying force of the pickup roller is sufficient.	Increase the conveying force during paper pickup by increasing the spring load of the pickup roller.
	6. Check the film is sufficiently protruded in front of approching the feed roller and the nip.(Too wide a gap against the feed roller.)	Amount of protrusion of film in approaching (Gap: 0.2 - 0.5 mm) must be maintained after adjustment.

Jam types	Check description	Corrective measures
No-paper-feed jam or the leading edge of paper is curled back at the position of the roller (J0501,J0502, J0503,J0504,J0509,	 7. Check the separation roller is not disturbed as a driving component is in contact with the frame during the separation roller is in motion. 	If it gets in contact, replace the primary feed unit.
J0503,J0504,J0509, J0523, J0524,J0545)	 motion. 8. Depress the release lever to release the pressure of the primary feed rollers to check that the retard holder falls.(The pressure by the retard roller to the feed roller is decreased.) 	Modify mounting the retard holder fixing plate.

Jam types	Check description	Corrective measures
Multiple-feed Jam (J0511, J0512, J0513, J0514, J0519)	 Check if the cutting edge of the paper bundle is crumpled or the cassette is loaded with multiple times of replenishing paper. 	If the cutting edge of the paper bundle is crumpled or the cassette is loaded with multiple times of replenishing paper, load new paper.
	2. Checking paper size. Check that the size of the loaded paper and the paper size chosen on the operator panel are met.	If the paper size does not agree.1. If the cassette cursors are open against the paper, set it properly.2. Insert the cassette until the paper size detector switch is turned on.If the size is not detectable while automatic sizing is enabled, replace the size detection switch.
		 If the paper size agrees 1. If paper other than complying the requirements such as coated paper, inkjet paper, etc., is used, replace the paper. 2. RE-assemble the pulley retard in the primary feed unit if it is mounted to the oppisite direction. 3. Check if the spring retard has not been fallen off of the mounting position. * : If the spring retard is not dropped off of the mount position, decrease the spring pressure that is applied to the separation rollers. 4. Replace the primary feed unit.
	3. Check if paper dusts and abrasion are observed on the paper fanning roller and retard roller.	If the paper fanning roller is dirty, clean. If abrasion is observed, replace.
	 4. Select the motor by U032 and check the clutch rotates following the other component when the motor is turned on. (see page 1- 3-31) 	If the clutch rotates following the other component and its stain is observed, replace the clutch.
Duplex No-original- feed Jam (J0508)/ Duplex Multiple-feed Jam (J0518)	Perform U031 to check if the duplex sensor 2 is detected. (see page 1-3-30)	If the duplex sensor 2 is not working, replace the duplex sensor 2.

Jam types	Check description	Corrective measures
Intermediate/ conveying sensor stay jam	 Check to see if the actuator is operative without hinderance. 	If it won't operate without hinderance, re-assemble or replace the actuator's return spring.
(J1313, J1314, J1513, J1514)	2. Perform U031 to check the operation of the sensor.	If the sensor is inoperative, replace.
	3. Select the motor by U032 and check if the coveying clutch rotates following the other component. (see page 1-3-31)	If stained, replace the clutch.Re-assmeble the clutch so that it is not continuously energized. (Change of wirings, etc.)
	4. Check if the conveying guide is twisted to be mounted.(If the mounting parts of the guide is floated, the actuator won't protrude sufficiently.)	If the bracket is twisted to be mounted, remove the screw fixing the conveying guide and properly mount the bracket in the right position and fix again.
	5. Check no wrinkles are observed at the sluck of paper during paper feeding.	Adjust the cursors to the size of the paper. * : (If paper is fed askew, perform a skew cancellation adjustment of the width adjuster cursor.) (see page 1-5-87)
Conveying sensor non arrival jam (J1503/ J1504)	1. Check to see if the actuator is operative without hinderance.	Re-assemble or replace the actuator's return spring.
SM conveying sensor 2 stay jam (J3415, J3416, J3417)	 2. Perform U030 to check the operation of the motor. Check the transmission of the gear drive using U032. * : Check the convey- ing roller rotates and is movable in the direction of thrust without hinderance. (see page 1-3-29,1- 3-31) 	If the roller won't rotate without hinderance, loosen the screws for adjusting the position (at the gear train bracket) to mount the driving gears, and tighten so that a gap between the gears and frame is eliminated.

Jam types	Check description	Corrective measures
Loop sensor non arrival jam (J4101, J4102, J4103, J4104, J4105, J4106, J4107)	 Check no wrinkles are observed at the sluck of paper during paper feeding. 	Adjust the cursors to the size of the paper. * : (If paper is fed askew, perform a skew cancellation adjustment of the width adjuster cursor.) (see page 1-5-87)
	2. Check that the paper is entirely loaded inside the cassette without being skewed.	Reload paper.
Fuser eject sensor stay jam (J421X) Ejection-full sensor non arrival jam (J460X)	 If paper jam occurrs at the feedshift guide in the eject unit, check if the guide is operative without hinderance. 	If the distance between the housing and the feedshift guide is too small for the guide to move without hinderance, replace the eject unit.
Inversion sensor non arrival jam (J470X)	2. Perform U031 to check if the eject sensor does not show a false detection. (see page 1-3-30)	Replace the defective eject sensor or the eject unit.
Duplex sensors 1 and 2, stuck/ non arrival Jam (J43XX, J44XX)	 Check that the duplex rollers cause slipage in feeding paper. Perform U031 to check 	Clean or replace the duplex roller in the coveying unit. Replace the defective duplex sensors 1 and 2 or the
	if the duplex sensors 1 and 2 do not show false detections.	coveying unit.
	3. Check if the second side of plain paper is curled at its tail and slacked in the middle making the switch disguised as no existance of paper.	Replace the paper with new paper.Try feeding paper lengthwise.

Jam types	Check description	Corrective measures
BR conveying sensor 1/2 unreachable/stay jam (J49XX) Eject sensor non arrival jam (J50XX) Eject sensor stay jam (J51XX) DF paper entry error JAM (J600X)	 Check the location the bridge relay conveying unit is mounted. 	Re-mount.
	2. Check if the positionings of the bridge drive unit is broken.	Replace the bridge drive unit if damaged.
	3. Check the bridge conveying unit has been properly installed.	Re-mount.
	4. Check if the upper conveying guide on the bridge conveying unit has fallen off.	Re-mount. A view of the AK (Bridge) Conveyance Unit Tray being opened Upper guide

Jam types	Check description	Corrective measures
BR conveying sensor 1/2 unreachable/stay jam (J49XX) Eject sensor non arrival jam (J50XX) Eject sensor stay jam (J51XX) DF paper entry error JAM (J600X)	5. Check contamination of the rollers of the bridge eject unit.	Clean or replace the rollers.
	6. Check if the fixed hook part of the bridge eject unit is broken.	Replace the eject unit if damaged.
	7. Check if the rail moutings of the bridge eject unit is broken.	Replace the eject unit if damaged.
	8. Check contamination or abrasion of the axle holders of the bridge eject unit.	Clean the axle holder or replace with a new axle holder.

Jam types	Check description	Corrective measures
BR conveying sensor 1/2 unreachable/stay jam (J49XX) Eject sensor non arrival jam (J50XX) Eject sensor stay jam (J51XX) DF paper entry error JAM (J600X)	9. Check if the pivot of the paper conveying guide of the bridge eject unit has fallen off.	Re-mount.
	10. Check if the ribs of the conveying unit of the bridge eject unit have fallen off.	If a rig is broken, replace the coveying guide.

Jam types	Check description	Corrective measures
DF conveying sensor unreachable jam (J610X) DF conveying sensor retention jam (J611X)	1. Check the main unit and the DF are vertically flush with each other.	Perform the height adjustment by referring to the installation instructions.
	2. Check if the upper conveying guide on the BR conveying unit has fallen off.(Fixing an anti-falling part)	

Jam types	Check description	Corrective measures
DF conveying sensor unreachable jam (J610X) DF conveying sensor	 Check if the jammed paper has a dog-ear. 	1.If thepaper is caught at the hole of the bridge conveying unit and dog-eared and jammed, affix a sheet of film over the hole.
retention jam (J611X)		The hole on the paper conveyance unit
		2.If a down-curled sheet is jammed at the DF conveying guide ribs by being dog-eared, replace the DF conveying lower guide.
	4. Check if dog-ears are caused within the punch unit.	If the edge of paper is caught at the holes of the punch unit, check the punch unit and the firmware version of the DF using U019, and upgrade the firmware of both units altogether.3NK_9A00.003.004 or later, 3NB_9200.004.007 or later, 3NC_9200.004.001 or later
	5. Check if paper is caught at its leading edge to crumple.	If a welding protrusion on the coveying side causes paper to be trapped, try replacing the punch unit.

Jam types	Check description	Corrective measures
DF conveying sensor unreachable jam (J610X) DF conveying sensor retention jam (J611X)	6. If the paper is stuck in front of the conveying roller and it is not damaged, check if it is jammed because it was trapped at the stay punch.	Affix sheets of PET film at the Stay Punch in two parts.
DF intermediate sen- sor retention jam (J631X) DF main tray ejection retention JAM (J641X) DF eject sensor non arrival jam (J6500) DF eject sensor reten- tion jam (J651X)	 If there is not the jammed paper which is causing J631, at the paper processing aria, check to see if the actuator (DF middle sensor) is operative. 	Re-mount the actuator.

Jam types	Check description	Corrective measures
DF intermediate sen- sor retention jam (J631X) DF main tray ejection retention JAM (J641X) DF eject sensor non arrival jam (J6500) DF eject sensor reten- tion jam (J651X)	 Check the range of the up and down movement of the ejection guide. Check if the operating position after feeding in the first sheet is normal. (1)If it moves askew (due to the forward and backward shift of phase on the eject guide) (2)If the range of motion is too small Check if the gap between the ejection roller and the ejection pulleys is approxi- mately 3.5 - 5.5 mm. (Check gaps while making paper still in the intermedi- ate process tray.) 	If the gap is not correct, fix balance of the bundle eject unit. If (1): Correct the phase shifting with meshing of the front and back gears. (Turn on U240 - Motor-EjectUnlock (30) to check the balance of the front and back rollers with the bundle eject unit opened. see page 1-3-104) If (2): Adjust the positioning of or replace the Mount Pl upper guide. If (2): Adjust the positioning of or replace the Mount Pl upper guide.
	 3. Execute maintenance mode U240 Motor - Width Test A3/LD to adjust the position of the width adjuster cursor of the process tray. Check if the cursor is located at 0 - +0.5 from the edge of is abnormally shifted. (The DF and the main unit paper sources) (see page 1-3-104) 	<image/>

Jam types	Check description	Corrective measures
DF intermediate sen- sor retention jam (J631X) DF main tray ejection retention JAM (J641X) DF eject sensor non arrival jam (J6500) DF eject sensor reten- tion jam (J651X)	4. Check if the dog-eared paper, under-curled paper, or the paper fed in a wrong timing is disturbed at the cursor and causing a sluck jam.	Replace the cursor with a new type.
	5. Check if a slack jam and stapling problem has occurred while the paper entered the DF process tray due to the down-curl of the paper at duplex printing since the paper approaches the process tray.	If correcting dog-ears or curlings is not possible, apply two seats of film onto the plastic guides to support the paper ends during feeding.
	6. With stapling at one point with abour 65 sheets, check for the failure on the bundle when it is delivered in the shape of an arc.	 If a wire from the ejection motor is pinched by other component or a connector is loosely connected, correct. If a loss of synchronism is observed with the ejection motor due to lack of torque, replace the motor. If paper slipage occurrs due to the lack of pressure by the ejection rollers, check the pressure rollers (3, at the center) to see if the pressure is insufficient and replace or re- assemble. If a malfunction to encumber the ejection rollers to generate pressure is observed, correct.
	7. With stapling set at 2 points and about 50 sheets, run a test print and check the print bundle delivered for the failure on the direction of ejection and the front and back side, abrupt alignment, and overall alignment.	If the paper is curled, change the direction of loading paper or replace the paper.

Jam types	Check description	Corrective measures
DF intermediate sen- sor retention jam (J631X) DF main tray ejection	8. Check if a floated staple, buckling, or stapling at a wrong position is occurred.	Configure each of the cassettes for the weight of the paper loaded.Replace the paper. Adjust the stapling home position by U246 - Staple HP. (see page 1-3-112)
retention JAM (J641X) DF eject sensor non arrival jam (J6500) DF eject sensor reten- tion jam (J651X)	 9. Check stapling has been properly done if the paper bundle cannot be ejected causing J-6510. * : 4000-sheets finisher 	 Provide instructions with the following points emphasized. 1. Tap the paper to align its ends and load all the way into the cassette. 2. After settings, let go off of the paper.?(Allows automatic ehection after stapling.) 3. Do not remove paper before the paper bundle is ejected once it is stapled.
DF drum sensor non arrival jam (J6600)	Paper is jammed with its leading edge caught by the diversion solenoid 1 in the middle of coveying paths.	Check the axle of the diverting solenoid is inserted all the way into the lever of the DF diverting solenoid 1, and insert the lever firmly if it is not.
DF drum sensor stay jam (J6610)	 Check if the size and orientation of the original document and the paper used match. 	If not agreed, load the paper bundle in the size and orientation configured for the cassette or the manual feed tray.
	2. Check to see if the actuator (DF drum sensor) is operative without hinderance.	If the return spring has been fallen off of the fixing position, fix it properly.If the actuator won't operate smoothly, replace.
Center-folding unit conveying stay JAM (J6710) Center-folding unit conveying stay JAM (J7710)	If paper is jammed before reaching the center-folding unit, check that the drive train gears are in mesh.	If the drive transmission gears are not in mesh, replace the pivot pin of the CF lock lever and the DF fixing pin.

(3) Paper jam at feeding from cassette 1 Electrical parts that could cause paper jam during paper travelling at the primary feeding (to regist roller)

Timing of detection

Jam code
J0501,J0511,J1301,J1311,J4001,J4011

Measures

Related parts		
Paper feed motor(PFM)	Registration sensor (RS)	
Paper feed clutch 1(PFCL1)	Engine PWB (EPWB)	
Assist clutch 1 (ACSL1)*2	Feed PWB 2 (FPWB2)	
Middle clutch (MCL)*1	Feed PWB 1 (FPWB1)	
Middle motor (MM) *2		
Registration clutch (RCL)*1		
Registration motor (RM) ^{*2}		
Feed sensor 1 (FS1)		
Middle sensor (MS)		

Checking procedure at the occurrence of J0501	Corrective action at the occurrence of J0501	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Feed sensor 1 (FS1): Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 2 YC8-11
3	Paper feed clutch (PFCL1): Operation check (U032)	Feed PWB 2 YC4-1
4	Paper feed motor : Operation check (U030)	Feed PWB 2 YC2-3 (RDY), 5 (REM)
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

Checking procedure at the occurrence of J13X	Corrective action at the occurrence of J13X1	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Middle sensor (MS) : Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 2 YC8-9
3	Assist clutch 1 (ACSL1) ^{*2} :Operation check (U032)	Feed PWB 2 YC10-1
4	Middle clutch (MCL) ^{*1} : Middle motor (MM) ^{*2} :Operation check (U032/30)	Feed PWB 2 YC7-14 / YC7-1 to 4
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

Checking procedure at the occurrence of J40X1	Corrective action at the occurrence of J40X1	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Registration sensor (RS): Conduct connectivity check, mounting location check, operation check (U031) and U051 - Slack Margin Settings.	Feed PWB 2 YC7-12
3	Registration clutch (RCL)*1 Registration motor (RM)*2: Operation check (U032/30)	Feed PWB 1 YC22-2 / YC25-1 to 4
4	Feed PWB 1 : Replace	
5	Engine PWB : Replace	

(4) Paper jam at feeding from cassette 2 Electrical parts that could cause paper jam during paper travelling at the primary feeding (to regist roller)

Timing of detection

Jam code	
J0502,J0512,J1502,J1512,J1302,J1312,J4002,J4012	

Corrective Action

Related parts	
Paper feed motor(PFM)	Engine PWB (EPWB)
Paper feed clutch 2 (PFCL2)	Feed PWB 2 (FPWB2)
Assist clutch 2 (ACSL2)*2	Feed PWB 1 (FPWB1)
Middle clutch (MCL) ^{*1} Middle motor (MM) ^{*2}	
Registration clutch (RCL) ^{*1} Registration motor (RM) ^{*2}	
Vertical conveying clutch (PCCL)	
Feed sensor 2 (FS2)	
Paper conveying sensor (PCS)	
Middle sensor (MS)	
Registration sensor (RS)	

Checking procedure at the occurrence of J05X2	Corrective action at the occurrence of J05X2	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Feed sensor 2 (FS2): Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 2 YC8-23
3	Paper feed clutch (PFCL1): Operation check (U032)	Feed PWB 2 YC4-1
4	Paper feed motor : Operation check (U030)	Feed PWB 2 YC2-3(RDY), 5(REM)
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

Checking procedure at the occurrence of J13X2	Corrective action at the occurrence of J13X2	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Middle sensor (MS) : Conduct connectivity check, mounting location, check operation check (U031)	Feed PWB 2 YC8-21
3	Vertical conveying clutch (PCCL): Operation check (U032)	Feed PWB 2 YC5-3
4	Middle clutch (MCL) ^{*1} Middle motor (MM) ^{*2} :Operation check (U032/30)	Feed PWB 2 YC7-14 / YC7-1 to 4
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only

Checking procedure at the occurrence of J15X2	Corrective action at the occurrence of J15X2	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Conveying sensor (PCS) I/O check and sensor check (U031)	Feed PWB 2 YC6-3
3	Vertical conveying clutch (PCCL): Operation check (U032)	Feed PWB 2 YC5-3
4	Assist clutch 2 (ACSL2) *2?Operation check (U032)	Feed PWB 2 YC12-1
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

*2: 45 ppm model /55 ppm model only.

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Checking procedure at the occurrence of J40X2	Corrective action at the occurrence of J40X2	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Registration sensor (RS): Conduct connectivity check, mounting location check, operation check U031 and U051 - Slack Margin Settings.	Feed PWB 2 YC7-12

Checking procedure at the occurrence of J40X2	Corrective action at the occurrence of J40X2	On/Off control signal output connector (terminal), point of checking connection
3	Registration clutch (RCL)*1 Registration motor (RM)*2: Operation check (U032/30)	Feed PWB 1 YC22-2 / YC25-1 to 4
4	Feed PWB 1 : Replace	
5	Engine PWB : Replace	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

(5) Paper jam during manual feeding

Electrical parts that could cause paper jam during paper travelling at the primary feeding (to regist roller)

Timing of detection

Jam code
J0131,J0509,J0519,J4009,J4019

Corrective Action

Related parts	
Paper feed motor(PFM)	Engine PWB (EPWB)
Manual feed clutch (MPPFCL)	Feed PWB 1 (FPWB1)
Middle clutch (MCL) ^{*1} Middle motor (MM) ^{*2}	Relay PWB (RYPWB) * : In paper conveying unit
Registration clutch (RCL) ^{*1} Registration motor (RM) ^{*2}	
MP feed sensor (MPFS)	
Registration sensor (RS)	
Manual feed lift motor (MPLM)	
MP lift sensor 1 (MPLS1)	
MP lift sensor 2 (MPLS2)	

Checking procedure at the occurrence of J05X9	Corrective action at the occurrence of J05X9	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	MP feed sensor (MPFS): Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 1 YC17-9
3	Manual feed conveying clutch (CL): Operation check (U032)	Feed PWB 2 YC4-1
4	Middle clutch (MCL) ^{*1} Middle motor (MM) ^{*2} : Operation check (U032/30)	Feed PWB 2 YC7-14 / YC7-1 to 4
5	Feed PWB 2: Replace	
6	Engine PWB : Replace	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

Checking procedure at the occurrence of J40X9	Corrective action at the occurrence of J40X9	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Registration sensor (RS): Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 2 YC7-12
3	Registration clutch (RCL)*1 Registration motor (RM)*2: Operation check (U032/30)	Feed PWB 1 YC22-2 / YC25-1 to 4
4	Feed PWB 1 : Replace	
5	Engine PWB : Replace	

Checking procedure at the occurrence of J0131	Corrective action at the occurrence of J0131	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	 Manual feed lift base elevation check: 1. Up-and-down movability of the paper lift base of the manual feed tray. 2. Check if the lift lever is in contact with the lift motor cam (re-mount the manual feed table). 	-

Checking procedure at the occurrence of J0131	Corrective action at the occurrence of J0131	On/Off control signal output connector (terminal), point of checking connection
3	MP lift sensors 1 and 2: Check for connection and the position of the sensor to be mounted.	Relay PWB (YC3-5, YC3-8) (YC12)
4	MP lift motor: Check if the paper lift base is raised as the motor rotates.	Relay PWB(YC3-11), (YC12)
5	Feed PWB 1 : Replace	Feed PWB 1(YC17),(YC1)
6	Engine PWB : Replace	Engine PWB (YC6)

(6) Paper jam at the duplex re-feeding part Electrical parts that could cause paper jam during paper travelling at the primary feeding (to regist roller)

Timing of detection

Jam code	
J0508,J0518	

Corrective Action

Related parts	
Paper feed motor(PFM)	Engine PWB (EPWB)
Duplex clutch 2 (DUCL2)*1 Duplex motor 2 (DUM2)*2	Feed PWB 1 (FPWB1)
Duplex sensor 2 (DUS2)	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

Checking procedure at the occurrence of J05X8	Corrective action at the occurrence of J05X8	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Duplex sensor 2 (DUS2): Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 1 YC 14-5
3	Duplex clutch 2 (DUCL2)*1 Duplex motor 2 (DUM2)*2: Operation check (U032/30)	Feed PWB 1 YC 14-12 / YC14-14 to 17
4	Check that the drive from the paper feed motor is transferred to the duplex roller. *: 35 ppm model only.	
5	Feed PWB 1 : Replace	
6	Engine PWB : Replace	

(7) Electrical parts that could cause paper jam at the transfer part

Timing of detection

Jam code	
J410x,J411x	

Corrective Action

Related parts	
Transfer belt drive	Engine PWB (EPWB)
Registration clutch (RCL) ^{*1} Registration motor (RM) ^{*2}	Feed PWB 1 (FPWB1)
Loop sensor (LPS)	Relay PWB (RYPWB) * : In paper conveying unit

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

Chaoling		
Checking		
procedure at the	Corrective action at the occurrence of	On/Off control signal output connector
occurrence of	J41XX	(terminal), point of checking connection
J41XX		
1	Items for Initial Checks	see page 1-4-23
2	Loop sensor (LPS) : Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 1 YC23-11
3	Registration clutch (RCL)*1 Registration motor (RM)*2: Operation check (U032/30)	Feed PWB 1 YC22-2 / YC25-1 to 4
4	Check that the drive from the transfer belt unit.	
5	Check how the conveying unit and the main unit drawer are connected (such as a fallen pin) and, if they are normal, replace the relay PWB.	
6	Feed PWB 1 : Replace	
7	Engine PWB : Replace	

(8) Electrical parts that could cause paper jam at the fuser and eject parts

Timing of detection

Jam code	
J420x,J421x,J460x,J461x,J470x,J471x	

Corrective Action

Related parts	
Fuser motor (FUM)	Engine PWB (EPWB)
Eject motor (EM)	Front PWB (FRPWB)
Feedshift solenoid (FSSOL)	
Fuser eject sensor (FUES)	
Eject full sensor (EFS)	
Switchback sensor (SBS)	
JS eject motor (JSEM) * : The job separator is installed.	

Checking procedure at the occurrence of J42XX	Corrective action at the occurrence of J42XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Fuser eject sensor (FUES) : Conduct connectivity check, mounting location check, operation check (U031)	Engine PWB YC26-A13
3	feedshift solenoid (FSSOL): feedshift guide check (U033)	Front PWB YC4-15REM), 16(RET)
4	Fuser motor (FUM) : Operation check (U030)	Feed PWB 1 YC18-3(RDY), 5(REM)
5	Engine PWB : Replace	

Checking procedure at the occurrence of J46XX	Corrective action at the occurrence of J46XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Eject full sensor (EFS) : Conduct connectivity check, mounting location check, operation check (U031)	Front PWB YC3-4
3	feedshift solenoid (FSSOL): feedshift guide check (U033)	Front PWB YC4-15REM), 16(RET)
4	Eject motor (EM) : Operation check (U030)	Front PWB YC3-6 to 10
5	Front PWB (FRPWB): Replace	
6	Engine PWB : Replace	

Checking procedure at the occurrence of J47XX	Corrective action at the occurrence of J47XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Switchback sensor (SBS) : Conduct connectivity check, mounting location check, operation check (U031)	Front PWB YC4-9
3	feedshift solenoid (FSSOL): feedshift guide check (U033)	Front PWB YC4-15REM), 16(RET)
4	Job separator eject motor (JSEM): Operational check (U030)	JS main circuit PWB: YC2-4, 5, 6, 7, YC-1 Feed PWB 1: YC20
5	Engine PWB : Replace	Engine PWB : YC7 Front PWB : YC3

(9) Electrical parts that could cause paper jam at the duplex part

Timing of detection

Jam code
J430x,J431x,J440x,J441x

Corrective Action

Related parts		
Paper feed motor(PFM)	Engine PWB (EPWB)	
Duplex clutch 1 (DUCL1) ^{*1} Duplex motor 1 (DUM1) ^{*2}	Relay PWB (RYPWB) * : In paper conveying unit	
Duplex clutch 2 (DUCL2) ^{*1} Duplex motor 2 (DUM2) ^{*2}	Feed PWB 1 (FPWB1) J440X	
Duplex sensor 1 (DUS1)		
Duplex sensor 2 (DUS2)		

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

Checking procedure at the occurrence of J43XX	Corrective action at the occurrence of J43XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Duplex sensor 1 (DUS1) : Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 1 YC23-1
3	Duplex clutch 1 (DUCL1)*1 Duplex motor 1 (DUM1)*2: Operation check (U032/30)	Feed PWB 1 YC23-4 /YC23-6 to 9
4	Is the drive from the paper feed motor chaned to the upper and lower duplex rollers.	
5	Check how the conveying unit and the main unit drawer are connected and, if they are normal, replace the feed circuit PWB1.	
6	Feed PWB 1(FPWB1) : relpace	
7	Engine PWB : Replace	

Checking procedure at the occurrence of J44XX	Corrective action at the occurrence of J44XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	Duplex sensor 2 (DUS2) : Conduct connectivity check, mounting location check, operation check (U031)	Feed PWB 1 YC14-5
3	Duplex clutch 2 (DUCL2)*1 Duplex motor 2 (DUM2)*2: Operation check (U032/30)	Feed PWB 1 YC14-12 / YC14-14 to 17
4	Check how the conveying unit and the main unit drawer are connected and, if they are normal, replace the feed circuit PWB1.	
5	Feed PWB 1(FPWB1) : relpace	
6	Engine PWB : Replace	
7	Relay PWB (RYPWB) : Replace	

*1: 35 ppm model only. *2: 45 ppm model /55 ppm model only.

(10) Electrical parts that could cause paper jam at the BR (bridge) part

Timing of detection

Jam code	
J490x,J491x,J500x,J501x,J510x,J511x	

Related parts	
BR conveying motor 1 (BRCM1)	Engine PWB (EPWB)
BR conveying motor 2 (BRCM2)	BR PWB (BRPWB)
BR conveying sensor 1 (BRCS1)	
BR conveying sensor 2 (BRCS2)	
BR eject sensor (BRES)	
BR feedshift solenoid (BRSOL)	

Checking procedure at the occurrence of J49XX	Corrective action at the occurrence of J49XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	BR conveying sensor 1 (BRCS1) : Conduct connectivity check, mounting location check, operation check (U031)	BR PWB YC6-2
3	BR conveying motor 1 (BRCM1) : Operation check (U030)	BR PWB YC7-1 to 4
4	BR PWB (BRPWB) : Replace	
5	Engine PWB : Replace	

Checking procedure at the occurrence of J50XX	Corrective action at the occurrence of J50XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	BR conveying sensor 2 (BRCS2) : Conduct connectivity check, mounting location check, operation check (U031)	BR PWB YC4-2
3	BR conveying motor 2 (BRCM2) : Operation check (U030)	BR PWB YC7-5 to 8
4	BR PWB (BRPWB) : Replace	

Checking procedure at the occurrence of J50XX	Corrective action at the occurrence of J50XX	On/Off control signal output connector (terminal), point of checking connection
5	Engine PWB : Replace	

Checking procedure at the occurrence of J51XX	Corrective action at the occurrence of J51XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	BR eject sensor (BRES) : Conduct connectivity check, mounting location check, operation check (U031)	Engine PWB YC20-17
3	BR feedshift solenoid (BRSOL): Check for switching feedshift guide (U033)	Engine PWB YC20-12(ACT), 13(RET)
4	BR PWB (BRPWB) : Replace	
5	Engine PWB : Replace	

(11) Electrical parts that could cause paper jam at the DF paper entry,feedshift and subtray left eject part

Timing of detection

Jam code
J610x,J611x,J620x,J621x,J630x,J631x

Related parts		
DF paper entry motor (DFPEM)	DF feedshift solenoid 3 (DFFSSOL)	
DF middle motor (DFMM)	DP main PWB (DFMPWB)	
DF eject motor (DFEM)		
BR conveying motor 1 (BRCM1)		
BR conveying motor 2 (BRCM2)		
DF paper entry sensor (DFPES)		
DF middle sensor (DFMES)		
DF sub eject sensor (DFSES)		

Checking procedure at the occurrence of J61XX	Corrective action at the occurrence of J61XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF paper entry sensor (DFPES) : Conduct connectivity check, mounting location check, operation check (U241:Finisher HP)	DF main PWB YC21-9
3	DF feedshift solenoid 3 (DFFSSOL): Check to see the feedshift guide 3 is switchable (U240 Solenoied - SubTray)	DF main PWB YC18-12,13
4	DF paper entry motor (DFPEM) : Operation check (U240 :Motor →Feed In(H),Feed In(L))	DF main PWB YC12-13 to 16
5	BR conveying motor 1 (BRCM1) , BR conveying motor 2 (BRCM2) : Operation check (U030 Bridge1 , Bridge2)	
6	DF main PWB(DFMPWB) : Replace	

Checking procedure at the occurrence of J62XX	Corrective action at the occurrence of J62XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF sub eject sensor (DFSES) : Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC21-3
3	DF feedshift solenoid 3 (DFFSSOL): Check to see the feedshift guide 3 is switchable (U240)	DF main PWB YC18-12,13
4	DF paper entry motor (DFPEM): Operation check (U240)	DF main PWB YC12-13 to 16
5	DF eject motor (DFEM) : Operation check (U240)	DF main PWB YC12-5 to 8
6	DF main PWB(DFMPWB) : Replace	

Checking procedure at the occurrence of J63XX	Corrective action at the occurrence of J63XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF middle sensor (DFMES):Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC20-6
3	feedshift solenoid 3 (DFFSSOL): Check to see the feedshift guide 3 is switchable (U240)	DF main PWB YC18-12,13
4	DF paper entry motor (DFPEM): Operation check (U240)	DF main PWB YC12-13 to 16
5	DF middle motor (DFMM) : Operation check (U240)	DF main PWB YC10-5 to 8
6	DF main PWB(DFMPWB) : Replace	

(12) Electrical parts that could cause paper jam at the DF process part

Timing of detection

Jam code
J6500,J651x,J6600,J6610

Related parts	
DF middle motor (DFMM)	DF main PWB(DFMPWB)
DF drum motor (DFDRM)	
DF bundle eject sensor (DFBDS)	
DF drum sensor (DFDRS)	
DF feedshift solenoid 1 (DFDRSOL)	

Checking procedure at the occurrence of J65XX	Corrective action at the occurrence of J65XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF middle sensor (DFMES):Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC20-6
3	DF bundle eject sensor (DFBDS) : Conduct connectivity check, mounting location, operation (U241)	DF main PWB YC22-27
4	DF middle motor (DFMM) : Operation check (U240)	DF main PWB YC12-9 to 12
5	DF main PWB(DFMPWB) : Replace	

Checking procedure at the occurrence of J66XX	Corrective action at the occurrence of J66XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF drum sensor (DFDRS) : Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC20-3
3	DF feedshift solenoid 1 (DFDRSOL): Check to see the feedshift guide 1 is switchable (U240)	DF main PWB YC18-12,13

Checking procedure at the occurrence of J66XX	Corrective action at the occurrence of J66XX	On/Off control signal output connector (terminal), point of checking connection
4	DF drum motor (DFDRM) : Operation check (U240)	DF main PWB YC18-1 to 4
5	DF main PWB(DFMPWB) : Replace	

(13) Electrical parts that could cause paper jam at the DF eject tray part

Timing of detection

Jam code	
J640x,J641x	

Related parts	
DF eject motor (DFEM)	DF main PWB(DFMPWB)
DF tray motor (DFTM)	
DF middle sensor (DFMES)	
DF tray upper sensor 1 and 2 (DFTUSS 1,2)	

Checking procedure at the occurrence of J64XX	Corrective action at the occurrence of J64XX	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF middle sensor (DFMES):Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC20-6
3	DF tray upper sensor 1 and 2 (DFTUSS1, 2) : Conduct connectivity check, mounting location, operation (U241)	DF main PWB YC21- 19(DFTUSS1),YC13-3(DFTUSS2)
4	DF eject motor (DFEM): Operational check (U240)	DF main PWB YC12-5 to 8
5	DF tray motor (DFTM) : Operation check (U240)	DF main PWB YC19-4
6	DF main PWB(DFMPWB) : Replace	

(14) Electrical parts that could cause paper jam at the CF conveying part

Timing of detection

Jam code
J6710,J7700,J7710

Related parts	
DF drum motor (DFDRM)	DF main PWB(DFMPWB)
CF paper entry motor (CFPEM)	CF PWB (CFPWB)
DF drum sensor (DFDRS)	
CF conveying sensor (CFPCS)	

Checking procedure at the occurrence of J671X	Corrective action at the occurrence of J671X	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	DF drum sensor (DFDRS) : Conduct connectivity check, mounting location check, operation check (U241)	DF main PWB YC20-3
3	DF drum motor (DFDRM) : Operation check (U240)	DF main PWB YC18-1 to 4
4	CF paper entry motor (CFPEM): Check if the gears can chain the drive.	CF PWB YC18-1 to 4
5	DF main PWB(DFMPWB) : Replace	
6	CF PWB (CFPWB): Replace	

Checking procedure at the occurrence of J77X0	Corrective action at the occurrence of J77X0	On/Off control signal output connector (terminal), point of checking connection
1	Items for Initial Checks	see page 1-4-23
2	CF conveying sensor (CFPCS) : Conduct connectivity check, mounting location check, operation check (U241)	CF PWB YC20-15
3	CF paper entry motor (CFPEM): Check if the gears can chain the drive.	CF PWB YC18-1 to 4
4	DF main PWB(DFMPWB) : Replace	
5	CF PWB (CFPWB): Replace	

1-4-3 Self-diagnostic function

(1) Self-diagnostic function

This machine is equipped with self-diagnostic function. When a problem is detected, the machine stops printing and display an error message on the operation panel. An error message consists of a message prompting a contact to service personnel and a four-digit error code indicating the type of the error.

(2) Self diagnostic codes

If the part causing the problem was not supplied, use the unit including the part for replacement **Caution:**

Before attempting to check the power supply, fuser unit, and the IH controller PWB, be sure to turn the power switch off and unplug the machine from power. Allow at least 5 seconds before starting to conduct service until the capacitors on the circuit boards have been completely discharged.

To reset a service call for fuser, performing U163 Fuser Defects is required. (See page 1-3-90) To reset a service call regarding the Maintenance T display and the DP, performing U906 Disconnection at Defect is required. (See page 1-3-167)

Code	Contents	Related parts	Check procedures/ corrective measures
0030	FAX control PWB system error Processing with the fax soft- ware was disabled due to a software problem.	FAX control PWB	 Turn the main power swtch off and after 5 seconds, re-mount the FAX controller PWB, then turn power on. Reinstall the fax software. Replace the FAX control PWB.
0060	Engine PWB mismatch Unmatching engine and engine sub boards. Defective engine subboard	Engine PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. Replace the engine PWB (see page 1-5- 52).
0070	FAX control PWB incompat- ible detection error Abnormal detection of FAX control PWB incompatibility In the initial communication with the FAX control PWB, any normal communication com- mand is not transmitted.	FAX control PWB (The FAX PWB installed will not be the one designed for the machine.)	 Install the FAX system designed for the model. Reinstall the fax software.
0100	Backup memory device error	EEPROM(main PWB)	 Turn the main power swtch off and after 5 seconds, then turn power on. Check that the EEPROM on the main circuit PWB is peroperly installed on the main circuit PWB and, if not, re-install it. Replace the main PWB (see page 1-5- 47).
0120	MAC address data error For data in which the MAC address is invalid.	EEPROM(main PWB)	 Turn the main power swtch off and after 5 seconds, then turn power on. Check the MAC address on the network status page. If it is blank, obtain an EEPROM with its MAC address written from the service support and install. Replace the main PWB (see page 1-5- 47).

Code	Contents	Related parts	Check procedures/ corrective measures
0150	Backup memory read/write error (engine PWB) No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated 5 times successively. Mismatch of reading data from 2 locations occurs 8 times successively. Mismatch between writing data and reading data occurs 8 times successively.	EEPROM (engine PWB)	 Turn the main power swtch off and after 5 seconds, then turn power on. Check that the EEPROM is peroperly installed on the engine PWB and re- install it. Replace the engine PWB (see page 1-5- 52). Check the EEPROM and if the data are currupted, contact the service support.
0160	Backup memory data error (engine PWB) Reading data from EEPROM is abnormal.	EEPROM	 Turn the main power swtch off and after 5 seconds, then turn power on. Execute U021 - memory initializing.(see page 1-3-27) If the EEPROM data are currupted, contact the service support.
0170	Billing counting error The values on the main circuit PWB and on the engine do not match for any of charging counter, life counter, and scanner counter.	EEPROM	 Check that the EEPROMs installed in the main PWB and the engine PWB are correct and, if not, use the correct EEPROM for the model. If the EEPROM data are currupted, contact the service support.
		Main PWB	Replace the main PWB (see page 1-5-47).
		Engine PWB	Replace the engine PWB (see page 1-5-52).
0180	Machine number mismatch Machine number of main and engine does not match.	Data damage of EEPROM.	 Confirm the machine data for the main and engine units by using U004 (see page 1-3-23). If the serial number data of different models is alternately displayed, install the correct EEPROM in the PWB of the wrong serial number data. Contact the Service Support.
0620	FAX image DIMM error1. The Fax image DIMM has not been installed.2. Fax image DIMM access error.	FAX image DIMM	 Install the FAX image DIMM supplied in the FAX system onto the main PWB. Firmly install the FAX image DIMM again onto the main board. Check the FAX image DIMM terminals and remove any foreign objects that may be adhered to it. Replace with a new FAX image DIMM.
		Main PWB.	Replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
0630	DMA error DMA transmission of image data does not complete within the specified period of time.	DP CIS	 Reconnect the CIS signal line. Confirm that the CIS connector terminals are firmly connected. Insert the connector all the way in. If the wiring is disconnected, shorted or grounded, replace the wiring.
		DP main PWB Main PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. If the wiring is disconnected, shorted or grounded, replace the wiring. Wiring that connects the CIS and the DP controller PWB. Wiring that connects the DP main PWB and the main PWB. Replace the DP main PWB. Replace the main PWB (see page 1-5- 47).
0640	Hard disk error The hard disk cannot be accessed.	HDD	 If an abnormal noise is heard from the HDD, replace the HDD. Check the SATA wiring between the HDD and the main circuit PWB for loose connection, disconnection and damages, and that it is connected into the correct terminal. Main PWB: YC1,YC27 Replace the SATA cable. Execute U024 to initialize (FULL) the HDD (see page 1-3-28). If an error is detected after executing U024, replace the HDD.
		Main PWB	Replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
0650	FAX image DIMM check error A fax image DIMM which was used with another machine is installed.	FAX DIMM.	 Confirm that a used FAX image DIMM was used instead of the FAX image DIMM contained in the FAX system. If a DIMM that was used with other unit has been installed, execute maintenance mode U671 - Recovery FAX DIMM. Check whether the Fax DIMM is properly inserted into the socket on the main PWB. Replace with a new FAX image DIMM.
		Main PWB	Replace the main PWB (see page 1-5-47).
0800	Image processing error JAM010X is detected twice.	Main PWB	Replace the main PWB (see page 1-5-47).
0830	FAX control PWB flash pro-	FAX software	1. Reinstall the fax software.
	gram area checksum error A checksum error occurred with the program of the FAX control PWB.	FAX control PWB	 Execute initializing by U600.(Refer to the FAX service manual) Replace the FAX control PWB.
0840	Faults of RTC (Maintenance T is displayed) The time is judged to go back based on the comparison of the RTC time and the current time or five years or more have passed. After C840 is detected, the machine enters in disconnec- tion mode after the main power switch has been	Battery (main PWB)	 Make sure that the back-up batteries on the main PWB are not short-circuited. Reset Maintenance T by executing U906 (see page 1-3-167). If the same C call is displayed when power is switched on and off, replace the back up battery. If communication error (due to a noise, etc.) is present with the RTC on the main circuit PWB, check the PWB is properly grounded.
	switched on and off and indi- cates 'Maintenance T.'	Main PWB	Replace the main PWB (see page 1-5-47).
0870	0870 PCFAX control PWB to main PWB high capacity data transfer error High-capacity data transfer between the FAX control PWB and the main PWB of the machine was not normally performed even if the data transfer was retried the speci- fied times.	FAX control PWB	 Turn the main power swtch off and after 5 seconds, re-mount the FAX controller PWB, then turn power on. Replace the FAX control PWB.
		HDD	Execute U024 to initialize the HDD (see page 1-3-28).
		Main PWB	Replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
0920	Fax file system error The backup data is not retained for file system abnor- mality of flash memory of the FAX control PWB.	FAX control PWB	 Execute initializing by U600 (Refer to the FAX service manual). Replace the FAX control PWB.
0970	12 V power down detect Detection of the temporary blackout during sleeping (24V is off, 23V is on, only the con- troller software is running)	Power source PWB	 Check the +12V output is given at YC14 of the power source PWB. Replace the power source PWB (see page 1-5-66).
0980	24 V power down detect If a 24V power disconnection signal is observed and a 12V power disconnection signal is observed simultaneously for one second.	Power source PWB	 Check the +24V output is given at YC9 (30/35 ppm) or YC12 (45/55 ppm) of the power circuit PWB. Replace the power source PWB (see page 1-5-54)

Code	Contents	Related parts	Check procedures/ corrective measures
1000	MP lift motor error If the MP lift sensor 1 (upper limit detect) or 2 (bottom detect) is not detectable to be turned on while the MP lift motor is ascending or descending.	Manual feed lift base elevating mechanism	 Check that the paper lift base of the manual feed tray can smoothly ascend and descent, if not, repair or replace. Check that the lift lever is located so that it can ascend or descend by the lift motor cam and that it not damaged and, if necessary, re-install or replace the manual feed table.
		MP lift motor	 Check that the paper elevator has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MP lift motor and Relay PWB (YC3) Relay PWB (YC12) and Feed PWB1 (YC17) Feed PWB1 (YC1) and Engine PWB (YC6) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the MP lift motor.
		MP lift sensor1 MP lift sensor2	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MP lift sensor1,2 and Relay PWB (YC3) Relay PWB (YC12) and Feed PWB1(YC17) Feed PWB1 (YC1) and Engine PWB (YC6) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the MP lift sensor1 or MP lift sensor2.
		Feed PWB 2	Replace the Feed PWB 2.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
1010	After cassette 1 is inserted, lift sensor 1 does not turn on	Cassette lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		Lift motor 1	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Lift motor 1 and Feed PWB 2 (YC3) Feed PWB 2 (YC1) and Engine PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the lift motor 1.
		Lift sensor 1	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Lift sensor 1 and Feed PWB 2 (YC8) Feed PWB 2 (YC1) and Engine PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the lift sensor1.
		Feed PWB 2 Engine PWB	 Replace the Feed PWB 2. 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
1020	After cassette 2 is inserted, lift sensor 2 does not turn on	Cassette lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		Lift motor 2	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Lift motor 2 and Feed PWB 2 (YC3) Feed PWB 2 (YC1) and Engine PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the lift motor 2.
		Lift sensor 2	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Lift sensor 2 and Feed PWB 2 (YC8) Feed PWB 2 (YC1) and Engine PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the lift sensor2.
		Feed PWB 2 Engine PWB	 Replace the Feed PWB 2. 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
1030	PF lift motor 1 error (paper feeder) After cassette 3 is inserted,	Cassette lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
	PF lift sensor 1 does not turn on within 12 s. This error is detected 5 times successively. During driving the motor, the lift overcurrent protective monitor signal is detected for 1 s or more 5 times succes- sively. However, the first 1 s after motor is turned on is excluded from detection.	PF Lift motor 1	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift motor 1 and main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. PFReplace the lift motor 1.
		PF Lift sensor 1	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift sensor 1 and PF main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the lift sensor 1.
		PF main PWB	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Related parts	Check procedures/ corrective measures
1040	PF lift motor 2 error (paper feeder) After cassette 4 is inserted, PF lift sensor 2 does not turn on within 12 s. This error is detected 5 times successively. During driving the motor, the lift overcurrent protective monitor signal is detected for 1 s or more 5 times succes- sively. However, the first 1 s after motor is turned on is excluded from detection.	Cassette lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		PF Lift motor 2	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift motor 2 and PF main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF Lift motor2.
		PF Lift sensor 2	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift sensor 2 and PF main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF Lift sensor 2.
		PF main PWB	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Related parts	Check procedures/ corrective measures
1100	PF lift motor 1 error (large capacity feeder) After cassette 3 is inserted, PF lift sensor 1 does not turn on within 23 s. This error is detected 5 times successively. (Time to detect is 2 seconds at the second time and later.) During driving the motor, the lift overcurrent protective monitor signal is detected for 200 ms or more 5 times suc- cessively. However, the first 1 s after PF lift motor 1 is turned on is excluded from detection.	Paper feeder lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		PF Lift motor1	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift motor 1 and PF main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF lift motor1.
		PF Lift sensor1	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift sensor 1 and PF main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF lift sensor1.
		PF main PWB	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Related parts	Check procedures/ corrective measures
1110	PF lift motor 2 error (large capacity feeder) After cassette 4 is inserted, PF lift sensor 2 does not turn on within 23 s. This error is detected 5 times successively. (Time to detect is 2 seconds at the second time and later.) During driving the motor, the lift overcurrent protective monitor signal is detected for 200 ms or more 5 times suc- cessively. However, the first 1 s after PF lift motor 2 is turned on is excluded from detection.	Paper feeder lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		PF Lift motor 2	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift motor 2 and PF main PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF Lift motor2.
		PF Lift sensor2	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF Lift sensor 2 and PF main PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the PF Lift sensor 2.
		PF main PWB	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Related parts	Check procedures/ corrective measures
1140	SD lift motor error (side deck) After cassette 5 is inserted, SD lift sensor does not turn on within 30 s. The lock signal of the motor is detected continuously for 200 ms.	Paper feeder lift base elevating mechanism	Check that the cassette base can be manipulated smoothly, if not, repair or replace.
		SD Lift motor	 Check that the cassette base has been ascended. Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. SD Lift motor and SD main PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the SD Lift motor.
		SD Lift sensor	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. SD Lift sensor and SD main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the SD Lift sensor.
		SD main PWB	Replace the SD main PWB (Refer to the service manual for the paper feeder).
1400	Rotary guide motor error The guide sensor is not detected to be on at the home position detection with the rotary guide for three times in a row.	Rotary guide motor	 Check the rotary guide and drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Rotary guide motor and BR PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the rotary guide motor.
		BR PWB	Replace the BR PWB.

Code	Contents	Related parts	Check procedures/ corrective measures
1710	Side multi tray incompatible detection error The side multi tray has been installed with a device to which it is incompatible.	The side multi tray is installed with a device to which it is incompatible.	Install the side multi-tray with the target model.
1800	Paper feeder communica- tion error A communication error from paper feeder is detected 10 times in succession.	Paper feeder PF main PWB Engine PWB	 Check the wiring connection status with the main unit and, if necessary, try connecting it again. 1. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF main PWB (YC13) and Engine PWB (YC19) 2. If the wiring is disconnected, shorted or grounded, replace the wiring. 3. Replace the PF main PWB (Refer to the service manual for the paper feeder). 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
Code 1900	Contents Paper feeder EEPROM error When writing the data, read and write data does not match 3 times in succession.	Related parts PF main PWB (EEPROM)	

Code	Contents	Related parts	Check procedures/ corrective measures
2101	Developer motor error After developer motor is driven, the ready signal does not turn to L within 5 s. After developer motor is stabi- lized, the ready signal is at the H level for 5 s continuously.	Developer unit	 Check that the developer waste lock has been released and, if not, release the lock (see page 1-2-12). Check that the gears and spiral screw of the developer unit are not damaged. Confirm that the developer roller can rotate. If it won't rotate, replace the developer unit (see page 1-5-35).
		Developer motor	 To check the motor operation, execute DLP(K) by U030 (see page 1-3-29). Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer motor and Feed PWB 1 (YC8) Feed PWB 1 (YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Developer motor.
		Motor control PWB	Replace the Motor control PWB
		Engine PWB.	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
2201	drum motor steady-state error After drum motor is stabilized, the ready signal is at the H	Drum unit	 Confirm that the drum or the drum screw can rotate. If it won't rotate, replace the drum unit. (see page 1-5-36)
	level for 5 s continuously.	drum motor	 Check the drive gear can rotate or they are not unusually loaded and, if neces- sary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. drum motor and Feed PWB 1 (YC9) Feed PWB 1 (YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the drum motor (see page 1-5- 67).
		Motor control PWB	Replace the Motor control PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
2211	Drum motor startup error Drum motor is not stabilized within 2 s since the motor is activated.	Drum unit	 Check the drive gear can rotate or they are not unusually loaded and, if neces- sary, replace. Confirm that the drum or the drum screw can rotate. If it won't rotate, replace the drum unit (see page 1-5-36).
		drum motor	 Confirm that the wiring connector is firmly connected and, if necessary, con- nect the connector all the way in. drum motor and Feed PWB 1 (YC9) Feed PWB 1 (YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the drum motor (see page 1-5- 67).
		Motor control PWB	Replace the Motor control PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
2300	Fuser motor error After fuser motor is driven, the ready signal does not turn to L within 2 s. After fuser motor is stabilized, the ready signal is at the H level for 1 s continuously.	Fuser motor	 To check the motor operation, execute U030 Fuser (Fuser motor) (see page 1- 3-29). Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser motor and Feed PWB 1(YC18) Feed PWB 1(YC1) and Engine PWB (YC6) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the fuser motor (see page 1-5- 70).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
		Feed PWB 1	Replace the Feed PWB 1.
		Fuser unit	Replace the fuser unit (see page 1-5-45).
2500	Paper feed motor error After paper feed motor is driven, the ready signal does not turn to L within 2 s. After paper feed motor is sta- bilized, the ready signal is at the H level for 1 s continu- ously.	Paper feed motor	 To check the motor operation execute U030 Feed (paper feed motor) (see page 1-3-29). Check the paper feed roller and drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Paper feed motor and Feed PWB 2(YC2) Feed PWB 2(YC1) and Engine PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the paper feed motor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
2550	Transfer motor error After Transfer motor is driven, the ready signal does not turn to L within 2 s. After Transfer motor is stabi- lized, the ready signal is at the H level for 1 s continuously.	Transfer motor	 Check the drive gear can rotate or they are not unusually loaded and, if neces- sary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Transfer motor and Relay PWB(YC6) Relay PWB(YC5) and Feed PWB 1 (YC13) Feed PWB 1 (YC1) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Transfer motor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
2600	PF paper feed motor error (large capacity feeder) After PF paper feed motor is driven, the ready signal does not turn to L within 2 s.	PF paper feed motor	 To check the feed unit operation, exe- cute U247 LCF- Motor ON (see page 1- 3-118). Check the paper feed roller and drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. PF paper feed motor and PF main PWB (YC16) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the paper feed motor.
		PF main PWB	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Related parts	Check procedures/ corrective measures
2810	Waste toner motor error Initialized when an error is constantly observed for 2 sec- onds after the inner motor is activated.	Waste toner box	 Rotate the waste toner spiral by the hand and check that they are not unusually loaded. If the spiral won't rotate, replace the waste toner tank.
	An error is detected twice for 2.5 seconds after rebooting. The lock detect signal won't be H level three times in a row within 200 ms at 1.25 ms cycles after the waste toner motor has been driven.	Waste toner motor	 Rotate the drive gear by the hand and check that they are not unusually loaded. Clean the drive gears and the axle holder. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Waste toner motor and Front PWB (YC13) Front PWB (YC3) and Engine PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the waste toner motor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
3100	Scanner carriage error The home position is not cor- rect when the power is turned	The scanner mirror frame is being locked after setup.	Check whether the scanner mirror frame has been unlocked and unlock if necessary (see page 1-2-7).
	on, at the end of a reading process of the table and docu- ment processor.	Scanner motor	 To check the scanner motor, execute U073 (see page 1-3-58). Move the scanner by the hand to check whether it is unusually difficult to move. Check that the optical wire rope is not disengaged and engage the wire. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Scanner motor and ISC PWB (YC5) ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the scanner motor.
		Home position sensor	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Home position sensor and ISC PWB (YC8) Replace the home position sensor.
		ISC PWB	Replace the ISC PWB and execute U411 (see page 1-3-139).
		Main PWB	Replace the main PWB (see page 1-5-47).
3200	Exposure lamp error When input value at the time of LED lamp PWB illumination does not exceed the threshold value between 5 s.	LED lamp PWB	 Execute CCD of U061 lamp check (see page 1-3-46). Confirm that the power connector is firmly connected and, if necessary, connect the connector all the way in. LED lamp PWB and ISC PWB (YC6) CCD PWB (YC2) and ISC PWB (YC9) ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the LED lamp PWB and execute U411 (see page 1-3-139).
		ISC PWB	Replace the ISC PWB and execute U411 (see page 1-3-139).
		CCD PWB	Replace the ISU and execute U411 (see page 1-3-139).

Code	Contents	Related parts	Check procedures/ corrective measures
3200		Main PWB	Replace the main PWB (see page 1-5-47).
3210	CIS lamp error When input value at the time of CIS illumination does not exceed the threshold value between 5 s.	CIS	 Execute U906 Separating Operation Release (see page 1-3-167). Execute CCD of U061 lamp check (see page 1-3-46). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CIS and DPSHD PWB (YC2) DPSHD PWB (YC3) and DP relay PWB (YC2) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CIS and execute U091 and U411 (see page 1-3-62,1-3-139).
		DPSHD PWB	Replace the DPSHD PWB.
		DP relay PWB	Replace the DP relay PWB.
3220	CCD lamp activation error The threshold is calculated for colors at initialization and the pixel which does not exceed that value is greater than 1000.	CIS	 Execute U906 Separating Operation Release (see page 1-3-167). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. LED lamp PWB and ISC PWB (YC6) CCD PWB (YC2) and ISC PWB (YC9) ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. If the LED lamp won't light, replace the LED PWB and execut U411 (see page 1-3-139).
		ISC PWB	Replace the ISC PWB and execute U411 (see page 1-3-139).
		Main PWB	Replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
3300	Optical system (AGC) error One of the gains is FF or 00 during the CCD lamp AGC is being processed.	LED lamp PWB	 To check the lamp, execute U061 CCD (see page 1-3-46). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. LED lamp PWB and ISC PWB (YC6) CCD PWB (YC2) and ISC PWB (YC9) ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. If the LED lamp won't light, replace the LED PWB and execut U411 (see page 1-3-139).
		CCD PWB	Replace the ISU and execute U411 (see page 1-3-139).
		ISC PWB	Replace the ISC PWB and execute U411 (see page 1-3-139).
		Main PWB	Replace the main PWB (see page 1-5-47).
3310	CIS AGC error After AGC, correct input is not obtained at CIS.	CIS	 Execute U906 Separating Operation Release (see page 1-3-167). To check the lamp, execute U061 CCD (see page 1-3-46). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP CIS and DPSHD PWB (YC2) DPSHD PWB (YC3) and DP relay PWB (YC2) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CIS and execute U091 and U411 (see page 1-3-62,1-3-139).
		DPSHD PWB	Replace the DPSHD PWB.
3500	Communication error between scanner and ASIC An error code is detected.	ISC PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the ISC PWB and execute U411 (see page 1-3-139).
		Main PWB	Replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
3600	Scanner sequence error	ISC PWB	 Execute U021 memory initializing (see page 1-3-27). Replace the ISC PWB and execute U411 (see page 1-3-139).
3700	Scanner device error	CCD (ISU)	Since the ISU is mounted with a CCD of different type, install the ISU that matches with the model.
3800	AFE error When writing the data, read and write data does not match 3 times in succession. No response is received in 100 ms from AEF.	ISC PWB	 Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. CCD PWB (YC2) and ISC PWB (YC9) If the FFC wiring is disconnected, replace the FFC wiring. Replace the ISC PWB and execute U411 (see page 1-5-26).
		CCD PWB	Replace the ISU and execute U411 (see page 1-3-139).
3900	Backup memory read/write error (ISC PWB) Read and write data does not match.	Backup memory (ISC PWB)	 Turn the main power switch off and after 5 seconds, turn it on. Replace the ISC PWB and execute U411 (see page 1-3-139).
4001	Polygon motor synchroni- zation error After polygon motor is driven, the ready signal does not turn to L within 30 s. The polygon motor speed won't stabilize within 10 s.	Polygon motor (LSU)	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Polygon motor and Engine PWB (YC15) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the laser scanner unit (see page 1-5-26).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
4011	Polygon motor steady-state error After Polygon motor is stabi- lized, the ready signal is at the H level for 15 s continuously.	Polygon motor (LSU)	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Polygon motor and Engine PWB (YC15) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the laser scanner unit (see page 1-5-31).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
4101	BD initialization error K After Polygon motor is driven, the BD signal is not detected for 1 s.	PD PWB K (LSU)	 Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. Laser scanner unit and LSU relay PWB (YC3) LSU relay PWB (YC2) and Engine PWB (YC11) If the FFC wiring is disconnected, replace the FFC wiring. Replace the laser scanner unit (see page 1-5-31).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
4201	BD steady-state error K The BD signal is not detected.	PD PWB K (LSU)	 Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. Laser scanner unit and LSU relay PWB (YC3) LSU relay PWB (YC2) and Engine PWB (YC11) If the FFC wiring is disconnected, shorted or grounded, replace the FFC wiring. Replace the laser scanner unit (see page 1-5-31).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
5101	101 Main high-voltage error K Measure the inflowing current when Vpp is varied in 3 steps and verify if the difference of the currents of 0 and step 2 is less than 42 (51 if lower high- voltage board).	Drum unit	 Confirm that the drum or the drum screw can rotate. If it won't rotate, replace the drum unit. Check that the discharger lamp is properly connected.
		Charger roller unit	 Check that the high-voltage contacts are not distorted or adhered with foreign objects. Reinstall the chrager roller unit.Or, replace the charger roller unit (see page 1-5-45).
		High voltage PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. High voltage PWB (YC2) and Engine PWB (YC16) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the High voltage PWB (see page 1-5-57).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
6000	Broken fuser heater wire Fuser thermistor 1 does not reach 100° C/212 °F even after 60 s during warming up. The detected temperature of fuser thermistor 1 does not reach the specified tempera- ture (ready indication temper- ature) for 420 s in warming up after reached to 100° C/212 °F.	Fuser unit	 Check that no paper jam is present. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90). (Deteriorated sensitivity due to the toner adhered to the center thermistor.)
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
		Power source PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Power source PWB (YC3) and fuser heater PWB (YC3) Fuser heater PWB (YC2) and feed PWB 1 (YC27) Feed PWB 1 (YC1) and Engine PWB (YC6) Replace the fuser unit (see page 1-5- 45).
		Fuser heater	1.
6020	Abnormally high fuser thermistor 1 temperature Fuser thermistor 1 detects a temperature higher than 240°C/464°F for 1 s.	Fuser unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit (see page 1-5- 45).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
6030	Broken fuser thermistor 1 wire Input from fuser thermistor 1 is 1010 or more (A/D value) continuously for 1 s. Verify if A/D read in the differ- ential output won't change by 4 or more when it was turned on for 10 seconds in a low- temperature environment.	Fuser unit	 Check that no paper jam is present. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90). (Deteriorated sensitivity due to the toner adhered to the center thermistor.)
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
		Fuser thermistor 1	1. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
		Fuser thermostat (triggered)	 Confirm that the wiring connector is firmly connected and, if necessary, con- nect the connector all the way in. Fuser unit and fuser heater PWB (YC1) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).

Code	Contents	Related parts	Check procedures/ corrective measures
6040	040 Fuser heater error Input from fuser center therm- istor 1 is abnormal value con- tinuously for 1 s. CPU port PH1 to stay in H level for one second or more in all operating modes is judged that the connector is disconnected.	Fuser unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring.
		judged that the connector is	Engine PWB
		Center thermistor 1	 Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
		Fuser thermostat (triggered)	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and fuser heater PWB (YC1) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).

Code	Contents	Related parts	Check procedures/ corrective measures
6050	Abnormally low fuser thermistor 1 temperature Fuser thermistor 1 detects a temperature lower than 100°C/212°F for 1 s after warming up, during ready or during print. The temperature of thermis- tor 1 is detected to be less than 70°C/158°F for more than one second during low- power mode.	Power source	 Check that the operating voltage falls within +/-10%. Check no voltage drop is caused. The heater is deactivated at 70V or lower. Relocate the AC outlet that supplies power.
		Fuser unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
		Fuser thermistor 1	1. Replace the fuser unit and execute U167 counter clear (see page 1-3-90).
		Fuser thermostat (triggered)	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and fuser heater PWB (YC1) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).

Code	Contents	Related parts	Check procedures/ corrective measures
6200	Broken fuser edge heater wire Fuser thermistor 2 does not reach 100° C/212 °F even after 60 s during warming up. The detected temperature of fuser thermistor 2 does not reach the specified tempera- ture (ready indication temper- ature) for 420 s in warming up after reached to 100° C/212	Fuser unit Engine PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90). Check the engine software and upgrade to the latest, if necessary.
	°F.	Fuser center thermistor 1	 2. Replace the engine PWB (see page 1-5-52). 1. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
6220	Abnormally high fuser edge thermistor temperature Fuser thermistor 2 detects a temperature higher than 220°C/428°F for 1 s.	Fuser unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
6230	Broken fuser edge thermis- tor wire The Input signal from the fuser thermistor 2 is 992 or more (A/D value) continuously for 1 s when the temperature at the fuser thermistor 1 is higher than 100°C/212°F. Fuser thermistor 2 detects a	Fuser unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90).
	loeer then 500°C/122°F for 15s during werming up.	Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
6250	Abnormally low fuser edge thermistor temperature Fuser thermistor 2 detects a temperature lower than 100°C/212°F for 1 s during ready or print. Fuser thermistor 2 detects a temperature lower than 50°C/ 122°F for 1 s during low power mode.	Fuser unit Engine PWB	 Confirm that the wiring connector is firmly connected and, if necessary, con- nect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Fuser unit and execute U167 counter clear (see page 1-3-90). Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- Tex)
6400	Zero-cross signal error While fuser heater ON/OFF control is performed, the zero- cross signal is not input within 3 s.	Fuser unit	 52). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser heater PWB (YC29) and feed PWB 1 (YC27) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the fuser heater PWB.
6610	Fuser release sensor error When the fuser release motor is driven, the fuser release sensor does not turn on/off for 8 s.	Fuser release motor	 To check the motor operation, execute U030 Fuser Release (see page 1-3-29). Check that the drive gear can be rotated and the separation is possible. If the motor won't rotate, confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser unit and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the fuser unit and execute U167 counter clear (see page 1-3-90).
		Fuser release sensor	 Check that the sensor is correctly positioned. Check that the sensor is not contaminated or damaged.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
6910	Engine software ready error The device won't engage in ready state in 60 minutes after warming-up has began. (A previous timeout process has not been cancelled.)	Engine PWB	 Turn the main power switch off and after 5 seconds, turn it on. Reinstall the engine software. Replace the engine PWB (see page 1-5- 52).
6930	Fuser rear fan motor error When the fuser rear fan motor is driven, alarm signal is detected for 5 s continuously.	Fuser rear fan motor	 To check the fan motor operation, exe- cute U037 Fuser Cooling (see page 1-3- 38). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Fuser rear fan motor and Engine PWB (YC26) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the fuser rear fan motor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 66).
6940	IH fan motor error When the IH fan motor is driven, the alarm signal is detected for 5 s continuously.	IH fan motor	 Execute IH PWB by U037 fan motor operation check (see page 1-3-39). Confirm that the power connector is firmly connected and, if necessary, connect the connector all the way in. Heater fan motor and Feed PWB 1(YC11) Feed PWB 1(YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the heater fan motor.
		Feed PWB 1 Engine PWB	 Replace the Feed PWB1. 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-64).

Code	Contents	Related parts	Check procedures/ corrective measures
7001	Toner motor error A state that a lock is detected 5 times in a row in 200ms cycle when the Toner motor is driven has occurred 30 times in total.	Toner container	 Check that the spiral screw of the toner container can be rotated by the hand. Check for broken gears and replace if any.
		Toner motor	 Draw out the toner container and execute U135 to check the toner motor operation (see page 1-3-77). Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Toner motor and Engine PWB (YC27) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Toner motor.
		Screw sensor	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Screw sensor and Front PWB (YC5) Front PWB (YC2) and Engine PWB (YC7) Replace the Screw sensor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
7101	Toner sensor error Sensor output value of 60 or less or 944 or more continued	Failure of locking the developer waste slot at setup.	If an abnormal noise is heard, check that the developer ejection outlet is released and, if not, release the outlet (see page 1-2-12).
	for 3 s.	Toner sensor	 Check the toner sensor output by U155 (see page 1-3-86). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Toner sensor and Front PWB (YC7) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Check that the gears of the Developer unit are not damaged and the spiral can rotate. Replace the Developer unit (see page 1- 5-35).
		Toner motor	 Draw out the toner container and execute U135 to check the toner motor operation (see page 1-3-77). Check the drive gear can rotate or they are not unusually loaded and, if necessary, replace. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Toner motor and Engine PWB (YC27) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Toner motor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. R1-5-52eplace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
7200	Broken outer temperature sensor 2 wire The sensor input sampling is greater than 230.	Outer temperature sensor 2	 Confirm Ext/Int is displayed by U139 temperature and humidity (see page 1- 3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Outer temperature sensor 2 and Front PWB (YC8) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the outer temperature sensor 2.
		Front PWB	Replace the front PWB.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7210	Short-circuited outer tem- perature sensor 2 The sensor input sampling is less than 69.	Outer temperature sensor 2	 Confirm Ext/Int is displayed by U139 temperature and humidity (see page 1- 3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Outer temperature sensor 2 and Front PWB (YC8) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the outer temperature sensor 2.
		Front PWB	Replace the front PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
7221	Broken LSU thermistor wire The sensor input sampling is greater than 230.	LSU thermistor	 Confirm LSU is displayed by U139 temperature and humidity (see page 1- 3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Laser scanner unit and LSU relay PWB (YC3) LSU relay PWB (YC2) and Engine PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the laser scanner unit (see page 1-5-31).
		LSU relay PWB	REPLACE the LSU relay PWB.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7231	Short-circuited LSU therm- istor K The sensor input sampling is less than 69.	LSU thermistor	 Confirm LSU is displayed by U139 temperature and humidity (see page 1- 3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Laser scanner unit and LSU relay PWB (YC3) LSU relay PWB (YC2) and Engine PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the laser scanner unit (see page 1-5-31).
		LSU relay PWB Engine PWB	 Replace the LSU relay PWB. 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
7241	Broken Developer thermis- tor wire The sensor input sampling is greater than 230.	Developer thermistor	 Confirm Developing is displayed by U139 temperature and humidity (see page 1-3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer unit and Front PWB (YC7) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Developer unit (see page 1- 5-35).
		Front PWB	Replace the front PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7251	Short-circuited Developer thermistor The sensor input sampling is less than 69.	Developer thermistor	 Confirm Developing is displayed by U139 temperature and humidity (see page 1-3-79). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer unit and Front PWB (YC7) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Developer unit (see page 1- 5-35).
		Front PWB	Replace the front PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. 1-5-52Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
7301	Toner hopper motor error When the toner hopper motor is driven, toner hopper sensor does not turn on within 200 ms. This error is detected 15 times successively.	Tonner hopper motor	 If the motor won't rotate, confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Tonner hopper motor and Front PWB (YC5) Front PWB (YC3) and Engine PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the tonner hopper motor .
		Screw sensor	 Check that the sensor is correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Screw sensor and Front PWB (YC5) Front PWB (YC3) and Engine PWB (YC7) Replace the Screw sensor.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7401	Developer unit type mis- match error Improper adaptation of the	Different type of the developer unit is installed.	Install the developer unit of the correct type.
	machine and developer unit is detected.	Developer unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer unit and Front PWB (YC7) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring.

Code	Contents	Related parts	Check procedures/ corrective measures
7460	Developer shutter error Power is turned on while the developer shutter is locked.	The developer shutter has been locked.	Release the developer shutter (see page 1- 2-12).
		Developer shutter sensor	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer shutter sensor and Front PWB (YC4) Front PWB (YC3) and Engine PWB (YC7) If the wiring is disconnected, shorted or grounded, replace the wiring.
7601	ID sensor 1 error [Front] Dark potential error FrontDarkP and FrontDarkS are greater than 0.80V. Light potential error FrontBrightS is smaller than FrontDarkS. FrontBrightP is smaller than [FrontDarkP + 0.5V].	ID sensor1	 Execute U464 Calib for setting ID compensation operation and check the displayed values by U465 Boas Calib for ID compensation reference (see page 1- 3-157). Clean the ID sensor on its surface. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. ID sensor 1 (front) and relay PWB (YC10) Relay PWB (YC1) and Feed PWB 1 (YC14) Feed PWB 1 (YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring.
		Feed PWB 1 Engine PWB	 Replace the Feed PWB 1. 1. Check the engine software and upgrade to the latest, if necessary. 2. Replace the engine PWB (see page 1-5-52).

Code	Contents	Related parts	Check procedures/ corrective measures
7602	ID sensor 2 error [Rear] Dark potential error RearDarkP and RearDarkS are greater than 0.80V. Light potential error RearBrightS is smaller than RearDarkS. RearBrightP is smaller than [RearDarkP + 0.5V].	ID sensor 2	 Execute U464 Calib for setting ID compensation operation and check the displayed values by U465 Boas Calib for ID compensation reference (see page 1- 3-157). Clean the ID sensor on its surface. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. ID sensor2 (rear) and relay PWB (YC10) Relay PWB (YC1) and Feed PWB 1 (YC14) Feed PWB 1 (YC2) and Engine PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring.
		Feed PWB 1	Replace the Feed PWB 1.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7800	Broken outer temperature sensor wire The device did not respond for more than 5 ms during reading, in 5 times.	Outer temperature sensor	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Outer temperature sensor and Front PWB (YC8) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Outer temperature sensor.
		Front PWB	Replace the front PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
7901	Drum EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times successively. Mismatch of reading data from two locations occurs 8 times successively. Mismatch between writing data and reading data occurs	DR PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DR PWB and Front PWB (YC6) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Drum unit (see page 1-5- 36).
	8 times successively.	Front PWB	Replace the front PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7911	Developer unit EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times successively. Mismatch of reading data from two locations occurs 8 times successively. Mismatch between writing	Developer unit	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Developer unit and Front PWB (YC7) Front PWB (YC2) and Engine PWB (YC8) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Developer unit (see page 1- 5-35).
	data and reading data occurs	Front PWB	Replace the front PWB
	8 times successively.	Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
7941	Laser scanner unit EEPROM error Mismatch of reading data from two locations occurs 8 times successively. Mismatch between writing data and reading data occurs 8 times successively.	APC PWB	 Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. APC PWB and LSU relay PWB (YC3) LSU relay PWB (YC2) and Engine PWB (YC11) If the FFC wiring is disconnected, shorted or grounded, replace the FFC wiring. Replace the laser scanner unit (see page 1-5-31).
		LSU relay PWB	REPLACE the LSU relay PWB.

Code	Contents	Related parts	Check procedures/ corrective measures
7941		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
8010	Punch motor error 1 When the punch motor is driven, punch home position sensor does not turn on within 200 ms.	Punch motor	 Execute U240 Motor - Punch HP to check the finisher operation (see page 1-3-104). Manipulate the punch up and down to check it can smoothly move up and down. Check that the drive from the motor reaches the punch cam. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch motor and Punch PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the punch motor.
		Punch home position sensor	 Execute U241 Punch - Punch HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch home position sensor and Punch PWB (YC8) Replace the Punch home position sensor.
		Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7) (4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8) (1000-sheet finisher) Replace the punch PWB.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

		corrective measures
Punch motor error 2 Home position is not obtained in 3 s after home position is initialized or in standby.	Punch motor	 Execute U240 Motor - Punch to check the finisher operation (see page 1-3- 104). Manipulate the punch up and down to check it can smoothly move up and down. Check that the drive from the motor reaches the punch cam. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch motor and Punch PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the punch motor.
	Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7)(4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8)(1000-sheet finisher) Replace the punch PWB.
	DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).
	-	initialized or in standby. Punch PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8030	Punch motor error 3 Home position does not turn from On to Off in 50 ms after home position has been ini- tialized.	Punch motor	 Execute U240 Motor - Punch to check the finisher operation (see page 1-3- 104). Manipulate the punch up and down to check it can smoothly move up and down. Check that the drive from the motor reaches the punch cam. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch motor and Punch PWB (YC4) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the punch motor.
		Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7) (4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8) (1000-sheet finisher) Replace the punch PWB.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8090	DF paddle motor error When the DF paddle motor is driven, DF paddle sensor does not turn on within 1 s.	DF paddle motor	 Execute U240 Motor - Beat to check the finisher operation (see page 1-3-104). Check that the paddle can rotate. Check that the drive from the motor reaches the paddle. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF paddle motor and DF main PWB (YC15) (4000-sheet finisher) DF paddle motor and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF paddle motor.
		DF paddle sensor	 Execute U241 Finisher - Bundle Eject HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF paddle sensor and DF main PWB (YC22) (4000-sheet finisher) DF paddle sensor and DF main PWB (YC20) (1000-sheet finisher) Replace the DF paddle sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8100	DF eject release motor error When the DF eject release motor is driven, DF bundle discharge sensor does not turn on within 1 s.	DF eject release motor DF bundle discharge unit sensor	 Execute U240 Motor - Eject Unlock (Full) to check the finisher operation (see page 1-3-104). Check that the eject guide of the process tray is opened and, if not, cor- rect the guide. Check that the drive from the motor reaches the eject guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF bundle discharge unit sensor and DF main PWB (YC22)(4000-sheet finisher) DF bundle discharge unit sensor and DF main PWB (YC20)(1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF eject release motor.
		DF bundle discharge unit sensor	 Execute U241 Finisher - Bundle Eject HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF bundle discharge unit sensor and DF main PWB (YC22)(4000-sheet finisher) DF bundle discharge unit sensor and DF main PWB (YC20)(1000-sheet finisher) Replace the DF bundle eject unit sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8110	DF shift motor 1 error (4000-sheet finisher) DF shift sensor 1 won't turn on when it has travelled 160 mm after DF shift motor 1 is driven.	DF shift motor 1 [front]	 Execute U240 Motor - Sort Test to check the finisher operation (see page 1-3- 104). Manipulate the front shift guide back and forth to check it is smoothly operable. Check that the drive from the motor reaches the front shift guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift motor 1[front] and DF main PWB (YC14) If the wiring is disconnected, shorted or grounded, replace the wiring.
		DF shift sensor 1 [front]	 Replace the DF shift motor 1 [front]. Execute U241 Finisher - Shift Front HP to check the finisher switch (see page 1- 3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift sensor 1[front] and DF main PWB (YC23) Replace the DF shift sensor 1 [front].
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8120	DF shift motor 2 error (4000-sheet finisher) DF shift sensor 2 won't turn on when it has travelled 160 mm after DF shift motor 2 is driven.	DF shift motor 2 [rear]	 Execute U240 Motor - Sort Test to check the finisher operation (see page 1-3- 104). Manipulate the rear shift guide back and forth to check it is smoothly operable. Check that the drive from the motor reaches the rear shift guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift motor 2 [rear] and DF main PWB (YC14) If the wiring is disconnected, shorted or grounded, replace the wiring.
		DF shift sensor 2 [rear]	 Replace the DF shift motor 2 [rear]. Execute U241 Finisher - Shift Tail HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift sensor 2 [rear] and DF main PWB (YC23) Replace the DF shift set sensor2 [rear].
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8130	DF shift release motor error (4000-sheet finisher) When the DF shift release motor is driven, DF shift release sensor does not turn on within 1 s.	DF shift release motor	 Check that cancelling the maintenance mode after executing U240 Motor - Sort for the finisher operation check lets the rear and forth cursors returns to the home position (see page 1-3-104). Manipulate the front and rear shift guide to check it is smoothly operable. Check that the drive from the motor reaches the shift guide front and rear. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift release motor and DF main PWB (YC14) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF shift release motor.
		DF shift release sensor	 Replace the DF shift release motor. Execute U241 Finisher - Shift Unlock HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF shift release sensor and DF main PWB (YC23) Replace the DF shift release sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8140	DF tray error 1 When the main tray has ascended, DF tray sensor 1 or DF tray upper surface sensor does not turn on within 20 s.	DF tray motor	 Execute U240 Motor - Tray to check the finisher operation (see page 1-3-104). Manipulate the main tray up and down to check it is smoothly operable. Check that the drive from the motor reaches the main tray. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray motor and DF Main PWB(YC16) (4000-sheet finisher) DF tray motor and DF Main PWB(YC14) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF tray motor.
		DF tray sensor 1 DF tray upper surface sensor	 Execute U241 Finisher - Tray U-Limit, Tray Top to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray sensor 1 and DF Main PWB(YC22) (4000-sheet finisher) DF tray upper surface sensor and DF Main PWB(YC21,YC13) (4000-sheet finisher) DF tray sensor 1 and DF main PWB (YC20) (1000-sheet finisher) DF tray upper surface sensor and DF main PWB (YC18) (1000-sheet finisher) Replace the DF tray sensor 1 or DF tray upper surface sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8150	DF tray error 2 When the main tray has descended, DF tray sensor 1 or DF tray upper surface sen- sor does not turn off within 5 s.	DF tray motor	 Execute U240 Motor - Tray to check the finisher operation (see page 1-3-104). Manipulate the main tray up and down to check it is smoothly operable. Check that the drive from the motor reaches the main tray. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray motor and DF main PWB (YC16) (4000-sheet finisher) DF tray motor and DF main PWB (YC14) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF tray motor.
		DF tray sensor 1 DF tray upper surface sensor	 Execute U241 Finisher - Tray U-Limit, Tray Top to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray sensor 1 and DF main PWB (YC22) (4000-sheet finisher) DF tray upper surface sensor and DF main PWB (YC21,YC13) (4000-sheet finisher) DF tray sensor 1 and DF main PWB (YC20) (1000-sheet finisher) DF tray upper surface sensor and DF main PWB (YC18) (1000-sheet finisher) Replace the DF tray sensor 1 or DF tray upper surface sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8160	DF tray error 3 When the main tray has descended, DF tray sensor 4 does not turn on within 20 s.	DF tray motor	 Execute U240 Motor - Tray to check the finisher operation (see page 1-3-104). Manipulate the main tray up and down to check it is smoothly operable. Check that the drive from the motor reaches the main tray. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray motor and DF main PWB (YC16) (4000-sheet finisher) DF tray motor and DF main PWB (YC14) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF tray motor.
		DF tray sensor 4	 1. Execute U241 Finisher - Tray Middle to check the finisher switch (see page 1-3- 106). 2. Check that the sensor and its mounting bracket are correctly positioned. 3. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF tray sensor 4 and DF main PWB (YC23) (4000-sheet finisher) DF tray sensor 4 and DF main PWB (YC20) (1000-sheet finisher) 4. Replace the DF tray sensor 4.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8170	DF side registration motor 1 error 1 When initial operation, DF side registration sensor 1 does not turn on within 3 s.	DF side registration motor 1	 Execute U240 Motor - Width Test to check the finisher operation (see page 1-3-104). Manipulate the front side registration guide to check it is smoothly operable. Check that the drive from the motor reaches the front side registration guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration motor 1 and DF main PWB (YC15) (4000-sheet finisher) DF side registration motor 1 and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF side registration motor 1.
		DF side registration sensor 1	 Execute U241 Finisher - Width Front to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration sensor 1. and DF main PWB (YC22) (4000-sheet finisher) DF side registration sensor 1. and DF main PWB (YC20) (1000-sheet finisher) Replace the DF side registration sensor 1.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8180	DF side registration motor 1 error 2 JAM6810 (jam in front of width alignment) is detected twice.	DF side registration motor 1	 Execute U240 Motor - Width Test to check the finisher operation (see page 1-3-104). Manipulate the front side registration guide back and forth to check it is smoothly operable. Check that the drive from the motor reaches the front side registration guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration motor 1 and DF main PWB (YC15) (4000-sheet finisher) DF side registration motor 1 and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF side registration motor 1. Execute U241 Finisher - Width Front to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration sensor 1. and DF main PWB (YC22) (4000-sheet finisher)
		DF main PWB	 4. If the wiring is disconnected, shorted or grounded, replace the wiring. 5. Replace the DF side registration sensor 1. Replace the DF main PWB (Refer to the service manual for the document finisher).
			service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8190	DF side registration motor 2 error 1 When initial operation, DF side registration sensor 2 does not turn on within 3 s.	DF side registration motor 2	 Execute U240 Motor - Width Test to check the finisher operation (see page 1-3-104). Manipulate the rear side registration guide back and forth to check it is smoothly operable. Check that the drive from the motor reaches the rear side registration guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration motor 2 and DF main PWB (YC15) (4000-sheet finisher) DF side registration motor 2 and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF side registration motor 2. Execute U241 Finisher - Width tail HP to check the finisher switch (see page 1- 3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration sensor 2 and DF
			 main PWB (YC22) (4000-sheet finisher) DF side registration sensor 2 and DF main PWB (YC20) (1000-sheet finisher) 4. Replace the DF side registration sensor 2.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8200	DF side registration motor 2 error 2 JAM6910 (jam in rear of width alignment) is detected twice.	DF side registration motor 2 DF side registration sensor 2	 Execute U240 Motor - Width Test to check the finisher operation (see page 1-3-104). Manipulate the rear side registration guide back and forth to check it is smoothly operable. Check that the drive from the motor reaches the rear side registration guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration motor 2 and DF main PWB (YC15) (4000-sheet finisher) DF side registration motor 2 and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF side registration motor 2. Execute U241 Finisher - Width tail HP to check the finisher switch (see page 1- 3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF side registration sensor 2 and DF main PWB (YC22) (4000-sheet finisher) Side registration sensor 2 and DF main PWB (YC22) (4000-sheet finisher) A reglace the DF side registration sensor 2 and DF
		DF main PWB	2. Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8210	DF slide motor error When initial operation, DF staple sensor does not turn on within 3 s.	DF slide motor	 Execute U240 Motor - Staple Move to check the finisher operation (see page 1-3-104). Manipulate the staple unit back and forth to check it is smoothly operable. Check that the drive from the motor reaches the staple unit. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF slide motor and DF main PWB (YC12) (4000-sheet finisher) DF slide motor and DF main PWB (YC10) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF slide motor.
		DF staple sensor	 Execute U241 Finisher - Width Staple HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF staple sensor and DF main PWB (YC22) (4000-sheet finisher) DF staple sensor and DF main PWB (YC20) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF staple sensor.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8230	DF staple motor error 1 Staple JAM (DF) has been detected twice in a row. (The second JAM detection condition fullfilled with the home position did not detected in 600 ms after the motor was driven.)	DF staple motor	 Remove the staple unit and check that stapling is possible without a jam. Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. Staple unit and DF main PWB (YC17) (4000-sheet finisher) Staple unit and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the staple unit. (Refer to the service manual for the document finisher).
		DF staple sensor	Replace the staple unit.
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).
8240	DF staple motor error 2 Staple JAM (DF) has been detected twice in a row. (The second JAM detection condition fullfilled with a lock detection signal maintained 1 V for 500 ms continuously, while the stapler motor was driven.)	DF staple motor	 Remove the staple unit and check that stapling is possible without a jam. Confirm that the FFC wiring connector is not distorted and connect the FFC wiring all the way in. Staple unit and DF main PWB (YC17) (4000-sheet finisher) Staple unit and DF main PWB (YC11) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the staple unit. (Refer to the service manual for the document finisher).
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).

Code	Contents	Related parts	Check procedures/ corrective measures
8300	CF unit communication error (4000-sheet finisher) Communication with the cen- ter-folding unit is not possible.	CF unit set switch	 Execute U241 Booklet - Set to check the finisher switch (see page 1-3-106). Check that the switch and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF main PWB (YC7) and DF main PWB (YC9) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF unit set switch.
		CF main PWB	Replace the CF main PWB
		DF main PWB	Replace the DF main PWB (Refer to the service manual for the document finisher).
8310	CF side registration motor 2 error (4000-sheet finisher) When initial operation, CF side registration sensor 2 does not turn on within 1 s.	CF side registration motor 2	 Execute U240 Booklet - Width Test to check finisher operation check (see page 1-3-104). Manipulate the side registration upper guide back and forth to check it can smoothly move back and forth. Check that the drive from the motor reaches the side registration upper guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF side registration motor 2 and CF main PWB (YC10) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF side registration motor.
		CF side registration sensor 2	 Execute U241 Booklet - Width Up HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF side registration sensor 2 and CF main PWB (YC20) Replace the CF side registration sensor 2.
		CF main PWB	Replace the CF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8320	CF adjustment motor error (4000-sheet finisher) When initial operation, CF adjustment sensor does not turn on within 2.5 s.	CF adjustment motor1,2	 Execute U240 Booklet - Bundle Up / Down to check the finisher operation (see page 1-3-104). Manipulate the fold moving belt up and down to check it is smoothly operable. Check that the drive from the motor reaches the fold moving belt. (Check if the belt is bent.) Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF adjustment motor 1,2 and CF main PWB (YC10) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF adjustment motor 1,2.
		CF adjustment sensor1,2	 Execute U241 Booklet - bundle Up / Down HP to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF adjustment sensor 1,2 and CF main PWB (YC20) Replace the CF adjustment sensor1,2.
		CF main PWB	Replace the CF main PWB.

Code	Contents	Related parts	Check procedures/ corrective measures
8330	CF blade motor error (4000-sheet finisher) When initial operation, CF blade sensor does not turn on within 1500 ms.	CF blade motor	 Execute U240 Booklet - Blade to check the finisher operation (see page 1-3- 104). Manipulate the fold blade up and down to check it is smoothly operable. Check that the drive from the motor reaches the fold blade. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF blade motor and CF main PWB (YC15) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF blade motor.
		CF blade sensor	 Execute U241 Booklet - Blade HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF blade sensor and CF main PWB (YC20) Replace the CF blade sensor.
		CF main PWB	Replace the CF main PWB
8340	CF staple motor error 1 (4000-sheet finisher) Staple JAM (center-folding unit) has been detected twice in a row. (The second JAM detection condition fullfilled with the home position did not detected in 600 ms after the motor was driven.)	CF staple motor	 Execute U240 Booklet - Staple to check the finisher operation (see page 1-3- 104). Manipulate the staple up and down check it is smoothly operable. Check that the drive from the motor reaches the staple unit. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF staple unit and CF main PWB (YC13) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF staple motor.
		CF staple sensor	Replace the CF staple unit.
		CF main PWB	Replace the CF main PWB.

Code	Contents	Related parts	Check procedures/ corrective measures
8350	CF side registration motor 1 error (4000-sheet finisher) When initial operation, CF side registration sensor 1 does not turn on within 1 s.	CF side registration motor 1	 Execute U240 Booklet - Width Test to check the finisher operation (see page 1-3-104). Manipulate the side registration lower guide back and forth to check it can smoothly operable. Check that the drive from the motor reaches the side registration lower guide. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF side registration motor 1 and CF main PWB (YC10) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF side registration motor 1.
		CF side registration sensor 1	 Execute U241 Booklet - Width Down HP to check the finisher switch (see page 1- 3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF side registration sensor 1 and CF main PWB (YC20) Replace the CF side registration sensor 1.
		CF main PWB	Replace the CF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8360	CF main motor error (4000-sheet finisher) During driving the motor, the lock signal is detected for 1 s continuously.	CF main motor	 Execute U240 Booklet - Folding to check the finisher operation (see page 1-3- 104). Manipulate the conveying roller to check it can smoothly rotate. Check that the drive from the motor reaches the conveying roller. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF main motor and CF main PWB (YC16) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CF main motor.
		CF main PWB	Replace the CF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8410	Punch slide motor error 1 The punch slide sensor won't turn On when home position has been moved by 30 mm.	Punch slide motor	 Execute U240 Booklet - Punch Move to check the finisher operation (see page 1-3-104). Manipulate the punch slide part of the punch unit back and forth to check it can smoothly move. Check that the drive from the motor reaches punch part. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch slide motor and Punch PWB (YC3) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the punch slide motor.
		Punch slide sensor	 Execute U241 Punch - Punch HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch slide sensor and Punch PWB (YC6) Replace the punch slide sensor.
		Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7) (4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8) (1000-sheet finisher) Replace the punch PWB.
		DF main PWB	Replace the DF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8420	Punch slide motor error 2 In detection of paper edges, the paper edge cannot be detected in 30 mm move.	Punch slide motor	 Execute U240 Booklet - Punch Move to check the finisher operation (see page 1-3-104). Manipulate the punch slide part of the punch unit back and forth to check it can smoothly move. Check that the drive from the motor reaches punch part. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch slide motor and Punch PWB (YC3) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the punch slide motor.
		Punch paper edge sensor 1,2	 Execute U241 Punch - Edge Face 1,2,3,4 to check the finisher switch (see page 1-3-106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch paper edge sensor 1,2 and Punch PWB (YC5,YC7) Replace the punch paper edge sensor 1,2.
		Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7) (4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8) (1000-sheet finisher) Replace the Punch PWB.
		DF main PWB	Replace the DF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8430	Punch unit communication error Communication with the punch unit is not possible.	Punch PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Punch PWB (YC1) and DF main PWB (YC7) (4000-sheet finisher) Punch PWB (YC1) and DF main PWB (YC8) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Punch PWB.
		DF main PWB	Replace the DF main PWB
8500	Mailbox communication error (4000-sheet finisher) Communication failed to be established after the mailbox was hooked up.	MB main PWB	 Turn the main power switch off and after 5 seconds, turn it on. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MB main PWB (YC3) and DF main PWB (YC6) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the MB main PWB
		DF main PWB	Replace the DF main PWB
8510	MB conveying motor error 1 (4000-sheet finisher) When initial operation, MB home position sensor does not turn on within 5 s.	MB conveying motor	 If the transfer roller won't rotate smoothly, repair its mechanism. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MB conveying motor and MB main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the MB conveying motor.
		MB home position sensor	 Execute U241 Mail Box - Motor HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MB home position sensor and MB main PWB (YC2) Replace the MB home position sensor.
		MB main PWB	Replace the MB main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8520	MB conveying motor error 2 (4000-sheet finisher) When standby operation, MB home position sensor does not turn off within 1 s.	MB conveying motor	 Execute Mail Box - Conv of U240 finisher operation check (see page 1-3- 104). Manipulate the conveying roller of the mailbox to check it can smoothly rotate. Check that the drive from the motor reaches the conveying roller. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MB conveying motor and MB main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the MB conveying motor.
		MB home position sensor	 Execute U241 Mail Box - Motor HP to check the finisher switch (see page 1-3- 106). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. MB home position sensor and MB main PWB (YC2) Replace the MB home position sensor.
		MB main PWB	Replace the MB main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
8800	Document finisher main program error Document finisher main pro- gram error at power up.	DF main PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF main PWB (YC4) and Engine PWB (YC18) (4000-sheet finisher) DF main PWB (YC7) and Engine PWB (YC18) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF main PWB
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
8900	Document finisher backup error Read and write data does not match 3 times in succession.	DF main PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DF main PWB (YC4) and Engine PWB (YC18) (4000-sheet finisher) DF main PWB (YC7) and Engine PWB (YC18) (1000-sheet finisher) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DF main PWB
8930	Center-folding unit backup error (4000-sheet finisher) Read and write data does not match 3 times in succession.	CF main PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CF main PWB (YC7) and DF main PWB (YC9) If the wiring is disconnected, shorted or grounded, replace the wiring. Install the EEPROM properly. Replace the CF main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
9000	Document processor com- munication error Communication with the docu- ment processor is not possi- ble.	DP main PWB	 Check that the versions of the main unit firmware and the DP firmware are identical. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP main PWB(YC1) and ISC PWB(YC12) ISC PWB (YC3) and Main PWB (YC11) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DP main PWB
		ISC PWB	Replace the ISC PWB.
9010	Coin vender communica- tion error A communication error from	U206 setting	Set maintenance mode U206 to off when a coin vender is not installed (see page 1-3-96).
	coin vender is detected 10 times in succession.	Coin vender control PWB	 Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. Coin vender control PWB and Engine PWB (YC23) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the Coin vender control PWB.
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).

Code	Contents	Related parts	Check procedures/ corrective measures
9040	DP lift motor going up error When the DP lift motor is driven, DP lift sensor 1 does not turn on within 1500 pulse. (Three recovery times.) The above has been detected 5 times.	DP lift motor	 Execute U906 Separating Operation Release (see page 1-3-167). Execute U243 Lift Motor to check the DP motor operation (see page 1-3-109). Check that the original document lift guide can move upwards. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP lift motor and DP main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DP lift motor.
		DP lift sensor 1	 Execute U244 Lift L-Limit to check DP switch (see page 1-3-110). Check that the sensor and its mounting bracket are correctly positioned. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP lift sensor 1 and DP main PWB (YC4) Replace the DP lift sensor 1.
		DP main PWB	Replace the DP main PWB

Code	Contents	Related parts	Check procedures/ corrective measures
9050	DP lift motor going down error When the DP lift motor is driven, DP lift sensor 2 does not turn on within 1500 pulse. (Three recovery times.) The above has been detected 5 times.	DP lift motor	 Execute U906 Separating Operation Release (see page 1-3-167). Execute U243 Lift Motor to check the DP motor operation (see page 1-3-109). Check that the original document lift guide can move downwards. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP lift motor and DP main PWB (YC5) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DP lift motor.
		DP lift sensor 2	 Execute U244 Lift L-Limit to check DP switch (see page 1-3-110). Confirm that the DP lift sensor 2 has been firmly fitted. Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP lift sensor 2 and DP main PWB (YC2) Replace the DP lift sensor2.
		DP main PWB	Replace the DP main PWB
9060	DP EEPROM error Mismatch of reading data from two locations occurs 3 times successively. Mismatch between writing data and reading data occurs	DP main PWB	 Execute U906 Separating Operation Release (see page 1-3-167). Confirm that the EEPROM has been properly installed. Replace the DP main PWB
	3 times successively.	Device damage of EEPROM	Contact the Service Support.
9070	Communication error between DP and SHD A communication error is detected.	DP SHD PWB	 Execute U906 Separating Operation Release (see page 1-3-167). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. DP SHD PWB (YC1) and DP main PWB (YC10) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the DP SHD PWB.

Code	Contents	Related parts	Check procedures/ corrective measures
9080	LED fault detection A block is existent below a peak which was obtained by activating the LEDs in the four CIS blocks at power on, which is less than 80hex.	DP CIS	 Execute CIS automatic original document alignment by U411 (see page 1-3-139). Confirm that the wiring connector is firmly connected and, if necessary, connect the connector all the way in. CIS and DP SHD PWB (YC1) DP SHD PWB (YC1) and DP main PWB (YC10) If the wiring is disconnected, shorted or grounded, replace the wiring. Replace the CIS and execute U411.
		DP SHD PWB	Replace the DP SHD PWB.
9100	Coin vender control PWB error Communication error has been detected at the coin mec of the coin vender control PWB.	Coin vender control PWB	Replace the coin mec.
9110	Coin vender rejector error Communication error has been detected in connection with the coin mec and the rejector.	Rejector	 Check that the rejector is firmly installed and, if not, install firmly. Replace the rejector.
9120	Sensor error in coin vender change (Yen 10)	Coin jam in the change tube	Check visually and remedy.
	Change is empty despite change is enough.	Contact in the connector	Check the connection of the empty change sensor.
		Change empty sensor	Replace the coin mec.
		Coin vender control PWB	Replace the coin mec.
9130	Sensor error in coin vender change (Yen 50)	Coin jam in the change tube	Check visually and remedy.
	Change is empty despite change is enough.	Contact in the connector	Check the connection of the empty change sensor.
		Change empty sensor	Replace the coin mec.
		Coin vender control PWB	Replace the coin mec.

Code	Contents	Related parts	Check procedures/ corrective measures
9140	change (Yen 100)	Coin jam in the change tube	Check visually and remedy.
	Change is empty despite change is enough.	Contact in the connector	Check the connection of the empty change sensor.
		Change empty sensor	Replace the coin mec.
		Coin vender control PWB	Replace the coin mec.
9150	Sensor error in coin vender change (Yen 500)	Change tube	Check no exchange jam is observed at the outlet and, if necessary, repair it.
	Change is empty despite change is enough.	Contact in the connector	Check the connection of the empty change sensor.
		Change empty sensor	Replace the coin mec.
		Coin vender control PWB	Replace the coin mec.
9160	Coin vender pay-out error Coin is paid out despite the pay-out motor is determined not active.	Pay-out motor	Replace the coin mec.
9170	Coin vender pay-out sensor error Coin is paid out despite the	Pay-out area	Check no exchange jam is observed at the outlet and, if necessary, repair it.
		Pay-out motor	Replace the coin mec.
	pay-out motor is determined not active.	Pay-out sensor	Replace the coin mec.
9500	ISC PWB error A	Main PWB ISC PWB	 Reinsert the connector if its connection is loose. Main PWB (YC25) and ISC PWB (YC4) Replace the main PWB (see page 1-5- 47). Replace the ISC PWB Contact the Service Support.
9510	ISC PWB error B	Main PWB DP SHD PWB	 Reinsert the connector if its connection is loose. DP relay PWB (YC2) and DP SHD PWB (YC3) Replace the main PWB (see page 1-5- 47). Replace the DP SHD PWB. Contact the Service Support.

Code	Contents	Related parts	Check procedures/ corrective measures
9520	ISC PWB error C	Main PWB ISC PWB	 Reinsert the connector if its connection is loose. Main PWB (YC25) and ISC PWB (YC4) Replace the main PWB (see page 1-5- 47). Replace the ISC main PWB Contact the Service Support.
F000	Communication error between Main PWB and Operation PWB	Main PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. Check that the wirings and connetors between the main PWB and the operation PWB and between the main PWB and the HDD are normal. Main PWB (YC12,YC17,YC30) and Operation PWB (YC1,YC2,YC3) Check that the DDR memories in the main PWB are well conducted and, if not, replace. Execute U024 to initialize (FULL) the HDD (see page 1-3-28). Execute U021initialize memory. (see page 1-3-27) Replace the Main PWB. Copy the log File saved in the HDD by U964 in USB memory and contact the service support (see page 1-3-178). Replace the operation PWB (see page 1-5-
			58).
F010	Main PWB checksum error	Main PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. If not corrected, replace the main PWB (see page 1-5-47).

Code	Contents	Related parts	Check procedures/ corrective measures
F040	Communication error between Main PWB and Print engine	Main PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. Repair or replace the wire from the engine PWB, that may be grounded. (Check short-circuit between 5V and 3.3V.) Check that the FFC wire connecting between the Main PWB (YC3) and the engine PWB (YC46) is normal and, if necessary, re-insert.Or, replace the FFC wire. If not corrected, replace the main PWB (see page 1-5-47).
		Engine PWB	 Check the engine software and upgrade to the latest, if necessary. Replace the engine PWB (see page 1-5- 52).
		HDD	Replace the HDD (see page 1-5-83).
F041	Communication error between Main PWB and Scanner engine	Main PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. Check that the wires between the main PWB and the ISC PWB are normal. If not corrected, replace the main PWB (see page 1-5-47).
		ISC PWB	Replace the ISC PWB.
F050	Print engine ROM check- sum error	Engine software Engine PWB	 Install the latest engine software. 1. Turn the main power swtch off and after 5 seconds, then turn power on. 2. Confirm that the EEPROM has been properly installed.
			3. If not corrected, Replace the engine PWB (see page 1-5-52).
F051	Scanner engine ROM	Scanner software	Install the latest scanner software.
	checksum error	ISC PWB	 Turn the main power swtch off and after 5 seconds, then turn power on. Confirm that the EEPROM has been properly installed. If not corrected, Replace the ISC PWB.
F278	Power supply in drive sys- tem error	The main power switch was turned off before the power switch is pressed. Shutdown due to a power failure	Turn the main power swtch off and after 5 seconds, then turn power on. (Before turning power off, verify that the power key has been pressed and the power indicator has gone off, then switch the main power switch.)

1-4-4 Image formation problems

Isolate the component an image defect has occurred from.

<A guide to isolate the component of the cause.>

Run U089 to print a test page and check whether an image defect happens.

YES: Main unit as the cause of defect

NO: Scanner as the cause of defect

Perform enlarged or reduced copying and verify if the defective images are enlarged or reduced, accordingly. YES: Scanner as the cause of defect

1. Scanner as the cause of defect:

If the defect occurs with copying or sending, refer to P.1-4-140. (Defects caused by a reading error that occurs at the original (glass) LED lamp to CCD (DP: CIS).)

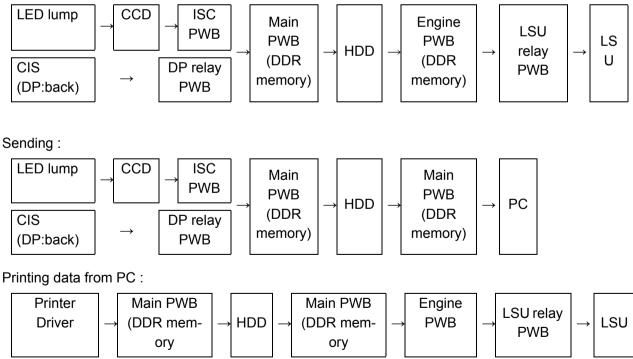
Isolate the problem at the location that the originals are scanned.

- a. Single side DP (read by Main CCD)
- b. On the contact glass (read by Main CCD)
- c. Back side DP (For DPs mounted with CIS)
- 2. Main unit as the cause of defect: refer to P. 1-4-187.

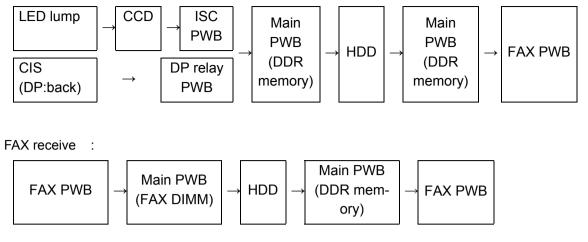
(A defect of image forming occurs from the rendering process that involves charging, drum, LSU, developer, and primary transferring.)

<Flow of image data>

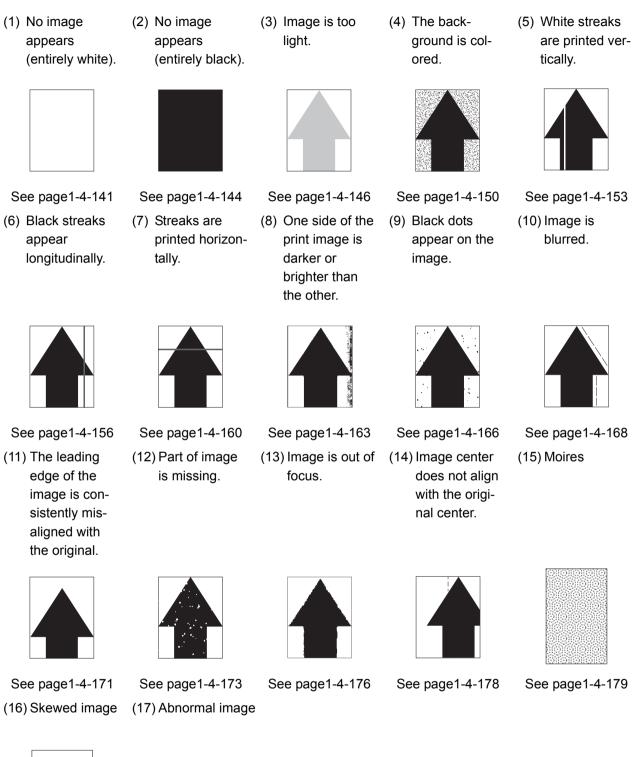
Copying :



FAX (send) :



1-4-5 Poor image (due to DP and scanner reading)





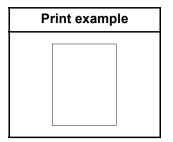
See page1-4-181

See page1-4-184

EABCIDE

arelaxtar as

(1) No image appears (entirely white).



	Defective part	Check description	Corrective Action
1	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
2	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if it its connection is loose. Or, if conduction is lot, replace the wire.
3	Home position sen- sor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
4	Scanner wire drum	Check that the scanner drive gear is loosely mounted.	If the scanner wire drum is loosely mounted, secure the screws.
5	Scanner drive gear	Check that the scanner drive gear is loosely mounted.	If the scanner drive gear loosely mounted, secure the screw.
6	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

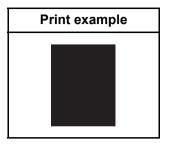
	Defective part	Check description	Corrective Action
1	Original document	Verify the sides of the original document.	If the sides of the original document are reversed, place the original document properly.
2	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	Home position sen- sor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
5	Scanner wire drum	Check that the scanner wire drum is loosely mounted.	If the scanner wire drum is loosely mounted, secure the screws.
6	Scanner drive gear	Check that the scanner drive gear is loosely mounted.	If the scanner drive gear loosely mounted, secure the screw.
7	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

3. DP-scanning second (back) page (with a dual scan DP installed)

-	1	i	
	Defective part	Check description	Corrective Action
1	Original document	Verify the sides of the original document.	If the sides of the original document are reversed, place the original document properly.
2	White-reference roller(Counter the CIS)	Check that the white-reference roller is smoothly operative.	If the white-reference roller does not rotate smoothly, re-install.
3	White-reference roller(Counter the CIS)	Check if the white reference roller is contaminated on its sur- face or damaged.	If the white-reference roller is dirty, clean. Or, if the roller is damaged, replace.
4	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
5	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
6	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
7	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Verify the sides of the original document.	If the sides of the original document are reversed, place the original document properly.
2	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	Home position sen- sor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
5	Scanner wire drum	Check that the scanner drive gear is loosely mounted.	If the sacanner wire drum is loosely mounted, secure the screws.
6	Scanner drive gear	Check that the scanner drive gear is loosely mounted.	If the scanner drive gear loosely mounted, secure the screw.
7	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(2) No image appears (entirely black).



1. Table scanning

	Defective part	Check description	Corrective Action
1	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
2	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
4	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

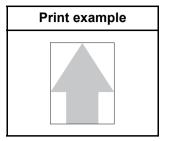
	Defective part	Check description	Corrective Action
1	Scanning position of the DP	Confirm the value using mainte- nance mode U068, DP Read.	If a large value is observed in maintenance mode U068, DP Read, perform adjustment.(see page 1-3-51)
2	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
5	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)

	Defective part	Check description	Corrective Action
6	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
2	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
3	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
4	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

1	Defective part	Check description	Corrective Action
1	Scanning position of the DP	Confirm the value using mainte- nance mode U068, DP Read.	If a large value is observed in maintenance mode U068, DP Read, perform adjustment.(see page 1-3-51)
2	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
5	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)
6	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(3) Image is too light.



	Defective part	Check description	Corrective Action
1	The settings of the adjustment of den- sity	Check the settings of the adjust- ment of density.	 Deactivate EcoPrint if it is activated. Or, if the density is too low, chosse an image quality that suits the original docuemt in type. Increase density. Perform the background color adjustment using the system menu.
2	Settings of anti-off- set	Check the settings of anti-offset.	If anti-offset is set to on, set it to off.
3	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, table(Chart1)_All. (see page 1-3-139)
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Home position sensor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
6	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
8	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
9	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
10	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)

	Defective part	Check description	Corrective Action
12	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

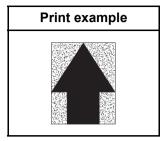
[Defective part	Check description	Corrective Action
1	The settings of the adjustment of den- sity	Check the settings of the adjust- ment of density.	 Deactivate EcoPrint if it is activated. Or, if the density is too low, chosse an image quality that suits the original docuemt in type. Increase density. Perform the background color adjustment using the system menu.
2	Settings of anti-off- set	Check the settings of anti-offset.	If anti-offset is set to on, set it to off.
3	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceUp(Chart1)_Input(see page 1-3-139)
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Home position sensor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
6	Scanning position of the DP	Check whether the scanning position of the DP is wrong.	If the scanning position of the DP is shifted, perform maintenance mode U068, DP Read.(see page 1-3-51)
7	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
8	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
9	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
10	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
11	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)
12	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
13	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	The settings of the adjustment of den- sity	Check the settings of the adjust- ment of density.	 Deactivate EcoPrint if it is activated. Or, if the density is too low, chosse an image quality that suits the original docuemt in type. Increase density. Perform the background color adjustment using the system menu.
2	Settings of anti-off- set	Check the settings of anti-offset.	If anti-offset is set to on, set it to off.
3	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceDown(Chart1)_All (see page 1-3-139)
4	White-reference roller(Counter the CIS)	Check that the white-reference roller is smoothly operative.	If the white-reference roller does not rotate smoothly, re-install.
5	White-reference roller(Counter the CIS)	Check if the white reference roller is contaminated on its sur- face or damaged.	If the white-reference roller is dirty, clean. Or, if the roller is damaged, replace.
6	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
7	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
8	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	The settings of the adjustment of den- sity	Check the settings of the adjust- ment of density.	 Deactivate EcoPrint if it is activated. Or, if the density is too low, chosse an image quality that suits the original docuemt in type. Increase density. Perform the background color adjustment using the system menu.
2	Settings of anti-off- set	Check the settings of anti-offset.	If anti-offset is set to on, set it to off.
3	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceUp(Chart1)_Input. (see page 1-3-139)

	Defective part	Check description	Corrective Action
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Home position sensor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
6	Scanning position of the DP	Check whether the scanning position of the DP is wrong.	If the scanning position of the DP is shifted, perform maintenance mode U068, DP Read.(see page 1-3-51)
7	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
8	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
9	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
10	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
11	ISC PWB	The ISC PWB is defective.	RSeplace the ISC PWB and perform U411. (see page 1-3-139)
12	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
13	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(4) The background is colored.



	Defective part	Check description	Corrective Action
1	Original document	 Check if the background density of the original document is too dense. Check if the original document is floated during scanning. 	 If the background density of the original document is too dense, perform automatic background adjustment.Or, adjust density with background adjustment. If the original document is floated during scanning, press down the original document.
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, table(Chart1)_All. (see page 1-3-139)
3	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
4	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if is hanged off.
5	Home position sensor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
6	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if it its connection is loose. Or, if conduction is lot, replace the wire.
8	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
9	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
10	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)

	Defective part	Check description	Corrective Action
1	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

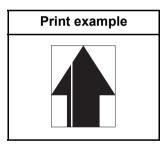
	Defective part	Check description	Corrective Action
1	Original document	 Check if the background density of the original document is too dense. Check if the original document is floated during scanning. 	 If the background density of the original document is too dense, perform automatic background adjustment.Or, adjust density with background adjustment. Adjust the location the DP is mounted.
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceDown(Chart1)_All. (see page 1-3-139)
3	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
4	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
5	Home position sensor	Check the location the Home position sensor is mounted.	Re-mount the Home position sensor if it is hanged off.
6	Installing DP	Check whether the DP frame is distorted or the hinges are damaged.	Replace the DP.
7	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if it its connection is loose. Or, if conduction is lot, replace the wire.
8	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if it its connection is loose. Or, if conduction is lot, replace the wire.
9	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
10	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
11	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
12	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
13	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

[Defective part	Check description	Corrective Action
1	Original document	 Check if the background density of the original document is too dense. Check if the original document is floated during scanning. 	 If the background density of the original document is too dense, perform automatic background adjustment.Or, adjust density with background adjustment. Adjust the location the CIS unit is mounted.
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceUp(Chart1)_All. (see page 1-3-139)
3	White-reference roller(Counter the CIS)	Check that the white-reference roller is smoothly operative.	If the white-reference roller does not rotate smoothly, re-install.
4	White-reference roller(Counter the CIS)	Check if the white reference roller is contaminated on its sur- face or damaged.	If the white-reference roller is dirty, clean. Or, if the roller is damaged, replace.
5	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
6	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted. If not cured, replace the PWB.
7	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
8	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	 Check if the background density of the original document is too dense. Check if the original document is floated during scanning. 	 If the background density of the original document is too dense, perform automatic background adjustment.Or, adjust density with background adjustment. Adjust the location the DP is mounted.
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceUp(Chart1)_Input. (see page 1-3-139)
3	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
4	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
5	Home position sensor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.

1	Defective part	Check description	Corrective Action
6	Installing DP	Check whether the DP frame is distorted or the hinges are damaged.	Replace the DP.
7	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector it its connection is loose. Or, if conduction is lot, replace the wire.
8	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit it is hanged off.
9	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
10	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
12	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(5) White streaks are printed vertically.



	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
4	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
5	Lamp unit	Check whether the LED cover is hanged off.	Re-mount the LED cover if it is hanged off.

	Defective part	Check description	Corrective Action
6	ISU	Check whether the lens cover is hanged off.	Re-mount the lens cover if it is hanged off.
7	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
10	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

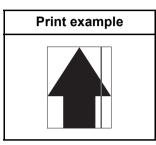
	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
4	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
5	Lamp unit	Check whether the LED cover is hanged off.	Re-mount the LED cover if it is hanged off.
6	ISU	Check whether the lens cover is hanged off.	Re-mount the lens cover if it is hanged off.
7	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
10	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	White-reference roller (Counter the CIS)	Check if the white reference roller is contaminated on its sur- face or damaged.	If the white-reference roller is dirty, clean. Or, if the roller is damaged, replace.
2	DP_CIS glass	Check whether the CIS glass is contaminated.	If the CIS glass is contaminated, clean the CIS glass and conveying guide. If it has a scuff, replace.
3	White streaks com- pensation settings	Check the white streaks com- pensation settings.	Check the white streaks compensation settings.
4	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
5	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
6	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
7	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
4	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
5	Lamp unit	Check whether the LED cover is hanged off.	Re-mount the LED cover if it is hanged off.
6	ISU	Check whether the lens cover is hanged off.	Re-mount the lens cover if it is hanged off.
7	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
8	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)

	Defective part	Check description	Corrective Action
9	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
10	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(6) Black streaks appear longitudinally.



	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the size of the original document and its reference size match.	If the size of the original document and its reference size do not match, set the correct document size or activate border erasure.
3	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
4	Adjustment of the scanner	Check whether the outer areas of the original document have streaks or lines.	 Perform maintenance mode U067, Front.(see page 1-3-50) Perform maintenance mode U411, table (Chart1)_Input. (see page 1-3-139)
5	Contact glass	Check whether the outer areas of the original document have streaks or lines.	If the contact glass is dirty, clean.
6	mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
7	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
8	CCD sensor	Check that the CCD sensor glass is contaminated with dusts.	If dusts are observed on the CCD sensor glass,remove the dusts by an air blower.

	Defective part	Check description	Corrective Action
9	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
10	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
12	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

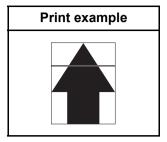
	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the size of the original document and its reference size match.	If the size of the original document and its reference size do not match, set the correct document size or activate border erasure.
3	Scanning position of the DP	Check whether the scanning position of the DP is wrong.	If the scanning position of the DP is shifted, perform maintenance mode U068, DP Read. (see page 1-3-51)
4	Adjustment of the scanner	Check whether the outer areas of the original document have streaks or lines.	 Perform maintenance mode U072, Front. (see page 1-3-56) Perform maintenance mode U411, DP Auto Adj. Perform maintenance mode U411, DP FaceUp(Chart2)_Input. (see page 1-3-139)
5	Slit glass, Contact glass	Check whether the slit glass and contact glass are dirty.	If the slit glass and contact glass are dirty, clean the contact glass, the slit glass, the bottom part of the shading plate, and the conveying guide.
6	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
7	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
8	CCD sensor	Check the dust on the CCD sensor glass.	Check whether the CCD sensor glass is stuck with dusts, and if necessary, remove the dusts by an air blower.

	Defective part	Check description	Corrective Action
9	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
10	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
12	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Adjustment of the scanner	Check if the outer areas of the original document have streaks or lines.	 Perform maintenance mode U072, CIS. (see page 1-3-56) Perform maintenance mode U411, DP Auto Adj. Perform maintenance mode U411, DP FaceDown(Chart1)_All. (see page 1-3-139)
2	DP_CIS glass	Check whether the CIS glass of the DP is contaminated.	If the CIS glass of the DP is contaminated, clean. Or, if it has scuffs, replace.
3	DP guide plate	Check whether the DP guide plate is dirty.	If the guide plate is dirty, clean the guide plate and the conveying guide.
4	DP regist pulley	The DP regist pulley is contaimi- nated.	Clean the DP regist pulley.
5	White-reference roller(Counter the CIS)	Check if the white reference roller is contaminated on its sur- face or damaged.	If the white-reference roller is dirty, clean. Or, if the roller is damaged, replace.
6	White streaks com- pensation settings	Check the white streaks com- pensation settings.	If the white streaks compensation is insufficient, perform maintenance mode U091.(see page 1-3-62)
7	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
8	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
9	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
10	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the size of the original document and its reference size match.	If the size of the original document and its reference size do not match, set the correct document size or activate border erasure.
3	Adjustment of the scanner	Check if the outer areas of the original document have streaks or lines.	Perform maintenance mode U072, Front. (see page 1-3-56)
4	Scanning position of the DP	Check whether the scanning position of the DP is wrong.	If the scanning position of the DP is shifted, perform maintenance mode U068, DP Read. (see page 1-3-51)
5	Slit glass, contact glass	Check whether the slit glass and contact glass are dirty.	If the slit glass and contact glass are dirty, clean the contact glass, the slit glass, the bottom part of the shading plate, and the conveying guide.
6	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
7	Lamp unit	Check that the lamp unit is con- taminated with dusts.	If dusts are observed on the lamp unit, remove the dusts in the light paths.
8	CCD sensor	Check that the CCD sensor glass is contaminated with dusts.	If dusts are observed on the CCD sensor glass,remove the dusts by an air blower.
9	Shading plate	Check whether the shading plate is dirty.	If the shading plate is dirty, perform maintenance mode U063 to modify the shading position. If it does not cure, replace the contact glass assembly. (see page 1-3-46)
10	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
11	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
12	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(7) Streaks are printed horizontally.



[Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	Ajusting scanner	Check that the image at the back of the size indicator has been rendered.	 If the image at the back of the size indicator, has been rendered perform maintenance mode U066, Front. (see page 1-3-49) Perform maintenance mode U411, Table(Chart1)_Input.(see page 1-3-139)
4	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

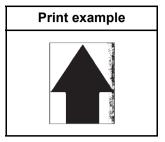
3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	DP_CIS glass	Check whether the CIS glass of the DP is contaminated.	If the CIS glass of the DP is contaminated, clean. Or, if it has scuffs, replace.
3	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
4	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
5	DP_SATA cable	Check the FFC cable between the SHD PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)

	Defective part	Check description	Corrective Action
7	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	FFC cable LED	Check the FFC cable between the LED PWB and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(8) One side of the print image is darker or brighter than the other.



1. Table scanning

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the original document has creases or foldings or wrin- kles.	If the original document has foldings or creases, remove them.
3	Position of the mat of the platen	Check whether the position of the mat of the DP or the platen is wrong.	If the position of the mat of the DP or the platen is shifted, re-mount.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Contact glass assy	Check the location the contact glass is mounted.	If the light guide panel has been fallen off of the mounting position, fix it properly.
6	Lamp unit	Check the position at which the light guide panel is mounted.	If the contact part of the lamp unit and the rail is distorted, replace the lamp unit.
7	Mirror	Check whether the mirrors are dirty.	If the mirrors are dirty, clean the three mirrors.
8	ISU	Check the location the ISU unit is mounted.	Insert a spacer between the scanner unit and the ISU to change the height. (see page 1-5-26)
9	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.(see page 1-3-139)
10	LED Assy	Check the mounting position of the refelector board or if it is distorted.	If the LED assy is hanged off of the mounting position of the reflector or it is deformed, replace the LED assy.
11	Lamp unit	Check that the contact part of the lamp unit and the rail is distorted.	If the contact part of the lamp unit and the rail is distorted, replace the lamp unit.
12	Mirror unit	Check the location the mirror is mounted.	Re-mount the mirror if it is hanged off. Or, if the mirror is damaged, replace.

	Defective part	Check description	Corrective Action
13	Mirror unit	Check that the contact part of the mirror unit and the rail is distorted.	If the contact part of the mirror unit and the rail is distorted, replace the mirror unit.
14	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
15	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
16	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the original document has creases or foldings or wrin- kles.	If the original document has foldings or creases, remove them.
3	DP scanning guide	Check that the scanning guide is smoothly operative.	If the scanning guide does not rotate smoothly, re-install.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
6	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411.
7	ISC PWB	The ISC PWB is defective.	replace the ISC PWB and perform U411. (see page 1-3-139)
8	CCD PWB	The CCD PWB is defective.	Replace the ISU PWB and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

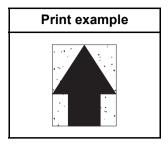
3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the original document has creases or foldings or wrin- kles.	If the original document has foldings or creases, remove them.

	Defective part	Check description	Corrective Action
3	White-reference roller(Counter the CIS)	Check that the white-reference roller is smoothly operative.	If the white-reference roller does not rotate smoothly, re-install.
4	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Original document	Check if the original document has creases or foldings or wrin- kles.	If the original document has foldings or creases, remove them.
3	DP scanning guide	Check that the scanning guide is smoothly operative.	If the scanning guide does not move smoothly, re-install.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
6	LED PWB	Check that the LED is lit.	If the LED is not lit, replace the LED PWB and perform U411. (see page 1-3-139)
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(9) Black dots appear on the image.



1. Table scanning

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

2. DP-scanning first (front) page

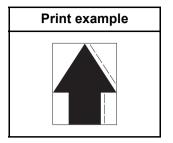
[Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted. If not cured, replace the PWB.
3	DP_SATA cable	Check the FFC cable between the SHD PWB and I/F PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

1	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is dirty.	If the original document is dirty, replace.
2	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
3	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
4	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(10) Image is blurred.



1. Table scanning

	Defective part	Check description	Corrective Action
1	Rail	Check that the carriage is smoothly operative.	If the carriage does not travel smoothly, remove foreign objects on the front and back optical rails.
2	Lamp unit	Check that the carriage is smoothly operative.	If the carriage does not travel smoothly because the lamp unit contacts with the frame, rectify.
3	Scanner wire drum	Confirm that a foreign object exists between the wire rope and the scanner wire drum.	If a foreign object exists, remove.
4	Mirror unit	Check that a foreign object exists in the grooves of the pul- ley.	If a foreign object exists in the grooves of the pulleys, remove.
5	Pulley	Check that a foreign object exists in the grooves of the pul- leys other than above.	If a foreign object exists in the grooves of the pulleys, remove.
6	Wire rope	Confirm that the wire rope has a foreign object sticked or has a scuff.	If a foreign object exists on the wire rope, remove the foreign object. Or, if it is damaged, replace.

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	DP conveying pul- ley	Check that the conveying pulley is smoothly operative.	If the conveying pulley does not rotate smoothly, re-asslemble the conveying roller and springs.
2	Adjustment height of the hinge portions of the DP	Check the height of the front and back portions of the DP.	If the front and back side of the DP is not leveled, adjust the hinge on the left side.
3	Install DP	Check how DP is mounted on the main unit.	If mounting to the main unit is improper, check positioning and secure the screws.
4	DP hinge	Check that the DP hinge is operative in both ascending and descending directions and kept open.	If the DP is not operative smoothly or is not held stably open, replace the hinges.

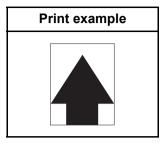
	Defective part	Check description	Corrective Action
5	DP document mat	Check the location the document mat of the DP is mounted.	Re-mount the document mat of the DP if it is hanged off.
6	Original document	Check that the leading edge of the original document is dog-eared.	If the leading edge of the original documet is dog-eared, straighten.
7	Scanning guide	Check if the scanning guide is distorted.	If the scanning guide deformed, replace.
8	Scopper guide	Check that the scopper guide is smoothly operative.	If the scopper guide does not rotate smoothly, re-install.
9	Conveying roller (before and after of scanning)	Check whether the conveying roller is dirty.	If the conveying roller is dirty, clean.
10	Drive belt	Check if the drive belt is jumping gear teeth.	If the drive belt is jumping gear teeth, re-mount the belt tensioner.

3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	DP conveying pul- ley	Check that the conveying pulley is smoothly operative.	If the conveying pulley does not rotate smoothly, re-asslemble the conveying roller and springs.
2	Install DP	Check how DP is mounted on the main unit.	If mounting to the main unit is improper, check positioning and secure the screws.
3	DP hinge	Check that the DP hinge is operative in both ascending and descending directions and kept open.	If the DP is not operative smoothly or is not held stably open, replace the hinges.
4	DP document mat	Check the location the document mat of the DP is mounted.	Re-mount the document mat of the DP if it is hanged off.
5	Original document	Check that the leading edge of the original document is dog-eared.	If the leading edge of the original documet is dog-eared, straighten.
6	Scanning roller	Check if the scanning roller is floated.	If the scanning roller is floated, re-assemble.
7	Conveying roller (before and after of scanning)	Check whether the conveying roller is dirty.	If the conveying roller is dirty, clean.
8	Scanning glass	Check if the scanning glass is floated.	If the scanning glass is floated, re-assemble.
9	Drive belt	Check if the drive belt is jumping gear teeth.	If the drive belt is jumping gear teeth, re-mount the belt tensioner.

	Defective part	Check description	Corrective Action
1	DP conveying pul- ley	Check that the conveying pulley is smoothly operative.	If the conveying pulley does not rotate smoothly, re-asslemble the conveying roller and springs.
2	Adjustment height of the hinge portions of the DP	Check the height of the front and back portions of the DP.	If the front and back side of the DP is not leveled, adjust the hinge on the left side.
3	Install DP	Check how DP is mounted on the main unit.	If mounting to the main unit is improper, check positioning and secure the screws.
4	DP hinge	Check that the DP hinge is operative in both ascending and descending directions and kept open.	If the DP is not operative smoothly or is not held stably open, replace the hinges.
5	DP document mat	Check the location the document mat of the DP is mounted.	Re-mount the document mat of the DP if it is hanged off.
6	Original document	Check that the leading edge of the original document is dog-eared.	If the leading edge of the original documet is dog-eared, straighten.
7	Scanning guide	Check if the scanning guide is distorted.	If the scanning guide deformed, replace.
8	Scopper guide	Check that the scopper guide is smoothly operative.	If the scopper guide does not rotate smoothly, re-install.
9	Conveying roller (before and after of scanning)	Check whether the conveying roller is dirty.	If the conveying roller is dirty, clean.
10	Drive belt	Check if the drive belt is jumping gear teeth.	If the drive belt is jumping gear teeth, re-mount the belt tensioner.

(11) The leading edge of the image is consistently misaligned with the original.



1. Table scanning

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly on the contact glass.	If the original document is not properly placed on the contact glass, place it correctly.
2	Secures the lamp unit	Confirm the oriention of the bracket that secures the wire rope and the lamp unit.	If the bracket that fixes the wire rope and the lamp unit is misaligned, align the bracket properly.
3	Adjustment of the scanner	Check the scanning adjustment of the scanner.	 Perform maintenance mode U066, Front. (see page 1-3-49) Perform maintenance mode U411, table(Chart1)_Input. (see page 1-3-139)
4	Home position sen- sor	Check the location the home position sensor is mounted.	Re-mount the home position sensor if it is hanged off.
5	Drive belt	Check if the tension of the drive belt is insufficient.	If the tension of the drive belt is insufficient, tense the belt.
6	Scanner wire drum	Check if the optical wire drum is loosely fixed.	If the optical wire drum is loosely fixed, secure the screws.
7	Scanner drive gear	Check that the scanner drive gear is loosely mounted.	If the scanner drive gear loosely mounted, secure the screw.

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	 Perform maintenance mode U071, CIS Head. (see page 1-3-54) Perform maintenance mode U411, DP Auto Adj. (only a dual scan DP installed) Perform maintenance mode U411, FaceUp(Chart2)_Input. (see page 1-3-139)
2	Original conveying roller	Check if the conveyer roller is contaminated or worn.	If the conveying roller is dirty, clean the con- veying roller and its axles.If the roller is worn out, replace.

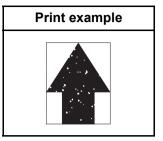
	Defective part	Check description	Corrective Action
3	DP drive motor	Check whether the DP drive motor is fluctuated in rotation.	If the DP motor is fluctuated in rotation, apply grease with the drive gear. If no improvement is observed, replace the motor.

3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	 Perform maintenance mode U071, CIS Head. (see page 1-3-54) Perform maintenance mode U411, DP Auto Adj. Perform maintenance mode U411, FaceDown(Chart1)_All. (see page 1-3- 139)

	Defective part	Check description	Corrective Action
1	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	1. Perform maintenance mode U071, Back Head. (see page 1-3-54)

(12) Part of image is missing.



1. Table scanning

	Defective part	Check description	Corrective Action
	Original document	Check if the original document is	If the original document is not properly placed
1		loaded correctly on the contact glass.	on the contact glass, place it correctly.
2	Original document	 Check that the size of the original document and the paper size match on the panel. Check that the copying position has been automatically rotated. 	 If the sizes of the original document and the paper size do not match, manually set the proper paper size for the original document. Check the paper size automatic detection switch and replace if faulty. If the copying position is automatically rotated, deactivate automatic image
3	Settings of Border removal	Check the value of border removal.	If a large value is given to bordere erasure, change it to a smaller value.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
6	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
8	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
9	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
10	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
11	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

2. DP-scanning first (front) page

<u> </u>	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly in the DP.	If the original document is not properly placed in the DP, place it correctly.
2	Original document	 Check that the size of the original document and the paper size match on the panel. Check that the copying position has been automatically rotated. 	 If the sizes of the original document and the paper size do not match, manually set the proper paper size for the original document. Check the paper size automatic detection switch and replace if faulty. If the copying position is automatically rotated, deactivate automatic image rotation by the system menu.
3	Settings of Border removal	Check the value of border removal.	If a large value is given to bordere erasure, change it to a smaller value.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

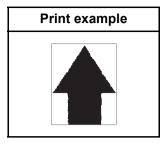
3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly in the DP.	If the original document is not properly placed in the DP, place it correctly.
2	Original document	Check the size of the original document and its reference size.	If the size of the original document and its reference size do not match, manually set the document size.
3	Settings of Border removal	Check the value of border removal.	If a large value is given to bordere erasure, change it to a smaller value.

	Defective part	Check description	Corrective Action
4	DP_SATA cable	Check the FFC cable between the SHD PWB and I/F PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if it its connection is loose. Or, if conduction is lot, replace the wire.
5	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted. If not cured, replace the PWB.
6	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
7	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly in the DP.	If the original document is not properly placed in the DP, place it correctly.
2	Original document	Check the size of the original document and its reference size.	If the size of the original document and its reference size do not match, manually set the document size.
3	Settings of Border removal	Check the value of border removal.	If a large value is given to bordere erasure, change it to a smaller value.
4	Contact glass	Check whether the contact glass is dirty.	If the contact glass is dirty, clean the contact glass, and the bottom part of the shading plate.
5	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
6	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(13) Image is out of focus.



1. Table scanning and DP-scanning first (front) page

<u> </u>	Defective part	Check description	Corrective Action
1	Original document	Check whether the original document is wavy.	If the original document is wavy, straighten.Or, replace the original document.
2	Contact glass	Check whether the contact glass is dew condensed.	If the contact glass is dew condensed, remove the dew.
3	Mirror	Check whether the mirror is dew condensed.	If the mirrors are dew-condensed, remove the dew.
4	Lens	Check whether the lens is dew condensed.	If the lens is dew condensed, remove the dew.
5	CCD sensor	Check whether the CCD sensor glass is dew condensed.	If the CCD sensor glass is dew condensed, remove the dew.
6	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, table(Chart1)_All. (see page 1-3-139)
7	ISU	Confirm the position of the lens and the CCD sensor.	If the lenses and the CCD sensor are misaligned, replace the ISU and perform U411.
8	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

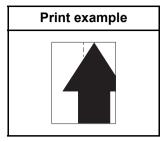
2. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	DP_CIS glass	Check whether the CIS glass is dew condensed.	If the CIS glass is dew condensed, remove the dew.
2	DP_CIS glass	Check whether the CIS glass is contaminated.	If the CIS glass is contaminated, clean the CIS glass. If it has a scuff, replace.
3	White-reference roller(Counter the CIS)	Check that the white-reference roller is smoothly operative.	If the white-reference roller does not rotate smoothly, re-install.

	Defective part	Check description	Corrective Action
4	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceDown(Chart1)_All. (see page 1-3-139)
5	DP_CIS unit	Check the location the CIS unit is mounted.	Re-mount the CIS unit if it is hanged off.
6	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)

	Defective part	Check description	Corrective Action
1	Contact glass	Check whether the contact glass is dew condensed.	If the contact glass is dew condensed, remove the dew.
2	Mirror	Check whether the mirror is dew condensed.	If the mirrors are dew-condensed, remove the dew.
3	Lens	Check whether the lens is dew condensed.	If the lens is dew condensed, remove the dew.
4	CCD sensor	Check whether the CCD sensor glass is dew condensed.	If the CCD sensor glass is dew condensed, remove the dew.
5	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, Table(Chart1)_All. (see page 1-3-139)
6	ISU	Confirm the position of the lens and the CCD sensor.	If the lenses and the CCD sensor are misaligned, replace the ISU and perform U411. (see page 1-3-139)
7	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
8	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(14) Image center does not align with the original center.



1. Table scanning

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly on the contact glass.	If the original document is not properly placed on the contact glass, place it correctly.
2	Contact glass assy	Check the location the contact glass is mounted.	Re-mount the contact glass if it is hanged off.
3	Adjustment of the scanner	Check the scanning adjustment of the scanner.	 Perform maintenance mode U067, Front.(see page 1-3-50) Perform maintenance mode U411, Table(Chart1)_Input. (see page 1-3-139)

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly in the DP.	If the original document is not properly placed in the DP, place it correctly.
2	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	 Perform maintenance mode U072, Front. Perform maintenance mode U411, DP Auto Adj. (If a duplex scanning DP is installed.) Perform maintenance mode U411, DP FaceUp(Chart2)_Input. (see page 1-3-139)

3. DP-scanning second (back) page (with a dual scan DP installed)

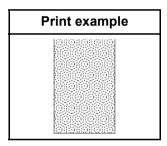
	Defective part	Check description	Corrective Action
1	Original document	u u u u u u u u u u u u u u u u u u u	If the original document is not properly placed
1		loaded correctly in the DP.	in the DP, place it correctly.

	Defective part	Check description	Corrective Action
2	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	 Perform maintenance mode U072, CIS . (see page 1-3-66) Perform maintenance mode U411, DP Auto Adj. Perform maintenance mode U411, DP FaceDown (Chart1)_All. (see page 1-3- 139)

4. DP-scanning second (back) page (with a reversed DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is loaded correctly in the DP.	If the original document is not properly placed in the DP, place it correctly.
2	Adjustment of the scanner	Check the scanning adjustment of DP scanning.	1. Perform maintenance mode U072, Back. (see page 1-3-56)

(15) Moires



1. Table scanning

	Defective part	Check description	Corrective Action
1	Settings of print quality mode	Confirm whether the moire varies depending on print quality mode.	Switch print quality mode if the moire variesdepending on print quality mode.1. Execute printing in text or print mode.2. Reduce the sharpness (to minus).
2	Original document	Check if moire is observed along the direction of scanning of the original document.	If moire is observed, place the original document after rotating it 90-degree.
3	Scaling factor	Happens with the zoom ratio of 100%.	Reduce the real-size ratio of the main scan direction by U065.
4	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, Table(Chart1)_All. (see page 1-3-139)

2. DP-scanning first (front) page

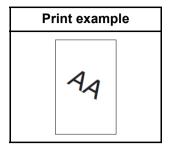
	Defective part	Check description	Corrective Action
1	Settings of print quality mode	Confirm whether the moire varies depending on print quality mode.	Switch print quality mode if the moire variesdepending on print quality mode.1. Execute printing in text or print mode.2. Reduce the sharpness (to minus).
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, Table(Chart1)_All. (see page 1-3-139)

3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Settings of print quality mode	Confirm whether the moire varies depending on print quality mode.	Switch print quality mode if the moire variesdepending on print quality mode.1. Execute printing in text or print mode.2. Reduce the sharpness (to minus).
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, DP FaceDown(Chart1)_All. (see page 1-3-139)

	Defective part	Check description	Corrective Action
1	Settings of print quality mode	Confirm whether the moire varies depending on print quality mode.	Switch print quality mode if the moire variesdepending on print quality mode.1. Execute printing in text or print mode.2. Reduce the sharpness (to minus).
2	Adjustment of the scanner	Check the automatic adjustment of the scanner.	Perform maintenance mode U411, Table(Chart1)_All. (see page 1-3-139)

(16) Skewed image



1. Table scanning

<u> </u>	Defective part	Check description	Corrective Action
1	Original document	Check if the original document is fed askew.	If the original document is not placed askew on the contact glass, place it correctly.
2	Adjustment of height of main unit and scanner unit	Check the scanner unit is quite level.	If the scanner unit is not quite level, perform the height adjustment of the entirer scanner unit.
3	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.

2. DP-scanning first (front) page

[Defective part	Check description	Corrective Action
1	Original document	Check if the original document has creases or foldings or wrinkles.	If the original document has foldings or creases, remove them.
2	DP paper feed	Check if the original document is fed askew.	If the original document is fed askew, set the width guides correctly.
3	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
4	DP feed roller	Check whether the feed roller is dirty.	If the feed roller is dirty, clean.Or, if not cured, replace the feed roller.
5	DP regist roller	Check whether the DP regist roller is dirty.	If the DP regist roller is dirty, clean.
6	DP regist pulley	Check that the DP regist pulley is smoothly operative.	If the DP regist pulley does not rotate smoothly, re-install.
7	Adjustment amount of slack of the original documen	Check the amount of slack of the original document when it reaches at the regist.	If the amount of the slack of the original document roller improper is perform maintenance mode U942, DP slack settings.(see page 1-3-175)
8	Original document setting	Check that the cursor fits with the original document.	Align the cursor to fit with the original document, if necessary.

Γ		Defective part	Check description	Corrective Action
ſ		Adjustment posi-	Check the front and back adjust-	If the front and back adjustment positions of
	9	tions of the hinge	ment positions of the right hinge.	the right hinge are improper, perform adjustment.

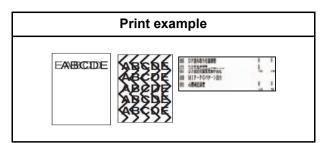
3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document has creases or foldings or wrinkles.	If the original document has foldings or creases, remove them.
2	DP feed roller	Check whether the DP feed roller is dirty.	If the DP feed roller is dirty, clean.
3	DP regist roller	Check whether the DP regist roller is dirty.	If the DP regist roller is dirty, clean.
4	DP regist pulley	Check that the DP regist pulley is smoothly operative.	If the DP regist pulley does not rotate smoothly, re-install.
5	Adjustment amount of slack of the original documen	Check the amount of slack of the original document when it reaches at the regist.	If the amount of the slack of the original document roller improper is perform maintenance mode U942, DP slack settings.(see page 1-3-175)
6	Original document setting	Check that the cursor fits with the original document.	Align the cursor to fit with the original document, if necessary.
7	Install the CIS	Check whether CIS is loosely mounted.	Re-mount the CIS unit if it is hanged off.

	Defective part	Check description	Corrective Action
1	Original document	Check if the original document has creases or foldings or wrinkles.	If the original document has foldings or creases, remove them.
2	Lamp unit	Check the location the lamp unit is mounted.	Re-mount the lamp unit if it is hanged off.
3	DP feed roller	Check whether the feed roller is dirty.	If the feed roller is dirty, clean.Or, if not cured, replace the feed roller.
4	DP regist roller	Check whether the DP regist roller is dirty.	If the DP regist roller is dirty, clean.
5	DP regist pulley	Check that the DP regist pulley is smoothly operative.	If the DP regist pulley does not rotate smoothly, re-install.

	Defective part	Check description	Corrective Action
6	Adjustment amount of slack of the original documen	Check the amount of slack of the original document when it reaches at the regist.	If the amount of the slack of the original document roller improper is perform maintenance mode U942, DP slack settings.(see page 1-3-175)
7	Original document setting	Check that the cursor fits with the original document.	Align the cursor to fit with the original document, if necessary.
8	Adjustment posi- tions of the hinge	Check the front and back adjust- ment positions of the right hinge.	If the front and back adjustment positions of the right hinge are improper, perform adjustment.
9	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

(17) Abnormal image



1. Table scanning

	Defective part	Check description	Corrective Action
1	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
2	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	HDD	Check the wires to the HDD in conduction. Check the connector for connection. Check the con- nector pins for distortion.	 Reinsert the connector if its connection is loose. Check the wires and connetctors, and replace if faulty. Replace the HDD or the SATA wire.
4	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
5	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
6	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

2. DP-scanning first (front) page

	Defective part	Check description	Corrective Action
1	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
2	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.

	Defective part	Check description	Corrective Action
3	HDD	Check the wires to the HDD in conduction. Check the connector for connection. Check the con- nector pins for distortion.	 Reinsert the connector if its connection is loose. Check the wires and connetctors, and replace if faulty. Replace the HDD or the SATA wire.
4	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)
5	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
6	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

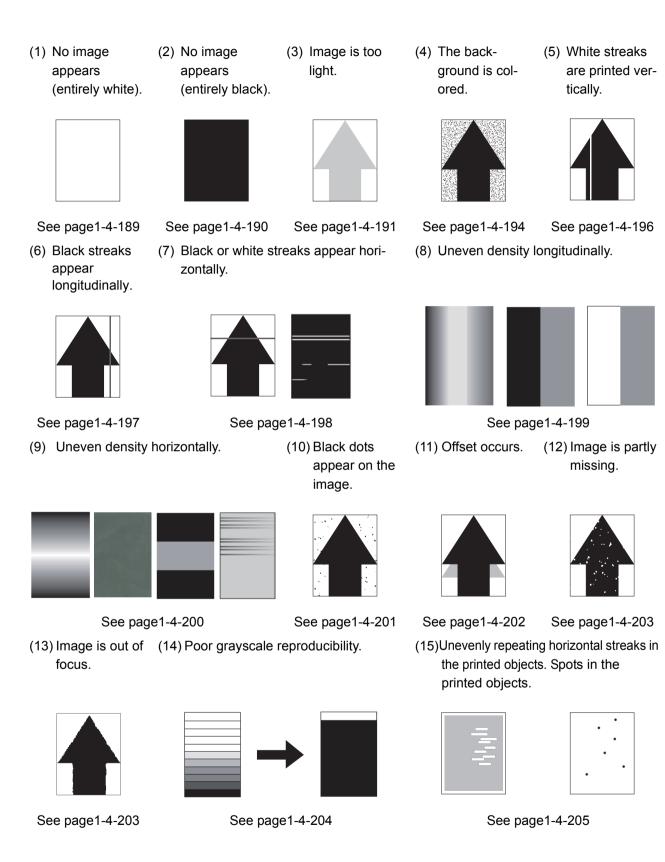
3. DP-scanning second (back) page (with a dual scan DP installed)

	Defective part	Check description	Corrective Action
1	DP_SHD PWB	Check the CIS and the SHD PWB is properly connected.	Reinsert the connector if the PWB was loosely inserted.If not cured, replace the PWB.
2	DP_SATA cable	Check the FFC cable between the SHD PWB and I/F PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	DP_CIS	CIS is defective.	Replace the CIS and perform U091 and U411. (see page 1-3-62,1-3-139)
4	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

	Defective part	Check description	Corrective Action
1	FFC cable CCD	Check the FFC cable between the CCD sensor and ISC PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
2	SATA cable ISC	Check the SATA cable between the ISC PWB and main PWB is properly connected. Or, verify conduction of the wire.	Reinsert the connector if its connection is loose. Or, if conduction is lot, replace the wire.
3	HDD	Check the wires to the HDD in conduction. Check the connector for connection. Check the con- nector pins for distortion.	 Reinsert the connector if its connection is loose. Check the wires and connetctors, and replace if faulty. Replace the HDD or the SATA wire.
4	ISC PWB	The ISC PWB is defective.	Replace the ISC PWB and perform U411. (see page 1-3-139)

	Defective part	Check description	Corrective Action
5	CCD PWB	The CCD PWB is defective.	Replace the ISU and perform U411. (see page 1-3-139)
6	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-47)

1-4-6 Poor image (Image rendering problems: printer engine



- (16) mage is blurred (18) The leading (19) Paper is wrin-(17)The leading (20)Fusing is loose. (Shifted kled. edge of the edge of the image is contransferring). image is sposistently misradically misaligned with the aligned with original. the original. See page1-4-206 See page1-4-207 See page1-4-208 See page1-4-208 See page1-4-210
- (21) Image center does not align with the original center.

(22)Dirty paper edges with toner.

- (23)Dirty reverse side of paper.



See page1-4-211



See page1-4-211



See page1-4-212

(1) No image appears (entirely white).

Print example	Cause of trouble
1. No or defective developing bias output.	
	2. Failure of the rotation of the developing roller.
3. Defective transfer.	
4. Laser is not dispersed from the laser scanner unit (LSU).	
5. The drum does not rotate.	

	Defective part	Check description	Corrective Action
	Developing unit	Executing U089 to generate PGs and check the following :	
		Check whether the developer drive gear is damaged.	If the gear is damaged, replace the developer unit.
1		Check the developing roller is rotated by hand.	If the developer unit is in fault, replace the developer unit. (see page 1-5-35)
		Check contamination and defor- mation on the terminals of devel- oper unit or the high-voltage PWB1.	If the connecting terminals are dirty, clean. If the connecting terminals are deformed, correct for a proper conduction.
2	High-voltage PWB	Check the connection of the con- nector(s) and the high-voltage PWB. Or, verify conduction of the wires.	Reinsert the connector if it its connection is loose. Replace the cable if it has no conduction. High voltage PWB (YC 1) and engine PWB (YC17) :Developer High voltage PWB (YC 2) and engine PWB (YC16) :Transfer
		Check if developing bias value at its default by U140.	 If the value obtaines by U140 does not conform to the default value, reset it to the default. (see page 1-3-80) Replace the high-voltage PWB.
3	Transfer belt unit	Check if the right side conveying unit is closed.	If the conveying unit has not been closed, check how the conveying guide is locked and open the conveying guide once, then close.
4	Laser scanner unit (LSU)	Check the connection of the con- nectors. Or, verify conduction of the wires.	 Reinsert the FFC wire if it its connection is loose. Replace the cable if it has no conduction. Replace the LSU (see page 1-5-26)
5	Engine PWB	A control signal is not derived from the engine PWB.	Replace the enging PWB. (see page 1-5-52)

(2) No image appears (entirely black).

Print example	Cause of trouble
	 No main charging. The laser from the LSU is activated simultaneously.

	Defective part	Check description	Corrective Action
	Charging roller	Check whether the charging roller is properly mounted.	If the charging roller is not fixed properly, fix the roller properly.
1		Check whether the connecting terminals of the charging roller and high-voltage PWB are deformed.	If the connecting terminals are deformed, correct for a proper conduction.
2	High-voltage PWB	Check the connection of the con- nectors. Or, verify conduction of the wires.	Reinsert the connector if its connection is loose. Replace the cable if it has no conduction. High voltage PWB (YC 2) and engine PWB (YC16) :Charger
		Main charging current supplied by the high-voltage PWB is faulty.	Replace the high-voltage PWB. (see page 1-5-57)
3	Laser scanner unit (LSU)	Switching on and off the laser diode on the LSU PWB is out of control.	Replace the LSU. (see page 1-5-31)
4	Engine PWB	The engine PWB is detective.	Replace the engine PWB.(see page 1-5-52)
5	Main PWB	The main PWB is defective.	Replace the main PWB.(see page 1-5-52)

(3) Image is too light.

Print example Cause of trouble	
	 Variance in environments (dew formation). Toner is under supplied, or deteriorated in quality.(Under charged) The volatage of the developing bias is too low. The volatage of the transfer current is too low. The power of LSU laser is too low. The surface potential of the drum is too high. The contact pressure at the transfer belt and the drum is too low.

	Defective part	Check description	Corrective Action
1	Paper	Check that the paper has mois- ture absorbed. Check that the paper has stored in a humid place.	 If the paper is damp, replace.Choose a dry place to store paper. If necessary, install a cassette heater. (see page 1-2-64)
	Drum unit	Check that the drum has dew condensation.	If a dew condensation is observed, perform drum refreshing. (System Menu >Adjustment / Maintenance)
2		 Check if the discharging lamp is dirty. Check whether it is lit. 	 If the discharging lamp is dirty, clean. If not cured, or it does not light, replace the drum unit. (Performs U119)(see page 1-3-73)

	Defective part	Check description	Corrective Action
	Developer unit	Executing U089 to generate PGs and check the following : (see page 1-3-61)	
		1. Confirm the value from U155. (see page 1-3-86)	If the value is less than 542, perform U132 to forcibly replenish toner. (see page 1-3-77)
			Replace the developer unit if the output is kept too low.
3		2. Check if the device executed a low-density printing for a prolonged period.	 If the device was executing a low-density printing for a prolonged period, perform developing refreshing. (System Menu >Adjustment / Maintenance) If developer refreshing does not correct the problem, perform the following Execute maintenance modes U464 Calibration and U410 Grayscale Adjustment. (see page 1-3-154,1-3-138)
		 Check if the connecting ter- minals for developer bias are deformed. 	If the connecting terminals are deformed, correct for a proper conduction.
		Check the value of U140 MagDC. (see page 1-3-80)	If the MagDC value is in excess of the upper limit by U140, perform U464 to set the Thickness Target Value from 0 to +30. Execute maintenance modes U464 Calibration.(see page 1-3-154)
4	Toner container	 Shake the toner container up and down approx. 10 times, and check the following: 1. Check remaining toner by the indicator. 2. Check whether the toner supply inlet is open. 	If the message prompting toner replenishing is shown, the toner inlet is not open, replace the toner container.
5	Toner supply motor	Execute U135 to check the revolution of the toner supply motor. (see page 1-3-77)	If the toner Conduct supply motor does not rotate, replace.

	Defective part	Check description	Corrective Action
6	High-voltage PWB	Check the value of the U100. Check the value of the U140.	 If the value obtained by U100 or U140 does not conform to the default value, reset it to the default. (see page 1-3-83) Replace the high-voltage PWB.
7	Transfer belt unit	 Check whether the connecting terminals. Check the value of the U106. (see page 1-3-68) 	 If the connecting terminals are deformed, correct for a proper conduction. If the value obtained after U106 does not conform to the default value, reset it to the default. Replace transfer belt unit.
		1. Check if the contact between the transfer belut and durm is correct.	Re-mount the transfer belut unit.
8	LSU	 The laser diode on the LSU APC PWB is out of control. Check whether the internal mirrors are contaminated. 	Replace the LSU. (Performs U119) (see page 1-3-73)
9	Engine PWB	The engine PWB is defective.	Replace the enging PWB. (see page 1-5-52)

(4) The background is colored.

Print example	要因	
	 Toner is deteriorated in quality (under-charged). Toner is over-supplied. Developing bias is too high. The layer of toner is too thick on the developing roller (too much toner). The surface potential of the drum is too low (under low temperature environment). 	

	Defective part	Check description	Corrective Action
1	Developer unit	Executing U089 to generate PGs and check the following : (see page 1-3-61)	
		 Check whether the device was being continuously operated with high density, under a hot environment. 	If the device was being continuously operated with high density under a hot environment, perform developing refreshing. (System Menu >Adjustment / Maintenance)
		2. Check the value of the U140 developer bias. (see page 1- 3-80)	If the density ID is too low at calibration, execute maintenance modes U464 Calibration and U410 Grascale Adjustment. (see page 1- 3-154,1-3-138)
		3. Check contamination and deformation on the connecting terminals for developer bias.	If the connecting terminals for developer bias are dirty, clean.If the connecting terminals are deformed, correct for a proper conduction.
		4. Check the toner sensor output by U155. (see page 1-3-86)	If the toner sensor output obtained by U155 is 100 or less, replace the developer unit. (see page 1-5-35)
2	Toner supply motor	Check the toner supply motor is continuously rotating.Check wires for shortcircuiting.	If the harnesses are short-circuited and the toner motor is continuously rotating, replace the toner supply motor.

	Defective part	Check description	Corrective Action
	Drum unit	1. Conduct U139 to check the internal temperature. (see page 1-3-79)	If the internal temperature is 16-degree C or less, continue printing until the temperature reaches 16-dgree C or higher.
		2. Check the value of the U100 main high voltage. (see page 1-3-66)	Fix the inner unit properly. (see page 1-5-33)
3		 Check that the ground terminal is not contaminated or the conductive grease is not applied with the connecting terminals. 	If the connecting terminals are dirty, clean. If the amount of the grease applied is too small, apply conductive grease to the bearing on the receiver side of the drum drive axle. Replace the drum unit. (Performs U119)
		4. Check if the charging roller is dirty.	If the charging roller is dirty, clean.Or replace it. (Performs U930)(see page 1-3-173)
4	Transfer belt unit	 Check if the belt is bleached on its surface. Check the value of U140 MagDC after conducting cali- bration. Check if the ground tab of the transfer belt unit is deformed. 	 If the connecting terminals are deformed, correct for a proper conduction. If the value obtained by U106 does not conform to the default value, reset it to the default. Increase the U140 MagDC value if the U140 MadDC value has not reached at its maximum even though the belt is bleached on its surface. If the MadDC increased to its maximum won't cure, replace the transfer belt unit. (see page 1-5-41)
5	High-voltage PWB	The developing bias and charg- ing current supplied by the high- voltage PWB is faulty.	Replace the high-voltage PWB. (see page 1-5-57)
6	Engine PWB	Defective the engine PWB	Replace the enging PWB. (see page 1-5-52)

(5) White streaks are printed vertically.

Print example Cause of trouble	
	 Dirty LSU slit glass. Foreign objects inside the developer unit. Internal contamination Dirty drum inside.

	Defective part	Check description	Corrective Action
1	Developer unit	Executing U089 to generate	Replace the developer unit.
		PGs. (see page 1-3-61)	(see page 1-5-35)
	Light path between	Check if there are dusts, dirts, or	If a foreign object exists on the frame or the
2	the LSU and the drum	toner obstructing the light paths.	sealings between the developer unit and the drum unit, remove.
	Drum unit	Check if the charging roller is	If the charging roller is dirty, clean. Or replace it.
3		dirty.	(Performs U930) (see page 1-5-36)
		Check if the discharging lamp is dirty.	If the discharging lamp is dirty,clean.
4	LSU	Check if the LSU slit glass is	If the LSU slit glass is dirty,
		dirty.	perform laser scanner cleaning.
5	Transfer belt unit	Check whether a white streak	Clean the transfer belt if it is dirty.
		occurs at the same position as	Replace the transfer belt unit. (see page 1-5-
		the smear on the transfer belt.	41)

(6) Black streaks appear longitudinally.

Print example	Cause of trouble
	 Dirty charging roller Flawed or dirty drum unit Damaged or paper dust bitten cleaning blade

	Defective part	Check description	Corrective Action
1	Separation brush	Check if the separation brush is dirty with paper dusts and waste toner.	If the separation brush is dirty, clean it using a brush.
	Drum unit	Check if drum is dirty on its sur- face.	Execute drum refreshing. (System Menu >Adjustment / Maintenance)
2		 Check if the drum has scratches. Check whether the edge of the cleaning blade is dam- aged. Check whether it is abraded or paper dusts are accumu- lated. Check whether toner is accumulated in the cleaning section. 	Replace the drum unit. (see page 1-5-36)
3	Charging roller unit	Check if there is no toner streaks on the surface of the charging roller.	If the charging roller has streaks on its surface, clean the charging roller. Replace the charging roller, if necessary. (Performs U930) (see page 1-3-173)
	Transfer belt unit	 Check if the transfer belt roller is contaminated on its surface or damaged. 	If smears and scuff are observed on the trans- fer belt unit, replace the unit. (see page 1-5-41)
4		2. Check the cleaning bias con- nector or the connecting ter- minals of high voltage are not dirty or deformed.	If the connector or terminals are dirty, clean. If the connecting terminals are deformed, cor- rect for a proper conduction. Replace the high-voltage PWB. (see page 1-5-57)

	Defective part	Check description	Corrective Action
5	Fuser unit	Check if the paper separation puddle is contaminated with toner.	If the paper separation puddle is dirty, clean the paper separation puddle.
5		Check the device is adjusted for a correct paper weight that matches the paper in use.	If the settings for paper weight and the paper being used do not match, make a proper con- figuration.
6	Eject guide	The Rib is contaminated with toner.	If it is duty,clean.

(7) Black or white streaks appear horizontally.

Print example	Cause of trouble
	 Dirty developer unit or terminals Flawed or dirty drum unit Improper grounding Dirty transfer roller terminals

	Defective part	Check description	Corrective Action
1	Developer unit	 Check the print image on paper has a problem at an interval equivalent to the cir- cumference of the develop- ing roller. Check that the developing roller is dirty at its ends or at the developing bias tab. 	 If the ends of the developing roller and the connecting terminals for developer bias are dirty, clean. Replace the developer unit. (see page 1-5- 35)
	Drum unit	 Check the print image on paper has a problem at an interval equivalent to the circumference of the drum . 	Execute drum refreshing. (System Menu >Adjustment / Maintenance)
2		2. Check if the drum has scratches.	Replace the drum unit. (Performs U119) (see page 1-5-36)
		 Check the grounding tab of the drum or the drum drive shaft. 	 Check how the inner unit is mounted, and correct, if necessary. Replace the drum unit. (Performs U119) (see page 1-5-36)

	Defective part	Check description	Corrective Action
3	Transfer belt unit	Check the print image that implies dirt, deformation, or scratches on the transfer belt, which will be appearing at an interval equal to its circumference.	If the print image has a problem, clean the transfer belt by a soft cloth.
		Check contamination and deformation on the terminals .	 If the connecting terminals are deformed, correct for a proper conduction Replace transfer belt unit.(see page 1-5- 41)
4	Fuser unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the fuser roller.	If the print image has a problem, clean the fuser roller.
5	High-voltage PWB	The bias voltage output sup- plied by the high-voltage PWB is not even.	Replace the high-voltage PWB. (see page 1-5- 57)

(8) Uneven density longitudinally.

Print example	Cause of trouble
	 Dirty LSU inside The transfer belt is not pressed against the drum properly. Drum condensation.

	Defective part	Check description	Corrective Action
1	Transfer belt unit	Check that the transfer belt unit is properly fit.	 If it is not fixed properly, fix it properly. If the conveying unit has not been cloed, check how the conveying guide is locked and open the conveying guide once, then close. Replace the transfer belt unit. (see page 1-5-41)
2	Drum unit	 Check toner is evenly layered on its surface. Check whether the device has been operated under a highly humid environment. 	 Execute drum refreshing. Selects the Dew Mode by U148 Drum Referesh Mode. (see page 1-3-85) Install a cassette heater. Replace the drum unit. (Performs U119) (see page 1-5-36)

	Defective part	Check description	Corrective Action
3	Developer unit	Check that toner is evenly lay- ered on the developing roller.	Replace the developer unit. (see page 1-5-35)
4	LSU	The emission of laser dispersed from the LSU is not even. (Mirror is dropped off inside.)	Replace the LSU.(Performs U119)

(9) Uneven density horizontally.

Print example	Cause of trouble
	 Defective laser scanner unit. Improper charging roller rotation Improper contact on the developer unit terminals

Γ	Defective part	Check description	Corrective Action
1	LSU	Check the emission of laser is even.	Replace the LSU. (see page 1-5-31)
2	Charging roller	Check if the charing roller is improperly mounted.	 Fix the charging roller properly. Replace the charging roller. (Performs U930) (see page 1-5-36)
3	Developer unit	Check If the connecting termi- nals of the developing bias is contaminated by toner.	 If the connecting terminals is dirty. Replace the developer unit. (Performs U140) (see page 1-5-35)
	Transfer belt unit.	Check if the transfer belt is con- taminated on its surface or dam- aged.	1. Replace the transfer belt unit.
4		Check if the cleaning bias con- nector or the connecting termi- nals of high voltage are dirty or deformed.	 If the connector or terminals are dirty, clean.If the connecting terminals are deformed, correct for a proper conduction. Replace the high-voltage PWB.
5	Fuser unit	Check that the roller, its driving unit, or the fusing pressure release mechanism is deformed, abraded, or damaged.	If the roller, its driving unit, or the fusing pres- sure release mechanism is deformed, abraded, or damaged, replace the fuser unit.

(10) Black dots appear on the image.

Print example	Cause of trouble
	 Dirty charging roller Flawed or dirty drum unit Damaged or paper dust bitten cleaning blade

	Defective part	Check description	Corrective Action
1	Drum unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the drum (126mm).	If the drum has scratches, replace the drum unit. (see page 1-5-36)
2	Charging roller	Check the print image on paper has a problem at an interval equivalent to the circumference of the charging roller (38mm).	A problem is observed at a constant interval of the charging roller (38 mm), replace the charging roller.(U930) (see page 1-3-173)
	Developer unit	1. Check if that the developing bias is leaked.	Execute AC calibration by U140. (see page 1-3-83)
3		2. Check the print image on paper has a problem at an interval equivalent to the circumference of the developing roller (39mm).	 If the print image on paper has a problem at an interval equivalent to the circumference of the developer roller, clean the developer unit. Replace the developer unit. (see page 1-5-36)
	Transfer belt unit.	Check if the transfer belt is con- taminated on its surface or dam- aged.	Replace the transfer belt unit.
4		Check the cleaning bias connec- tor or the connecting terminals of high voltage are not dirty or deformed.	 If the connector or terminals are dirty, clean.If the connecting terminals are deformed, correct for a proper conduction. Replace the high-voltage circuit PWB.
5	Fuser unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the fuser roller.	 If the print image has a problem, clean the fuser roller. If cleaning does not help improve the symptom, replace the fuser unit.

(11) Offset occurs.

Print example	Cause of trouble	
	 Flawed or dirty drum unit Developing bias leakage. 	

	Defective part	Check description	Corrective Action
1	Paper	Check that the type of the paper used falls within the range of specifications. Check the set- tings of the type and weight of the paper.	 If the type of the paper being used falls outside the requirements, replace and use a suitable type of paper. If the settings made for the paper being used is inadequate, configure the settings according to the paper being used.
2	Drum unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the drum (126mm).	If the print image on paper has a problem at an interval equivalent to the circumference of the drum, replace the drum unit. (see page 1-5-36
3	Developer unit	Check if offsets are observed at an constant interval of 39 mm, which is equivalent to the cir- cumference of the developing roller.	If offsets are observed at an constant interval of 39 mm, which is equivalent to the circumference of the developing roller, replace the developer unit. (Waste toner is not properly sweeped from the developing roller.) (see page 1-5-35)
4	Transfer belt unit	Check the transfer cleaning volatage by U106. (see page 1-3-68)	 If the transfer cleaning volatage by U106 is not its default, reset it to the default. Replace the transfer belt unit. (see page 1-5-41)
		Check if offsets are occurred at a pitch of the outer circumference of the transfer belt.	If an offset happens at a pitch of the outer cir- cumference, clean the transfer belt.
5	Fuser unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the fuser roller.	If the fuser unit roller is dirty, replace the unit.
6	Fusing temperature set- ting	Check the fusing temperature value by U161. (see page 1-3-90)	If the fusing temperature value by U161 is not its default, reset it to the default.

(12) Image is partly missing.

Print example	Cause of trouble
	 Flawed or dirty drum unit. Deformed or dirty transfer roller on its surface.

Γ	Defective part	Check description	Corrective Action
1	Paper	 Check that the paper has moisture absorbed. Check that the paper has stored in a humid place. 	 If the paper is damp, replace.Choose a dry place to store paper. If necessary, install a cassette heater. (see page 1-2-64)
2	Drum unit	Check the print image on paper has a problem at an interval equivalent to the circumference of the drum (126mm)	If the print image on paper has a problem at an interval equivalent to the circumference of the drum, exexcute drum refreshing (System Menu > Adjustment/Maintenance).
3	Transfer belt unit	Check if the transfer belt is deformed or contaiminated on its surface.	If the transfer belt unit is deformed or contami- nated, replace the intermediate transfer belt unit.
4	Fusing temperature set- ting	Check the value of the U161. (see page 1-3-89)	 Choose a paper weight appropriate for the weight of the paper actually being used, if the fusing temperature was set low using U161. Perform U161 for an appropriate fusing temperature.

(13) Image is out of focus.

Print example	Cause of trouble	
	 Drum condensation. Dirty LSU slit glass. 	

	Defective part	Check description	Corrective Action
1	Paper	 Check that the paper has moisture absorbed. Check that the paper has stored in a humid place. 	 If the paper is damp, replace.Choose a dry place to store paper. If necessary, install a cassette heater. (see page 1-2-64)

	Defective part	Check description	Corrective Action
2	Drum unit	Check that the surface of the drum has dew condensation.	Execute Drum refreshing. System Menu > Adjustment/Maintenance
3	LSU	Check whether the LSU slit glass is contaminated in its entirety.	 If the LSU slit glass is dirty, execute Laser scanner cleaning. Replace the LSU. (Performs U119) (see page 1-5-31)

(14) Poor grayscale reproducibility.

Print example	Cause of trouble
	1. Poor image adjustment.
\rightarrow	

Γ	Defective part	Check description	Corrective Action
1	Image adjustmen	Check if color adjustment is insufficient.	Execute U464 Calibration and U410 Grayscale Adjustment. (see page 1-3-154,1-3-138)

(15) Unevenly repeating horizontal streaks in the printed objects. Spots in the printed objects.

Print example	Cause of trouble
	 Installation at a high altitude. Using the paper with high surface resistance.

	Defective part	Check description	Corrective Action
1	Developer unit	The device is installed in an altitude higher than 1500 m sea level.	 If the device is installed in an altitude greater than 1500 m sea level, perform the following. 1. 35 ppm / 45 ppm devices Execute U140 and turn both AC Calib and High Altitude. 2. 55 ppm devices Execute U140 and turn both AC Calib and High Altitude to Mode1. If changing to Mode1 won't work, change to Mode2.
2	Paper	Check if paper is of high surface resistance.	(see page 1-3-80) Change the paper to another.

(16) mage is blurred (Shifted transferring).

Print example	Cause of trouble	
	 The paper used does not conform to the requirement. Imbalanced fuser unit pressures. 	

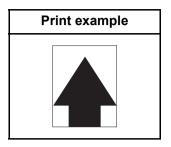
	Defective part	Check description	Corrective Action
1	Paper	 Check that the type of the paper used falls within the range of specifications. Check the settings of the type and weight of the paper. 	 If the type of the paper being used falls outside the requirements, replace and use a suitable type of paper. If the settings made for the paper being used is inadequate, configure the settings according to the paper being used.
2	Fuser unit	 Check the fuser pressure balance. Check if the fuser paper- inserting guide is deformed. 	 If the pressures at the front and rear are unbalanced, replace the fuser unit. (see page 1-5-45) If the fuser unit is deformed, replace. (see page 1-5-45)
3	Paper conveying motor	Check to see if the driving mech- anism for paper conveying is operative without a hinderance.	If the drive does not operate normally, apply grease.
4	Paper conveying guide	The paper conveying guide is deformed.	If the paper conveying guide is deformed, replace the paper conveying guide.

(17) The leading edge of the image is consistently misaligned with the original.

Print example Cause of trouble	
1. Improperly adjusted leading edge timing. 2. Improper amount of slack of the original document in front of the	

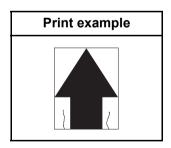
	Defective part	Check description	Corrective Action
	Regist roller	 Check whether the leading- edge timing is adequately adjusted. 	If theadjustment is not sufficient, execute U034 to adjust the leading edge timing. (see page 1-3-33)
1		2. Check whether the amount of slack of the original document when it reaches at the DP regist is adequate.	If the amount of the slack in front of the regist roller is insufficient, execute U051 to optimize the slack. (see page 1-3-39)

(18) The leading edge of the image is sporadically misaligned with the original.



	Defective part	Check description	Corrective Action
1	Paper feed clutch, Middle clutch, Reg- istration clutch, Duplex clutch	Check that the clutches are properly fit.IOr, check they are operative without a hinderance. (35 ppm model)	 If it is not fixed properly, fix it properly. If it does not operate without a hinderance, replace the clutch.
2	Paper feed clutch, Middle motor, Reg- istration motor, Duplex motor	Check that the clutches and motors are properly fit.Or, check they are operative without a hinderance. (45 ppm/ 55 ppm model)	 If it is not fixed properly, fix it properly. If it does not operate without a hinderance, replace the clutch or motor.

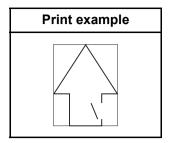
(19) Paper is wrinkled.



	Defective part	Check description	Corrective Action
1	Paper-width guides	Check the paper-width guides are flush with the paper.	If the width adjuster cursors are not flush with paper, set them correctly.
2	Paper	 Check if paper is curled or wavy. Check if paper is stored in a humid place. 	 If the paper is curled or wavy, replace. Choose a dry place to store paper.

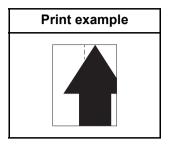
	Defective part	Check description	Corrective Action
3	Regist roller	The pressures at the front and back springs are unbalanced.	Replace the spring with the one having a correct pressure.
4	Fuser unit	The pressuring spring of the fuser unit is defective.	Replace the fuser unit. (see page 1-5-45)

(20) Fusing is loose.



	Defective part	Check description	Corrective Action
1	Paper	 Check that the type of the paper used falls within the range of specifications. Check the settings of the type and weight of the paper. 	 If the type of the paper being used falls outside the requirements, replace and use a suitable type of paper. If the settings made for the paper being used is inadequate, configure the settings according to the paper being used.
2	Paper weight set- ting	Check If the weight of the paper is correctly set.	If the weight of the paper is not correctly set, choose the correct weight that matches the paper being used.
3	Fuser unit	Check the fuser pressure set- ting.	Replace the fuser unit. (see page 1-5-45)
4	Fusing temperature set- ting	Check the value of the U161. (see page 1-3-90)	 Choose a paper weight appropriate for the weight of the paper actually being used, if the fusing temperature was set low using U161. Perform U161 for an appropriate fusing temperature.

(21) Image center does not align with the original center.



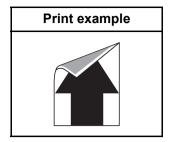
	Defective part	Check description	Corrective Action
1	Paper setting	Check if paper is set correctly.	Reload paper if the paper was not loaded correctly.
2	Image position adjustment	Excute U034 to check the center alignment during writing images.	Perform adjustment if the value of U034 Center Line Adjustment is inadequate. (see page 1-3-33)

(22) Dirty paper edges with toner.

Print example	Cause of trouble
	 Toner scattering due to an internal temperature increase.(Developer unit)

	Defective part	Check description	Corrective Action
1	Conveying guide	Check if the conveying guide is dirty with toner.	If the conveying guide is dirty with toner, clean the developer unit and the cooling ducts.
2	Internal tempra- ture increase (Developer unit)	Check the device has been used for printing a large amount of data or for printing in duplex mode with a high density.	If the device has been used for printing a large amout of data or for printing in duplex mode with a high density, clean the developer unit.

(23) Dirty reverse side of paper.



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	Defective part	Check description	Corrective Action
1	Conveying guide	Check if the conveying guide is dirty with toner.	If the conveying guide is dirty with toner, clean the conveying guide, the developer unit and the cooling ducts.
2	Fuser pressure roller	Check that a foreign object is stuck on the fuser pressure roller.	 If a foreign object exists, clean the fuser pressure roller. If the paper and the paper weight setting do not match, choose the proper paper weight setting.
3	Transfer belt unit	Check if the transfer belt is dirty with toner on its surface.	 Clean the transfer belt. Reset U106 Bias settings to its default.

1-4-7 Electric problems

If the part causing the problem was not supplied, use the unit including the part for replacement. Troubleshooting to each failure must be in the order of the numbered symptoms.

Problem	Causes	Check procedures/corrective measures
(1) The machine does	1. No electricity at the power outlet.	Measure the input voltage.
not operate when the main power switch is turned on.	 The power cord is not plugged in prop- erly. 	Check the contact between the power plug and the outlet.
	3. Broken power cord.	Check for continuity. If none, replace the cord.
	 Defective main power switch. 	Check for continuity across the contacts. If none, replace the main power switch.
	5. Defective power source PWB.	Replace the power source PWB (see page 1-5-52).
(2) MP lift motor does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP lift motor and relay PWB (YC3) Relay PWB (YC12) and feed PWB 1 (YC17) Feed PWB 1 (YC1) and engine PWB (YC6)
	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the MP lift motor.
	4. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(3) Scanner motor does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Scanner motor and ISC PWB (YC5) ISC PWB (YC3) and main PWB (YC11)
	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the scanner motor.
	4. Defective PWB.	Replace the ISC PWB or main PWB and check for correct operation (see page 1-5-47).
(4) Registration motor does not operate (45 ppm/55 ppm	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Registration motor and feed PWB 1 (YC25) Feed PWB 1 (YC2) and engine PWB (YC5)
model only).	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the registration motor.
	4. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(5) Middle motor does not operate (45 ppm/55 ppm	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Middle motor and feed PWB 2 (YC7) Feed PWB 2 (YC1) and engine PWB (YC4)
model only).	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the middle motor.
	4. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(6) Inner motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Inner motor and front PWB (YC13) Front PWB (YC3) and engine PWB (YC7)
	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the inner motor.
	4. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(7) Eject motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject motor and front PWB (YC5) Front PWB (YC3) and engine PWB (YC7)
	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the eject motor.
	4. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(8) Duplex motor 1 does not operate (45 ppm/55 ppm model only).	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex motor 1 and relay PWB (YC16) Relay PWB (YC13) and feed PWB 1 (YC23) Feed PWB 1 (YC2) and engine PWB (YC5)
	2. Defective drive trans- mission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the duplex motor 1.
	4. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(9) Duplex motor 2 does not operate (45 ppm/55 ppm model only).	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex motor 2 and relay PWB (YC7) Relay PWB (YC1) and feed PWB 1 (YC14) Feed PWB 1 (YC1) and engine PWB (YC6)
	 Defective drive trans- mission system. 	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the duplex motor 2.
	4. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(10) Toner fan motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner fan motor and engine PWB (YC19)
	2. Defective motor.	Replace the toner fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-52).
(11) Developer fan motor 1, 2 does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer fan motor 1, 2 and front PWB (YC5) Front PWB (YC3) and engine PWB (YC7)
	2. Defective motor.	Replace the developer fan motor 1 or 2.
	3. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(12) Exhaust fan motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Exhaust fan motor and engine PWB (YC19)
	2. Defective motor.	Replace the exhaust fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-52).
(13) LSU fan motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. LSU fan motor and front PWB (YC8) Front PWB (YC2) and engine PWB (YC8)
	2. Defective motor.	Replace the LSU fan motor.
	3. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(14) Eject fan motor 1, 2 does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject fan motor 1, 2 and relay PWB (YC11) Relay PWB (YC13) and engine PWB (YC23)
	2. Defective motor.	Replace the eject fan motor 1 or 2.
	3. Defective PWB.	Replace the relay PWB or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(15) Eject front fan motor does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject front fan motor and front PWB (YC11) Front PWB (YC2) and engine PWB (YC8)
	2. Defective motor.	Replace the eject front fan motor.
	3. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(16) Eject rear fan motor does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject rear fan motor and feed PWB 1 (YC19) Feed PWB 1 (YC1) and engine PWB (YC6)
	2. Defective motor.	Replace the eject rear fan motor.
	3. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(17) Power source fan motor does not	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Power source fan motor and engine PWB (YC22)
operate.	2. Defective motor.	Replace the power source fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-52).
(18) Controller fan motor does not	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Controller fan motor and main PWB (YC23)
operate.	2. Defective motor.	Replace the controller fan motor.
	3. Defective PWB.	Replace the main PWB and check for correct operation (see page 1-5-47).
(19) Heater fan motor does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Heater fan motor and feed PWB 1 (YC11) Feed PWB 1 (YC2) and engine PWB (YC5)
	2. Defective motor.	Replace the heater fan motor.
	3. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(20) Paper feed clutch 1, 2 does not oper- ate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper feed clutch 1, 2 and feed PWB 2 (YC4) Feed PWB 2 (YC1) and engine PWB (YC4)
	2. Defective clutch.	Replace the paper feed clutch 1 or 2.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(21) Assist clutch 1, 2 does not operate (45 ppm/55 ppm model only).	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Assist clutch 1 and feed PWB 2 (YC10) Assist clutch 2 and feed PWB 2 (YC12) Feed PWB 2 (YC1) and engine PWB (YC4)
	2. Defective clutch.	Replace the assist clutch 1 or 2.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(22) Paper conveying clutch does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper conveying clutch and feed PWB 2 (YC5) Feed PWB 2 (YC1) and engine PWB (YC4)
	2. Defective clutch.	Replace the paper conveying clutch.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(23) MP paper feed clutch does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper feed clutch and relay PWB (YC3) Relay PWB (YC12) and feed PWB 1 (YC17) Feed PWB 1 (YC1) and engine PWB (YC6)
	2. Defective clutch.	Replace the MP paper feed clutch.
	3. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(24) Registration clutch does not operate (35 ppm model	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Registration clutch and feed PWB 1 (YC22) Feed PWB 1 (YC2) and engine PWB (YC5)
only).	2. Defective clutch.	Replace the registration clutch.
	3. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(25) Middle clutch does not operate (35 ppm model	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Middle clutch and feed PWB 2 (YC7) Feed PWB 2 (YC1) and engine PWB (YC4)
only).	2. Defective clutch.	Replace the middle clutch.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(26) Duplex clutch 1 does not operate (35 ppm model only).	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex clutch 1 and relay PWB (YC11) Relay PWB (YC13) and feed PWB 1 (YC23) Feed PWB 1 (YC2) and engine PWB (YC5)
	2. Defective clutch.	Replace the duplex clutch 1.
	3. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(27) Duplex clutch 2 does not operate (35 ppm model only).	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex clutch 2 and relay PWB (YC7) Relay PWB (YC1) and feed PWB 1 (YC14) Feed PWB 1 (YC1) and engine PWB (YC6)
	2. Defective clutch.	Replace the duplex clutch 2.
	3. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(28) Pickup solenoid 1, 2 does not operate (45 ppm/55 ppm	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Pickup solenoid 1, 2 and feed PWB 2 (YC8) Feed PWB 2 (YC1) and engine PWB (YC4)
model only).	2. Defective solenoid.	Replace the pickup solenoid 1 or 2.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(29) Feedshift solenoid does not operate.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Feedshift and front PWB (YC4) Front PWB (YC3) and engine PWB (YC7)
	2. Defective solenoid.	Replace the feedshift solenoid 1 or 2.
	3. Defective PWB.	Replace the front PWB or engine PWB and check for correct operation (see page 1-5-52).
(30) Cleaning solenoid does not operate.	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Cleaning solenoid and relay PWB (YC4) Relay PWB (YC12) and Feed PWB 1 (YC17) Feed PWB 1 (YC2) and engine PWB (YC5)
	2. Defective solenoid.	Replace the cleaning solenoid.
	3. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(31) The message requesting paper to be loaded is shown	1. Defective connector cable or poor con- tact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper sensor 1, 2 and feed PWB 2 (YC8) Feed PWB 2 (YC1) and engine PWB (YC4)
when paper is present on the cas-	2. Deformed actuator.	Check visually and replace if necessary.
sette.	3. Defective sensor.	Replace the paper sensor 1 or 2.
	4. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(32) The message requesting paper to be loaded is shown when paper is	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper sensor and relay PWB (YC3) Relay PWB (YC12) and feed PWB 1 (YC17) Feed PWB 1 (YC1)and engine PWB (YC6)
present on the MP tray.	2. Deformed actuator.	Check visually and replace if necessary.
	3. Defective sensor.	Replace the MP paper sensor.
	4. Defective PWB.	Replace the feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).
(33) The size of paper on the cassette is not displayed cor- rectly.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper length switch 1, 2 and feed PWB 2 (YC3) Paper width switch 1, 2 and feed PWB 2 (YC3) Feed PWB 2 (YC1) and engine PWB (YC4)
	2. Defective switch.	Replace the paper length switch 1, 2 or paper width switch 1, 2.
	3. Defective PWB.	Replace the feed PWB 2 or engine PWB and check for correct operation (see page 1-5-52).
(34) The size of paper on the MP tray is not displayed cor- rectly.	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper length switch and relay PWB (YC2) MP paper width switch and relay PWB (YC2) Relay PWB (YC12) and feed PWB 1 (YC17) Feed PWB 1 (YC1)and engine PWB (YC6)
	2. Defective switch.	Replace the MP paper length switch or MP paper width switch.
	3. Defective PWB.	Replace the relay PWB, feed PWB 1 or engine PWB and check for correct operation (see page 1-5-52).

Problem	Causes	Check procedures/corrective measures
(35) A paper jam in the paper feed, paper conveying or eject section is indi- cated when the main power switch is turned on.	 A piece of paper torn from paper is caught around feed sensor 2, MP feed sensor, middle sensor, paper conveying sensor, registration sensor, loop sensor, fuser eject sensor, duplex sensor 1, 2, eject full sensor or switch- back sensor. 	Check visually and remove it, if any.
	2. Defective sensor.	Replace the feed sensor 1, 2, MP feed sensor, middle sen- sor, paper conveying sensor, registration sensor, loop sen- sor, fuser eject sensor, duplex sensor 1, 2, eject full sensor or switchback sensor.
(36) A message indicat- ing cover open is displayed when the	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Front cover switch and front PWB (YC8) Front PWB (YC2) and engine PWB (YC8)
front cover is closed.	2. Defective switch.	Replace the front cover switch.
(37) A message indicat- ing unit open is dis- played when the	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper conveying unit switch and feed PWB 1 (YC15) Feed PWB 1 (YC4) and power source PWB (YC12)
paper conveying unit is closed.	2. Defective switch.	Replace the paper conveying unit switch.
(38) A message indicat- ing cover open is displayed when the duplex cover is	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex cover switch and relay PWB (YC7) Relay PWB (YC1) and feed PWB 1 (YC14) Feed PWB 1 (YC1)and engine PWB (YC6)
closed.	2. Defective switch.	Replace the duplex cover switch.
(39) A message indicat- ing cover open is displayed when the	 Defective connector cable or poor con- tact in the connector. 	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper conveying cover switch and feed PWB 2 (YC6) Feed PWB 2 (YC1) and power source PWB (YC4)
paper conveying cover is closed.	2. Defective switch.	Replace the paper conveying cover switch.

1-4-8 Mechanical problems

Problem	Causes/check procedures	Corrective measures
(1) No primary paper feed.	Check if the surfaces of the following roll- ers are dirty with paper powder. Forwarding pulley Paper feed pulley MP paper feed pulley	Clean with isopropyl alcohol.
	Check if the following rollers is deformed. Forwarding pulley Paper feed pulley MP paper feed pulley	Check visually and replace any deformed (see page 1-5-7, 1-5-10, 1-5-14).
	Defective paper feed clutch 1, 2 or MP paper feed clutch installation.	Check visually and remedy if necessary.
(2) No secondary paper feed.	Check if the surfaces of the following roll- ers are dirty with paper powder. Right registration roller Left registration roller	Clean with isopropyl alcohol.
	Defective registration motor installation. (45 ppm/55 ppm model) Defective registration clutch installation. (35 ppm model)	Check visually and remedy if necessary.
(3) Skewed paper feed.	Paper width guide in a cassette installed incorrectly.	Check the paper width guide visually and remedy or replace if necessary.
(4)	Check if the paper is excessively curled.	Change the paper.
Multiple sheets of paper are fed.	Paper is loaded incorrectly.	Load the paper correctly.
paper are red.	Check if the separation pulley is worn.	Replace the separation pulley if it is worn (see page 1-5-7, 1-5-10).
(5)	Check if the paper is excessively curled.	Change the paper.
Paper jams.	Check if the contact between the right and left registration rollers is correct.	Check visually and remedy if necessary.
	Check if the heat roller or press roller is extremely dirty or deformed.	Check visually and replace the fuser unit (see page 1-5-45).
(6) Toner drops on the paper conveying path.	Check if the drum unit or developer unit is extremely dirty.	Clean the drum unit or developer unit.

If the part causing the problem was not supplied, use the unit including the part for replacement.

	Causes/check procedures	Corrective measures
	Check if the rollers, pulleys and gears operate smoothly.	Grease the bushes and gears.
Abnormal noise is heard.		Check visually and remedy if necessary.

1-4-9 Send error code

This section describes the scanning errors and descriptions, preventive actions, as well as corrective actions. Error codes not described here could fall within software errors.

If such an error is encountered, turn power off then on, and advise the service representative.

(1) Scan to SMB error codes

Code	Contents	Check procedures/corrective measures
1101	Host destined does not exist on the net- work.	 Confirm destined host. Confirm device's network parameters. Confirm the network parameters the device is connected.
1102	Login to the host has failed.	 Confirm user name and password. Confirm the network parameters the device is connected. Check the host if the folder is properly shared.
1103	Destined host, folder, and/or file names are invalid.	 Check illegal characters are not contained within these names. Check the name of the folder and files conform with the naming syntax. Confirm destined host and folder.
1105	SMB protocol is not enabled.	1. Confirm device's SMB protocols.
2101	Login to the host has failed.	 Confirm destined host. Confirm that the LAN cable is properly connected to the device. Check the SMB port number. Confirm device's network parameters. Confirm the network parameters the device is con- nected.
2201	Writing scanned data has failed.	 Check the scanning file name. Confirm device's network parameters. Confirm the network parameters the device is connected.
2203	No response from the host during a cer- tain period of time.	 Confirm the network parameters the device is connected. Confirm that the LAN cable is properly connected to the device.

(2) Scan to FTP error codes

Code	Contents	Check procedures/corrective measures
1101	FTP server does not exist on the net- work.	 Check the FTP server name. Confirm device's network parameters. Confirm the network parameters the device is connected.
1102	Login to the FTP server has failed.	 Confirm user name and password. Check the FTP server name.
1103	Destined folder is invalid.	 Check illegal characters are not contained within these names. Check the FTP server name.
1105	FTP protocol is not enabled.	1. Confirm device's FTP protocols.
1131	Initializing TLS has failed.	1. Confirm device's security parameters.
1132	TLS negotiation has failed.	 Confirm device's security parameters. Check the FTP server name.
2101	Access to the FTP server has failed.	 Check the FTP server name. Confirm that the LAN cable is properly connected to the device. Check the FTP port number. Confirm device's network parameters. Confirm the network parameters the device is con- nected. Check the FTP server name.
2102	Access to the FTP server has failed. (Connection timeout)	 Check the FTP server name. Check the FTP port number. Confirm device's network parameters. Confirm the network parameters the device is connected. Check the FTP server name.
2103	The server cannot establish communi- cation.	 Check the FTP server name. Check the FTP port number. Confirm device's network parameters. Confirm the network parameters the device is connected. Check the FTP server name.
2201	Connection with the FTP server has failed.	 Confirm device's network parameters. Confirm the network parameters the device is connected. Confirm destined folder. Check the FTP server name.
2202	Connection with the FTP server has failed. (Timeout)	 Confirm device's network parameters. Confirm the network parameters the device is connected.
2203	No response from the server during a certain period of time.	 Confirm device's network parameters. Confirm the network parameters the device is connected.

Code	Contents	Check procedures/corrective measures
2231	Connection with the FTP server has failed. (FTPS communication)	 Confirm device's network parameters. Confirm the network parameters the device is connected.
3101	FTP server responded with an error.	 Confirm device's network parameters. Confirm the network parameters the device is connected. Check the FTP server.

(3) Scan to E-mail error codes

Code	Contents	Check procedures/corrective measures
1101	SMTP/POP3 server does not exist on the network.	 Check the SMTP/POP3 server name. Confirm device's network parameters. Confirm the network parameters the device is connected.
1102	Login to the SMTP/POP3 server has failed.	 Confirm user name and password. Check the SMTP/POP3 server.
1104	The domain the destined address belongs is prohibited by scanning restriction.	1. Confirm device's SMTP parameters.
1105	SMTP protocol is not enabled.	1. Confirm device's SMTP protocols.
1106	Sender's address is not specified.	1. Confirm device's SMTP protocols.
2101	Connection to the SMTP/POP3 server has failed.	 Check the SMTP/POP3 server name. Confirm that the LAN cable is properly connected to the device. Check the SMTP/POP3 port number. Confirm device's network parameters. Confirm the network parameters the device is con- nected. Check the SMTP/POP3 server.
2102	Connection to the SMTP/POP3 server has failed. (Connection timeout)	 Check the SMTP/POP3 server name. Check the SMTP/POP3 port number. Confirm device's network parameters. Confirm the network parameters the device is connected. Check the SMTP/POP3 server.
2103	The server cannot establish communi- cation.	 Check the SMTP/POP3 server name. Check the SMTP/POP3 port number. Confirm device's network parameters. Confirm the network parameters the device is connected. Check the SMTP/POP3 server.
2201	Connection to the SMTP/POP3 server has failed.	 Confirm device's network parameters. Confirm the network parameters the device is connected.

Code	Contents	Check procedures/corrective measures
2202	Connection to the SMTP/POP3 server has failed. (Timeout)	 Confirm device's network parameters. Confirm the network parameters the device is connected.
2204	The size of scanning exceeded its limit.	1. Confirm device's network parameters.
3101	SMTP/POP3 server responded with an error.	 Confirm device's network parameters. Confirm the network parameters the device is connected. Check the SMTP/POP3 server.
3102	Error: Server Response.	 Check the SMTP/POP3 server. Wait a minute and trye again.
3201	No SMTP authentication is found.	 Check the SMTP server. The device supports SMTP authentication services including CRAM-MD5, DIGEST-MD5, PLAIN and LOGIN.
4803	Failed to establish the SSL session.	 Verify the self certificate of the device. Check the server certificate of the SMTP/POP3 server. Check the SMTP/POP3 configuration of the device and the SMTP/POP3 server.

1-4-10 Error codes

(1) Error code

Error codes are listed on the communication reports, activity report, etc. The codes consist of an error code indication U followed by a 5-digit number. (Error codes for V34 communication errors start with an E indication, followed by five digits.)

The upper three of the five digits indicate general classification of the error and its cause, while the lower two indicate the detailed classification. Items for which detailed classification is not necessary have 00 as the last two digits.

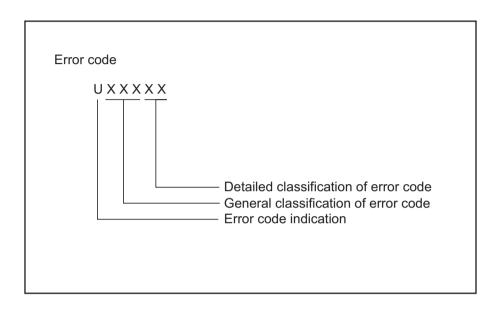


Figure 1-4-4

(2) Table of general classification

Error code	Description
U00000	No response or busy after the set number of redials.
U00100	Transmission was interrupted by a press of the stop/clear key.
U00200	Reception was interrupted by a press of the stop/clear key.
U00300	Recording paper on the destination unit has run out during transmission.
U004XX	A connection was made but interrupted during handshake with the receiver unit (refer to P.1-4-230 U004XX error code table).
U006XX	Communication was interrupted because of a machine problem (refer to P.1-4-230 U006XX error code table).
U00700	Communication was interrupted because of a problem in the destination unit.
U008XX	A page transmission error occurred in G3 mode (refer to P.1-4-230 U008XX error code table).
U009XX	A page reception error occurred in G3 mode (refer to P.1-4-230 U009XX error code table).
U010XX	Transmission in G3 mode was interrupted by a signal error (refer to P.1-4-231 U010XX error code table).
U011XX	Reception in G3 mode was interrupted by a signal error (refer to P.1-4-232 U011XX error code table).
U01400	An invalid one-touch key was specified during communication.
U01500	A communication error occurred when calling in V.8 mode.
U01600	A communication error occurred when called in V.8 mode.
U017XX	A communication error occurred before starting T.30 protocol during transmission in V.34 mode (refer to P.1-4-233 U017XX error code table).
U018XX	A communication error occurred before starting T.30 protocol during reception in V.34 mode (refer to P.1-4-233 U018XX error code table).
U03000	No document was present in the destination unit when polling reception started.
U03200	In interoffice subaddress-based bulletin board reception, data was not stored in the box specified by the destination unit.
U03300	In polling reception from a unit of our make, operation was interrupted due to a mismatch in permit ID or telephone number. Or, in interoffice subaddress-based bulletin board reception, operation was interrupted due to a mismatch in permit ID or telephone num- ber.
U03400	Polling reception was interrupted because of a mismatch in individual numbers (destina- tion unit is either of our make or by another manufacturer).
U03500	In interoffice subaddress-based bulletin board reception, the specified Subaddress confi- dential box number was not registered in the destination unit.
U03600	An interoffice subaddress-based bulletin board reception was interrupted because of a mismatch in the specified subaddress confidential box number.
U03700	Interoffice subaddress-based bulletin board reception failed because the destination unit had no subaddress-based bulletin board transmission capability, or data was not stored in any subaddress confidential box in the destination unit.

Error code	Description
U04000	In interoffice subaddress-based transmission mode, the specified subaddress box num- ber was not registered in the destination unit.
U04100	Subaddress-based transmission failed because the destination unit had no subaddress- based reception capability.
U04200	In encrypted transmission, the specified encryption box was not registered in the desti- nation unit.
U04300	Encrypted transmission failed because the destination unit had no encrypted communi- cation capability.
U04400	Encrypted transmission was interrupted because encryption keys did not agree.
U04500	Encrypted reception was interrupted because of a mismatch in encryption keys.
U05100	Password check transmission or restricted transmission was interrupted because the permit ID's did not agree with.
U05200	Password check reception or restricted reception was interrupted because the permit ID's did not match, the rejected FAX number's did match, or the destination receiver did not return its phone number.
U05300	The password check reception or the restricted reception was interrupted because the permitted numbers did not match, the rejected numbers did match, or the machine in question did not acknowledge its phone number.
U14000	Memory overflowed during confidential reception. Or, in subaddress-based confidential reception, memory overflowed.
U14100	In interoffice subaddress-based transmission, memory overflowed in the destination unit.
U19000	Memory overflowed during memory reception.
U19100	Memory overflowed in the destination unit during transmission.
U19300	Transmission failed because an error occurred during JBIG encoding.

(2-1) U004XX error code table: Interrupted phase B

Error code	Description
U00430	Polling request was received but interrupted because of a mismatch in permit number. Or, subaddress-based bulletin board transmission request was received but interrupted because of a mismatch in permit ID in the transmitting unit.
U00431	An subaddress-based bulletin board transmission was interrupted because the specified subaddress confidential box was not registered.
U00432	An subaddress-based bulletin board transmission was interrupted because of a mis- match in Subaddress confidential box numbers.
U00433	Subaddress-based bulletin board transmission request was received but data was not present in the subaddress confidential box.
U00440	Subaddress-based confidential reception was interrupted because the specified subad- dress box was not registered.
U00450	The destination transmitter disconnected because the permit ID's did not agree with while the destination transmitter is in password-check transmission or restricted transmission.
U00460	Encrypted reception was interrupted because the specified encryption box number was not registered.
U00462	Encrypted reception was interrupted because the encryption key for the specified encryption box was not registered.

(2-2) U006XX error code table: Problems with the unit

Error code	Description
U00601	Document jam or the document length exceeds the maximum.
U00613	Image writing section problem
U00656	Data was not transmitted to a modem error.
U00690	System error.

(2-3) U008XX error code table: Page transmission error

Error code	Description
U00800	A page transmission error occurred because of reception of a RTN or PIN signal.
U00811	A page transmission error reoccurred after retry of transmission in the ECM mode.

(2-4) U009XX error code table: Page reception error

Error code	Description
U00900	An RTN or PIN signal was transmitted because of a page reception error.
U00910	A page reception error remained after retry of transmission in the ECM mode.

(2-5) U010XX error code table: G3 transmission

Error code	Description
U01000	An FTT signal was received for a set number of times after TCF signal transmission at 2400 bps. Or, an RTN signal was received in response to a Q signal (excluding EOP) after transmission at 2400 bps.
U01001	Function of the unit differs from that indicated by a DIS signal.
U01016	An MCF signal was received but no DIS signal was received after transmission of an EOM signal, and T1 timeout was detected.
U01019	No relevant signal was received after transmission of a CNC signal, and the preset num- ber of command retransfers was exceeded (between units of our make).
U01020	No relevant signal was received after transmission of a CTC signal, and the preset num- ber of command retransfers was exceeded (ECM).
U01021	No relevant signal was received after transmission of an EOR.Q signal, and the preset number of command retransfers was exceeded (ECM).
U01022	No relevant signal was received after transmission of an RR signal, and the preset num- ber of command retransfers was exceeded (ECM).
U01028	T5 time-out was detected during ECM transmission (ECM).
U01052	A DCN signal was received after transmission of an RR signal (ECM).
U01080	A PIP signal was received after transmission of a PPS.NULL signal.
U01092	During transmission in V.34 mode, communication was interrupted because of an impossible combination of the symbol speed and communication speed.
U01093	A DCN or other inappropriate signal was received during phase B of transmission.
U01094	The preset number of command retransfers for DCS/NSS signals was exceeded during phase B of transmission.
U01095	No relevant signal was received after transmission of a PPS (Q) signal during phase D of transmission, and the preset number of command transfers was exceeded.
U01096	A DCN signal or invalid command was received during phase D of transmission.
U01097	The preset number of command retransfers was exceeded after transmission of an RR signal or no response.

(2-6) U011XX error code table: G3 reception

Error code	Description
U01100	Function of the unit differs from that indicated by a DCS signal.
U01101	Function of the unit (excl. communication mode select) differs from that indicated by an NSS signal.
U01102	A DTC (NSC) signal was received when no transmission data was in the unit.
U01110	No response after transmission of a DIS signal.
U01111	No response after transmission of a DTC (NSC) signal.
U01113	No response after transmission of an FTT signal.
U01125	No response after transmission of a CNS signal (between units of our make).
U01129	No response after transmission of an SPA signal (short protocol).
U01141	A DCN signal was received after transmission of a DTC signal.
U01143	A DCN signal was received after transmission of an FTT signal.
U01155	A DCN signal was received after transmission of an SPA signal (short protocol).
U01160	During message reception, transmission time exceeded the maximum transmission time per line.
U01162	Reception was aborted due to a modem malfunction during message reception.
U01191	Communication was interrupted because an error occurred during an image data reception sequence in the V.34 mode.
U01193	There was no response, or a DCN signal or invalid command was received, during phase C/D of reception.
U01194	A DCN signal was received during phase B of reception.
U01195	No message was received during phase C of reception.
U01196	Error line control was exceeded and a decoding error occurred for the message being received.

(2-7) U017XX error code table: V.34 transmission

Error code	Description
U01700	A communication error occurred in phase 2 (line probing).
U01720	A communication error occurred in phase 4 (modem parameter exchange).
U01721	Operation was interrupted due to the absence of a common communication speed between units.

U01700: A communication error that occurs at the transmitting unit in the period after transmission of INFO0 before entering phase 3 (primary channel equivalent device training). For example, INFO0/A/Abar (B/Bbar, for polling transmission)/INFOh was not detected.

- U01720: A communication error that occurs at the transmitting unit in the period after initiating the control channel before entering the T.30 process. For example, PPh/ALT/MPh/E was not detected.
- U01721: In the absence of a common communication speed between units (including when an impossible combination of communication speed and symbol speed occurs) after MPh exchange; 1) a DCN signal was received from the destination unit, and the line was cut; or 2) a DIS (NSF, CSI) signal was received from the destination unit and, in response to the signal, the unit transmitted a DCN signal, and the line was cut.

(2-8) U018XX error code table: V.34 reception

Error code	Description
U01800	A communication error occurred in phase 2 (line probing).
U01810	A communication error occurred in phase 3 (primary channel equivalent device training).
U01820	A communication error occurred in phase 4 (modem parameter exchange).
U01821	Operation was interrupted due to the absence of a common communication speed between units.

U01800: A communication error that occurs at the receiver unit in the period after transmission of INFO0 before entering phase 3 (primary channel equivalent device training). For example, INFO0/B/Bbar (A/Abar, for polling reception)/probing tone was not detected.

- U01810: A communication error that occurs at the receiver unit in phase 3 (primary channel equivalent device training). For example, S/Sbar/PP/TRN was not detected.
- U01820: A communication error that occurs at the receiver unit in the period after initiating the control channel before entering the T.30 process. For example, PPh/ALT/MPh/E was not detected.
- U01821: In the absence of a common communication speed between units (including when an impossible combination of communication speed and symbol speed occurs) after MPh exchange, a DCN signal was transmitted to the destination unit and the line was cut.

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1-5-1 Precautions for assembly and disassembly

(1) Precautions

Before starting disassembly, press the Power key on the operation panel to off. Make sure that the Power lamp is off before turning off the main power switch. And then unplug the power cable from the wall outlet. When the fax kit is installed, be sure to disconnect the modular cable before starting disassembly. When handling PWBs (printed wiring boards), do not touch parts with bare hands.

The PWBs are susceptible to static charge.

Do not touch any PWB containing ICs with bare hands or any object prone to static charge.

When removing the hook of the connector, be sure to release the hook.

Take care not to get the cables caught.

To reassemble the parts, use the original screws. If the types and the sizes of screws are not known, refer to the PARTS LIST.

(2) Drum

Note the following when handling or storing the drum.

When removing the drum unit, never expose the drum surface to strong direct light.

Keep the drum at an ambient temperature between -20°C/-4°F and 40°C/104°F and at a relative humidity not higher than 85% RH. Avoid abrupt changes in temperature and humidity.

Avoid exposure to any substance which is harmful to or may affect the quality of the drum.

Do not touch the drum surface with any object. Should it be touched by hands or stained with oil, clean it.

(3) Toner

Store the toner container in a cool, dark place. Avoid direct light and high humidity.

(4) How to tell a genuine Kyocera toner container

As a means of brand protection, the Kyocera toner container utilizes an optical security technology to enable visual validation. A validation viewer is required to accomplish this.

Hold the validation viewer over the left side part of the brand protection seal on the toner container. Through each window of the validation viewer, the left side part of the seal should be seen as follows:

A black-colored band when seen through the left side window (

A shiny or gold-colored band when seen through the right side window (~~)

The above will reveal that the toner container is a genuine Kyocera branded toner container, otherwise, it is a counterfeit.

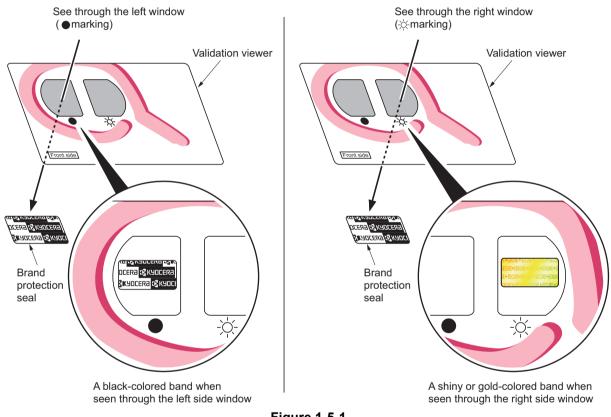


Figure 1-5-1

The brand protection seal has an incision as shown below to prohibit reuse.

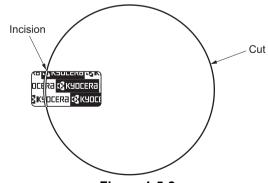


Figure 1-5-2

1-5-2 Paper feed section

(1) Detaching and refitting the primary paper feed unit

Procedure

Remove the primary paper feed unit

- 1. Pull the cassette 1 and cassette 2 out completely.
- 2. Pull the paper conveying unit out.
- 3. Open the right lower cover.
- 4. Remove the strap and then remove the right lower cover.

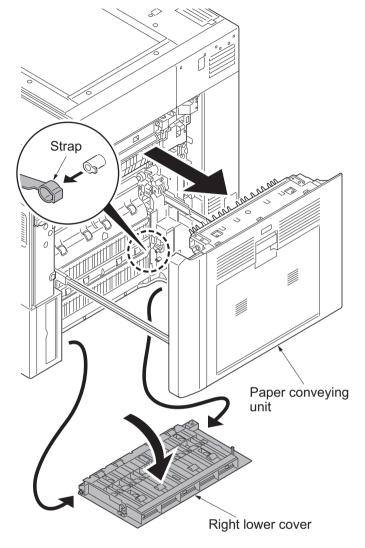


Figure 1-5-3

- 5. Remove the rear upper cover and the rear lower cover (see page 1-5-62).
- 6. Pull the paper conveying unit out.
- 7. Remove three screws and then remove the right lower rear cover.

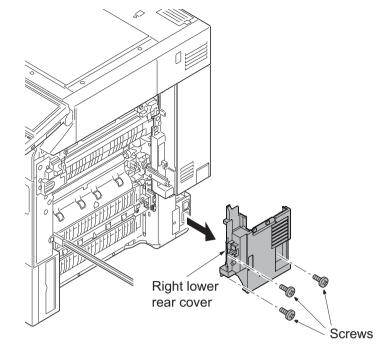


Figure 1-5-4

- 8. Open the handle cover.
- 9. Remove three screws.
- 10. Unhook the hook and then remove the right lower front cover.

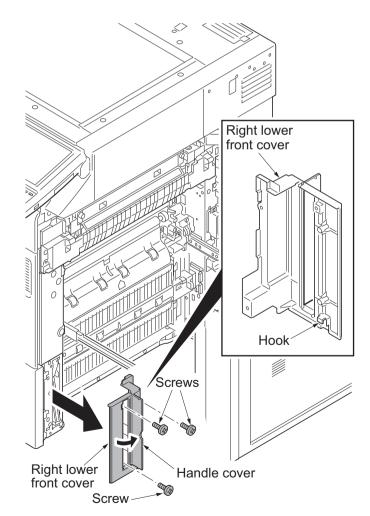


Figure 1-5-5

- 11. Release the wire saddle.
- 12. Remove two connectors.

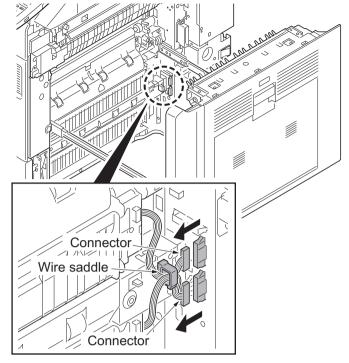


Figure 1-5-6

- 13. Remove two screws each from primary paper feed unit.
- 14. Remove the primary paper feed unit.
- *: Use the specific primary paper feed unit depending on model 35 ppm or 45 ppm/55 ppm.

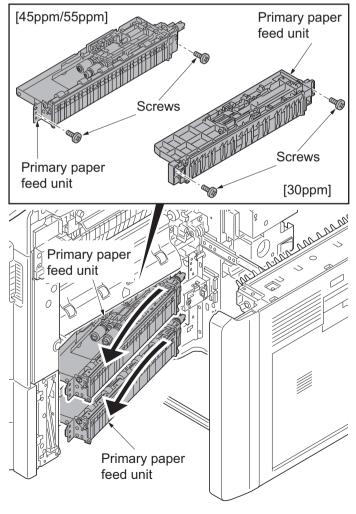


Figure 1-5-7

- 15. Check or replace the primary paper feed unit and refit all the removed parts.
 - *: When refit the primary paper feed unit, you must confirm the inserted pin to the driving coupler.
 - *: For 45ppm/55ppm model, you must install the primary paper feed unit while pushing the retard release lever of the lower side, when the primary paper feed unit is refitted.
- When the primary paper feed unit is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-162).

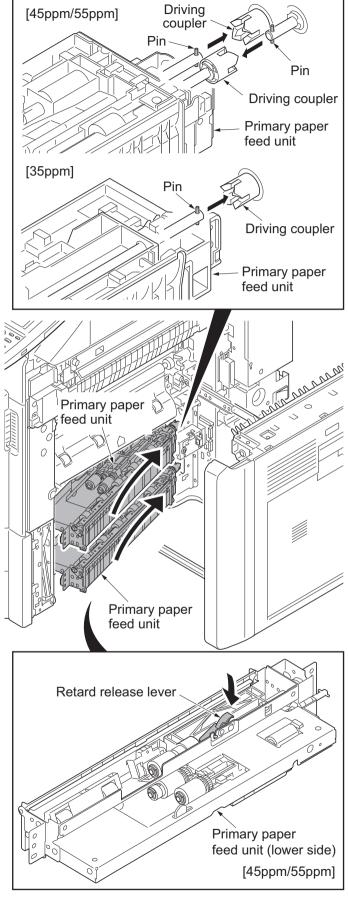


Figure 1-5-8

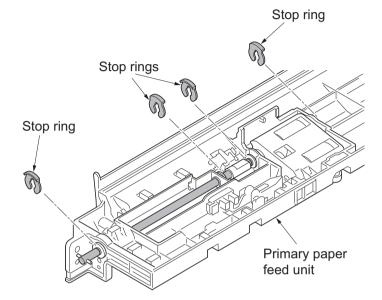
(2) Detaching and refitting the forwarding pulley, paper feed pulley and separation pulley. [35 ppm model]

Procedure

1. Remove the primary paper feed unit (see page 1-5-3).

Detaching the forwarding pulley and paper feed pulley

2. Remove four stop rings.





- 3. Slide the paper feed pulley shaft.
- 4. Remove the joint and three bushes.
- 5. Remove the spring and forwarding pulley holder assembly.

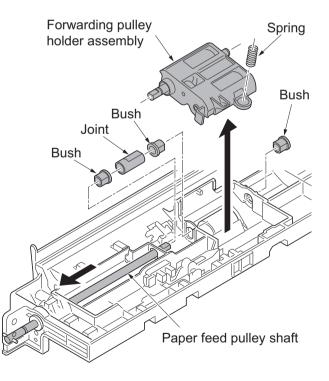
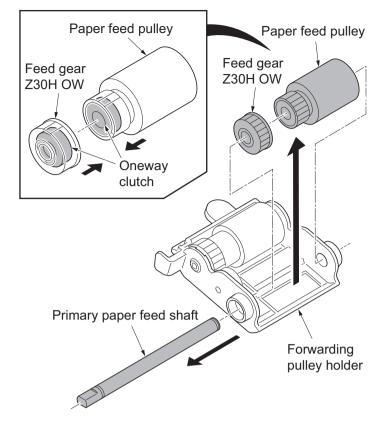


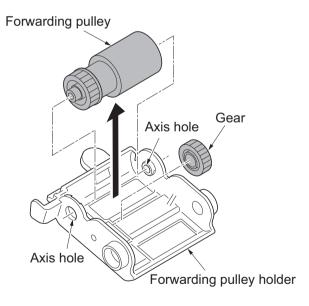
Figure 1-5-10

- 6. Pull the primary paper feed shaft out from the forwarding pulley holder.
- 7. Remove the feed gear Z30H OW and paper feed pulley.
- *: To refit the feed gear Z30H OW, be sure to correctly align it with the paper feed pulley, so that the on-way clutches meet each other.





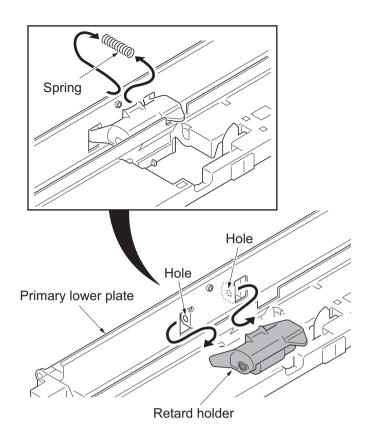
8. Pull the forwarding pulley from the axis hole of forwarding pulley holder.





Detaching the separation pulley

- 9. Remove the spring.
- 10. Remove the retard holder from the primary lower plate.





- 11. Remove the separation pulley from the retard holder.
- 12. Clean or replace the forwarding pulley, paper feed pulley and separation pulley.
- 13. Refit the forwarding pulley, paper feed pulley and separation pulley to the primary paper feed unit.
- 14. When the forwarding pulley, paper feed pulley or separation pulley is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-162).

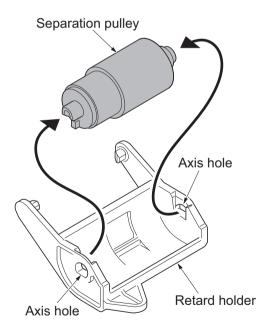


Figure 1-5-14

(3) Detaching and refitting the forwarding pulley, paper feed pulley and separation pulley. [45 ppm model / 55 ppm model]

Procedure

- 1. Remove the primary paper feed unit (see page 1-5-3).
- 2. Remove the stop ring A and then remove the one way clutch and the paper feed pulley.
- 3. Remove the stop ring B and then remove the forwarding pulley.

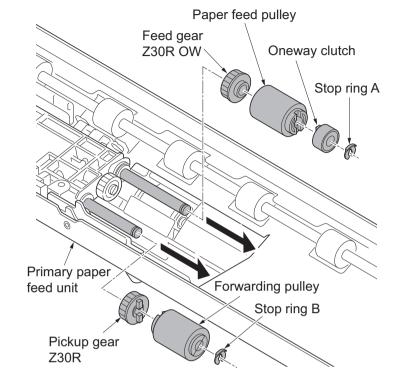


Figure 1-5-15

- 4. Remove the stop ring.
- 5. Remove the separation pulley while pushing the retard release lever.
- 6. Clean or replace the forwarding pulley, paper feed pulley and separation pulley.
- 7. Refit the forwarding pulley, paper feed pulley and separation pulley to the primary paper feed unit.
- When the forwarding pulley, paper feed pulley or separation pulley is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-162).

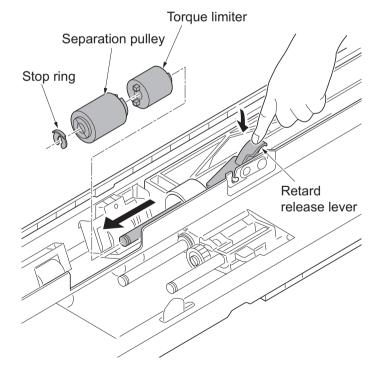


Figure 1-5-16

(4) Detaching and refitting the MP tray paper feed unit

Procedure

- 1. Pull the paper conveying unit out.
- 2. Open the MP tray.
- 3. Remove four screws.

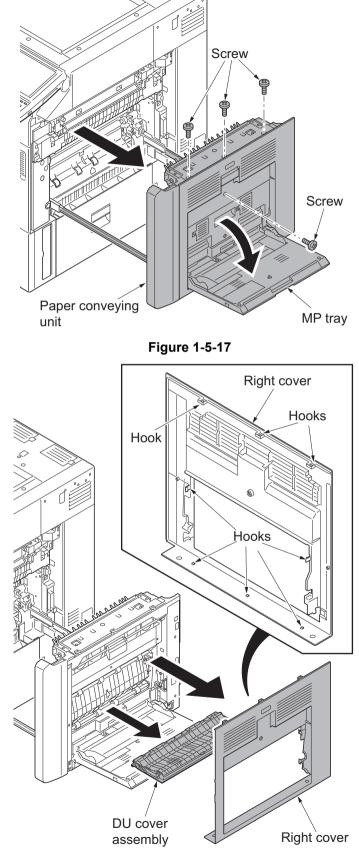


Figure 1-5-18

4. Unhook eight hooks and then remove the right cover and DU cover assembly.

- 5. Remove two connectors.
- 6. Release the wire saddle.
- 7. Remove the wire saddle.
- *: To refit the wire saddle, be sure to fit in the positioning hole that was previously used.

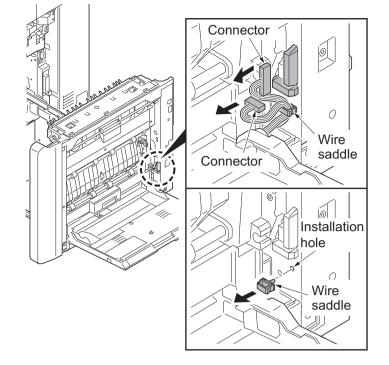


Figure 1-5-19

- 8. Remove the MP tray.
- *: When refitting the MP tray, insert it in the MP tray paper feed unit side by turning the lift arm.

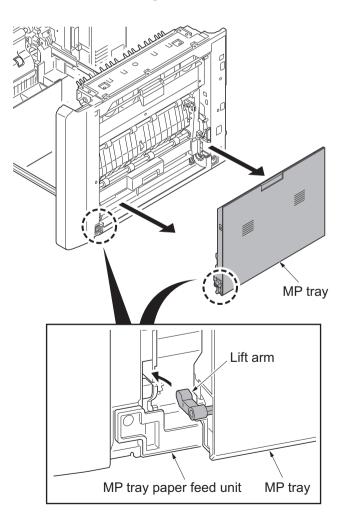
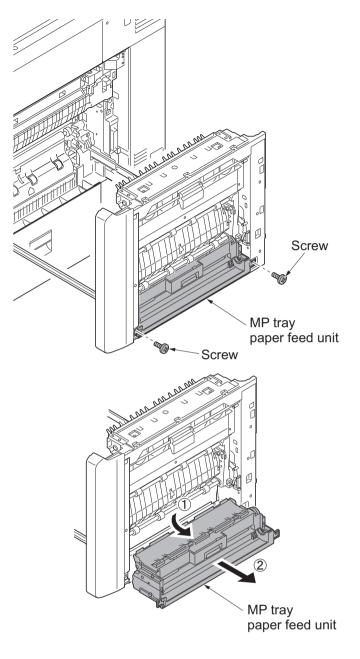


Figure 1-5-20

- 9. Remove two screws.
- 10. Remove the MP tray paper feed unit.





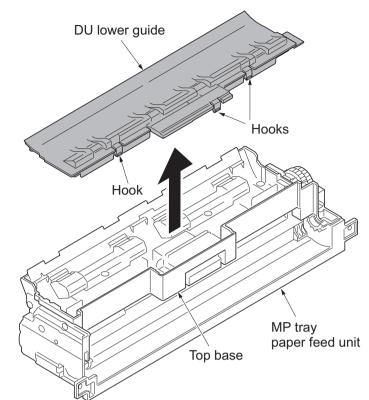
(5) Detaching and refitting the MP forwarding pulley, MP paper feed pulley and MP separation pulley

Procedure

1. Remove the MP tray paper feed unit (see page 1-5-11).

Detaching forwarding pulley and paper feed pulley

- 2. Unhook three hooks and then remove the Du lower guide.
- *: Remove the DU lower guide easy by bending the top base that the hook is hooking because the hook of the DU lower guide lacks flexibility.





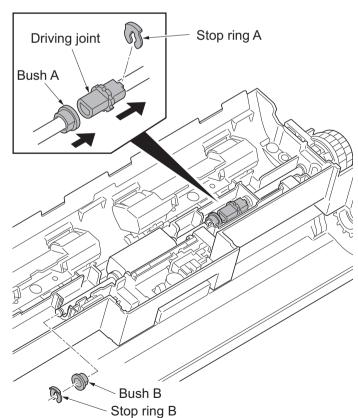


Figure 1-5-23

- 3. Remove the stop ring A and then slide the driving joint.
- 4. Slide the bush A.
- 5. Remove the stop ring B and then remove the bush B.

- 6. Unhook the hook of the feed holder assembly.
- 7. Remove the spring and the feed holder assembly from the top base.

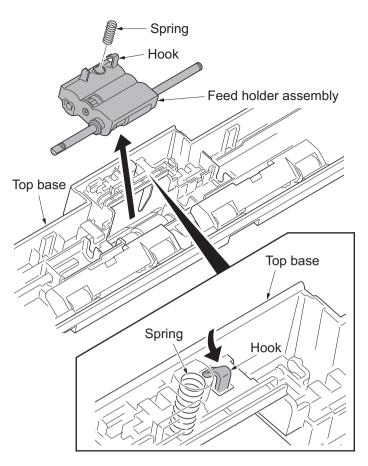
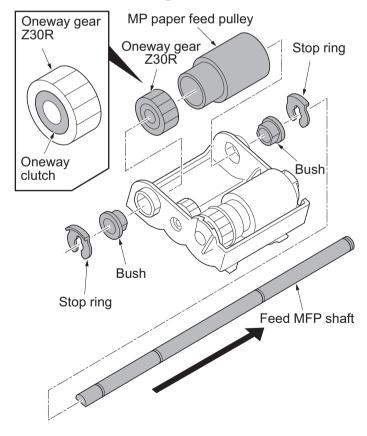


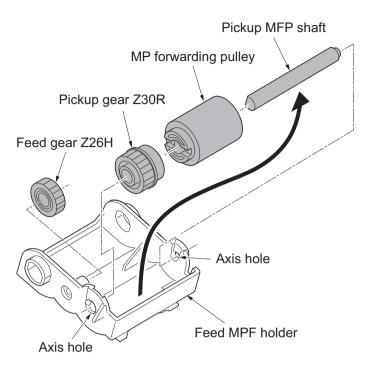
Figure 1-5-24

- 8. Remove two stop rings.
- 9. Pull the feed MPF shaft out.
- 10. Remove two bushes, one way gear Z30R and MP paper feed pulley.
- *: To refit the one-way gear Z30R, mount the gear in the correct direction as shown.





- 11. Remove the pickup MPF shaft from the axis holes of feed MPF holder.
- 12. Pull the pickup gear Z30R and MP forwarding pulley out from the pickup MFP shaft.





Detaching the MP separation pulley

13. Unhook two hooks and then remove the middle guide.

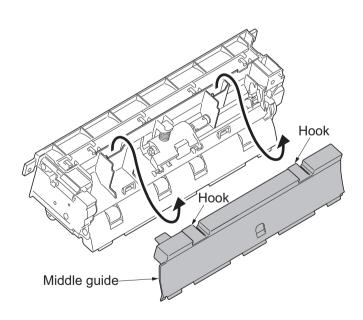


Figure 1-5-27

- 14. Remove the spring.
- 15. Release the uniting of joint by sliding the retard holder assembly.

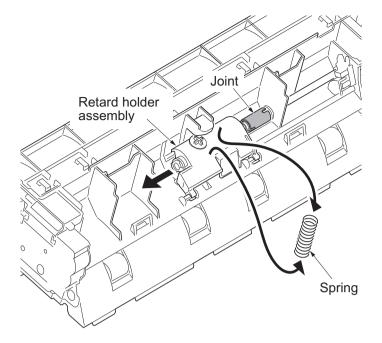


Figure 1-5-28

16. Remove the retard holder assembly by turning it as shown.



- 17. Remove two stop rings.
- 18. Remove two bushes.
- 19. Pull the retard MPF shaft out and then remove the torque limiter and the MP separation pulley.
- 20. Clean or replace the MP forwarding pulley, MP paper feed pulley and MP separation pulley.
- 21. Refit the MP forwarding pulley, MP paper feed pulley and MP separation pulley to the MP tray paper feed unit.
- 22. When the MP forwarding pulley, MP paper feed pulley or MP separation pulley is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-162).

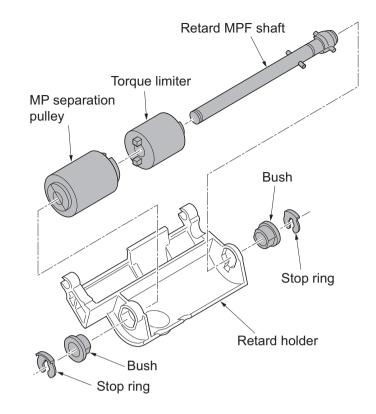


Figure 1-5-30

1-5-3 Optical section

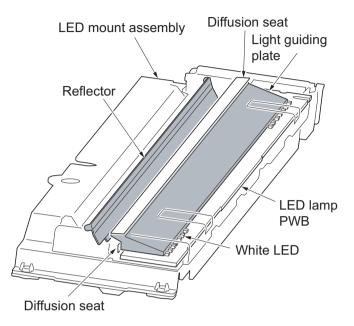
(1) Detaching and refitting the exposure lamp

Notes on handling the LED mount assembly

Do not touch the diffusion seat and the light guiding plate.

Use air blow when you clean the diffusion seat, the light guiding plate, and reflector.

Do not clean it using a cleaning cloth that adheres the fiber easily.





Procedure

- 1. Remove the original cover or the document processor.
- 2. Remove two screws and then remove the ISU front cover.
- 3. Remove two screws and then remove the ISU right cover.

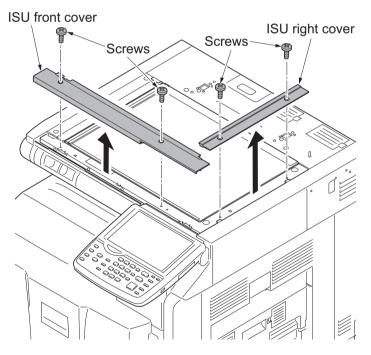


Figure 1-5-32

4. Remove two screws and then remove the ISU rear cover.

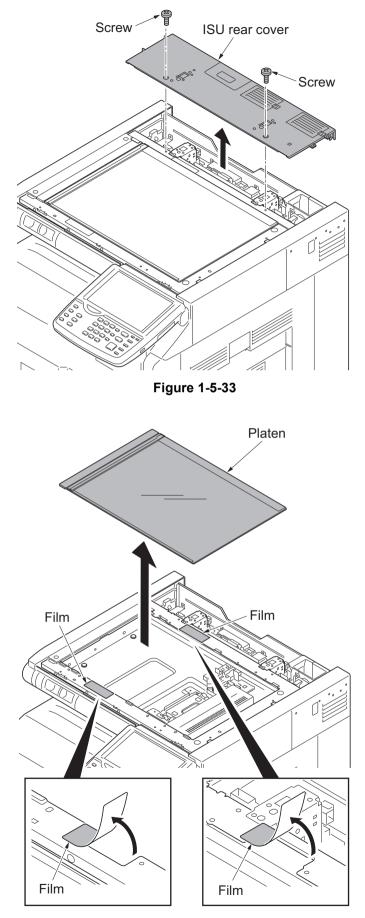


Figure 1-5-34

- 5. Remove the platen.
- 6. Peels two films off.

- 7. Move the LED mount assembly to the cutting lack part.
- 8. Unhook the hook and remove the FFC cover from LED mount assembly.
- 9. Remove the FFC from the FFC connector.
- 10. Unhook two hooks and remove the FFC guide from the LED mount assembly.

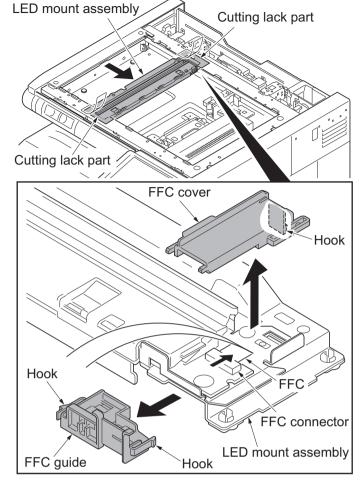


Figure 1-5-35

- 11. Remove two screws and then remove the LED mount assembly.
- 12. Check or replace the LED mount assembly and refit all the removed parts.
- *: When cleaning the reflector, the light guiding plate and the diffusion sheet of the LED mount assembly, clean it by air blow. Not to leave the hair dust.
- When the LED mount assembly is replaced, perform maintenance mode U411 (Adjusting the scanner automatically) (see page 1-3-139).

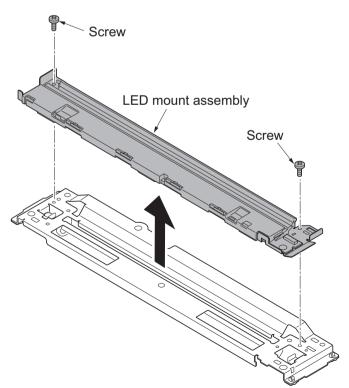


Figure 1-5-36

(2) Detaching and refitting the scanner wires

NOTE

When fitting the wires, be sure to use those specified below. Machine front: (P/N: 302H717381), gray Machine rear: (P/N: 302H717391), black

Fitting requires the following tools Two frame securing tools (P/N 302FZ17100) Two scanner wire stoppers (P/N 3596811)

Procedure

- 1. Remove the exposure lamp (see page 1-5-19).
- 2. Remove each screw and then remove front and rear wire holder plates from mirror 1 frame.
- 3. Remove the mirror 1 frame.

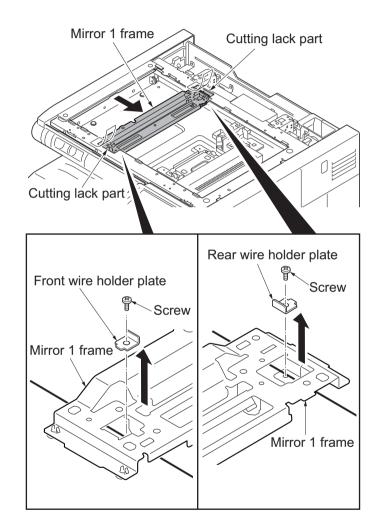
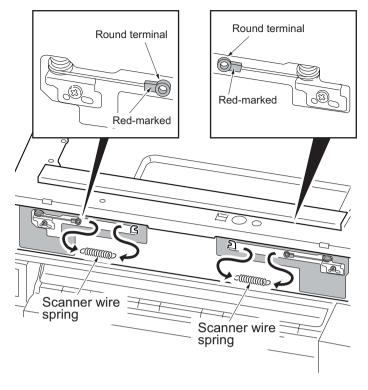


Figure 1-5-37

- 4. Remove the round terminals from the scanner wire springs on scanner unit left side.
- 5. Remove the scanner wire.





Fitting the scanner wires

6. Move the mirror 2 frame as shown in the figure and insert two frame securing tools into the positioning holes at the front and rear of the machine center to fix the mirror 2 frame in position.

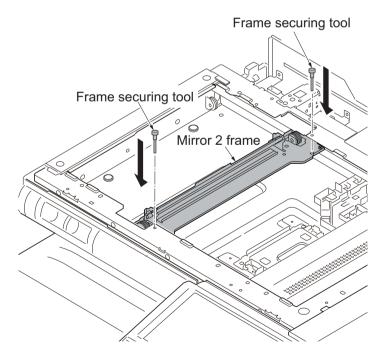


Figure 1-5-39

7. Hook the round terminals (Non-red-marked) onto the catches inside of the scanner unit	. (1)			
 Loop the scanner wires around the outer grooves in the pulleys on the mirror 2 frame, winding from below to above. 	.(2)			
9. Loop the scanner wire around the groove in the scanner wire pulley at the scanner unit right	,			
winding from above to below	. (3)			
10. Wind the scanner wires around the scanner wire drum five turns from the rear toward the ho	ole			
in the drum.	. (4)			
11. Insert the locating ball on the scanner wire into the hole in the scanner wire drum				
12. Wind the scanner wires three turns from the inner toward the hole in the drum	. (6)			
13. Install the scanner wire stoppers to the scanner wire drum to fix the wires	. (7)			
14. Loop the scanner wire around the groove in the scanner wire pulley at the scanner unit left,				
winding from below to above.	. (8)			
15. Loop the scanner wires around the inner grooves in the pulleys on the mirror 2 frame,				
winding from below to above.	. (9)			
16. Hook the scanner wires around the pulleys at the machine left	. (10)			
17. Hook the round terminal (Red-marked) onto the scanner wire spring	. (11)			

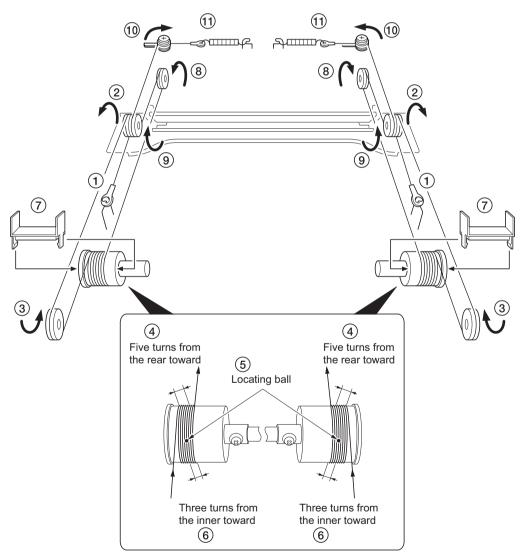


Figure 1-5-40

- 18. Remove the two scanner wire stoppers and frame securing tools.
- 19. Focusing on the locating ball of the wire drum, move aside the wires to inside.
- 20. Move the mirror 2 frame from side to side to correctly locate the wires in position.
- 21. Refit the mirror 1 frame.
- 22. Move the mirror 1 and 2 frames to the machine left, and insert the two frame securing tools into the positioning holes at the front and rear of the scanner unit to secure the frames in position.
- 23. Hold the wires and fix each front and rear wire holder plate to mirror 1 frame with the screw.
- 24. Remove the two frame securing tools.
- 25. Refit the exposure lamp.

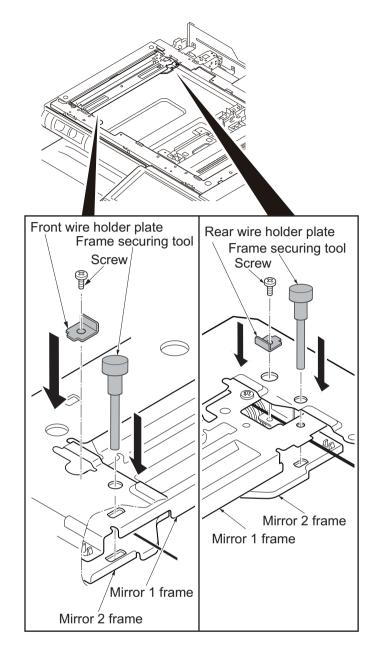


Figure 1-5-41

(3) Detaching and refitting the ISU

Procedure

Detaching the ISU

the lens cover.

- 1. Worn the electrostatic prevention band for the destruction prevention of the CCD board by static electricity.
- Remove the platen (see page 1-5-19).
 Remove six screws and then remove

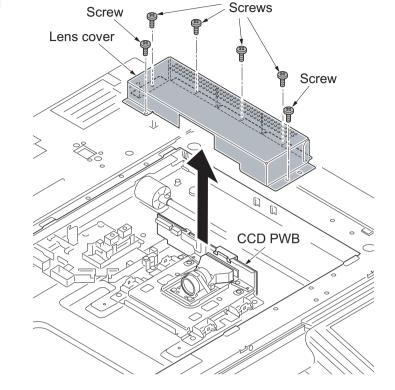


Figure 1-5-42

- 4. Remove the connector.
- 5. Remove the FFC from the FFC connector with a lock.
- *: When removing the FFC from the FFC connector with a lock, remove it after release the lock by lifting the lock lever up (see page 1-5-48).

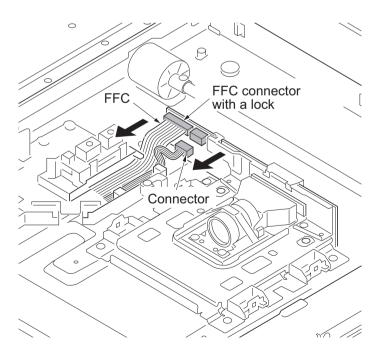
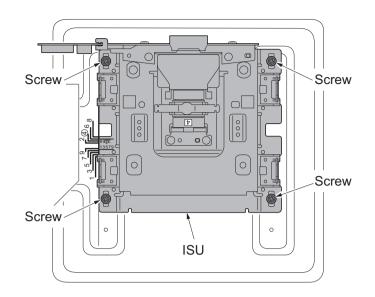


Figure 1-5-43

6. Remove four screws and then remove the ISU.





Refitting the ISU

- 1. Install the FFT.
- *: The FFT should be inserted while holding the position (A) shown in the illustration (A).

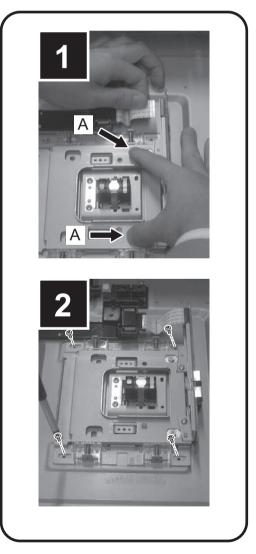


Figure 1-5-45

Refitting the ISU

2. Decide the fix position of ISU by the following.

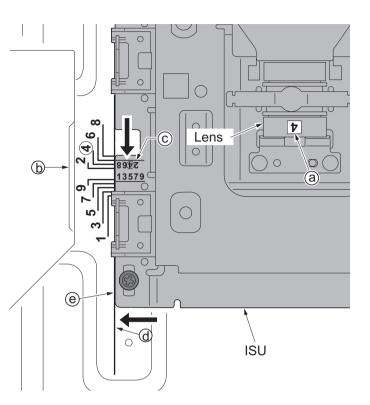
The right and left of machine:

Verify the number prefixed by a (a) mark.

Match the line (c) of ISU to the positioning line (b) of same number on frame side.

The rear and front of machine: Match the edge (e) of ISU to the positioning line (d) on frame side.

- 3. Fix the ISU as before with four screws.
- 4. Refit all the removed parts.
- 5. When replacing the new ISU, performs maintenance mode U411 (Adjusting the scanner automatically) (see page 1-3-139).



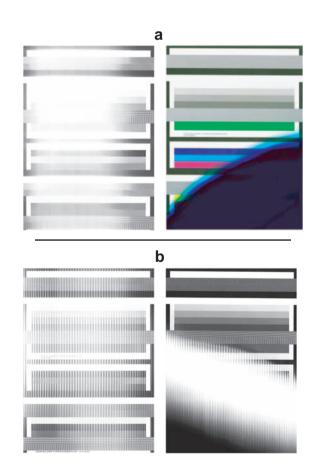


Refitting the ISU

4. Check the image

After replacing the CCD unit, check the copy image. According to the condition, execute the procedures below.

- 1. In case of no problem on the image, go to "9.Image Adjustment"
- 2. In case a part of the image is whitish from the leading edge or the background image appears like the illustration "a", go to "5. The CCD unit Height Adjustment 1".
- In case white vertical lines appear on the image like the illustration "b", go to "7. The CCD unit Height Adjustment 2".
- *: The CCD unit height adjustment is necessary for above 2 and 3 because an optical axis shifts and the light path is not secured.





5. The CCD unit Height Adjustment 1

In case a part of the image is whitish from the leading edge or the background image appears like the illustration "a" .

The replacement ISU comes complete with a large spacer (B) and a small spacer (C).

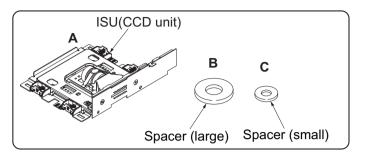


Figure 1-5-48

- 1. Set the spacer (large) (B) into the outside screw holes at the CCD sensor side.
- 2. Check the image.
- 3. In case of no problem on the image, go to "9. Image Adjustment".
- 4. In case of the problem on the image, go to "6. Re-adjustment 1".

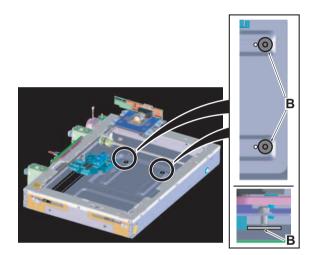


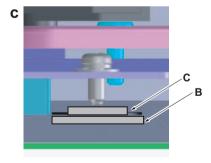
Figure 1-5-49

6. Re-adjustment 1

1. In case the whitish or background image still appears.

- c: Insert the additional spacer (small) (C)
- 2. In case the white vertical lines appear.
- d: Remove the spacer (large) (B) and insert the spacer (small) (C).

Check the image and go to "9. Image Adjustment".



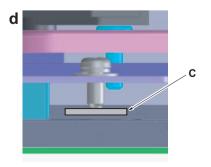
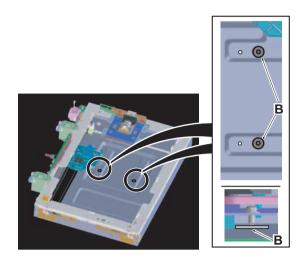


Figure 1-5-50

7. The CCD unit Height Adjustment 2 In case of white vertical lines appear like the illustration "b" on page 1.

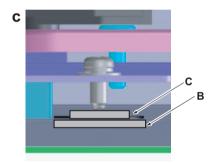
- 1. Set the spacer (large)(B) into the inside screw holes at the lens side.
- 2. Check the image.

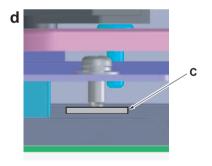




8. Re-adjustment 2

- In case the white vertical lines still appear.
 c:Insert the additional spacer (small) (C) In case the whitish or background image appears.
 d:Remove the spacer (large) (B) and insert the spacer (small) (C).
- 2. Check the image and go to "9. Image Adjustment".







9. Image Adjustment

Execute the U411 Auto Adjustment (see page 1-3-139). Set a new auto adjustment chart (part no. 7505000005) on the contact glass. Execute the U411- Target – Auto –Table (chart1) - ALL.

10. Refit all the removed parts.

(4) Detaching and refitting the LSU

Procedure

- 1. Remove the inner unit (see page 1-5-33).
- 2. Remove two screws.
- 3. Remove the inner cover by releasing the hook through the round access.

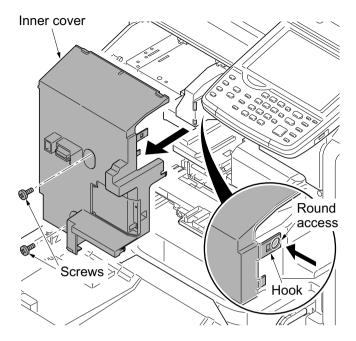


Figure 1-5-53

- 4. Remove two fixed screws of the container guide.
- 5. Pull the container guide out and remove the guide.

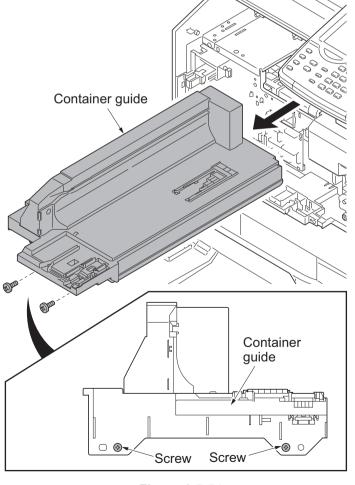
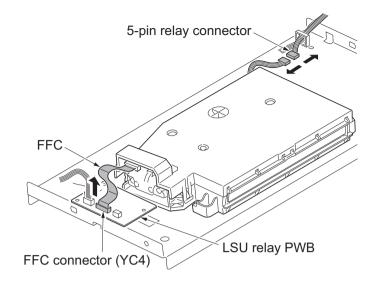


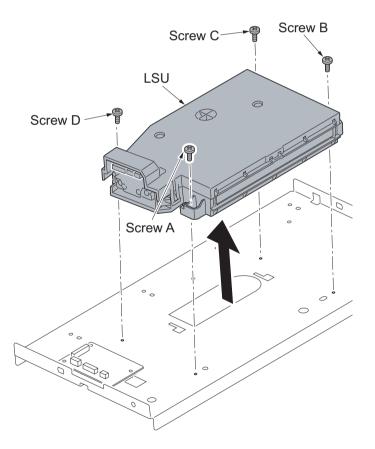
Figure 1-5-54

- Remove the FFC from the FFC connector with a lock (YC4) of the LSU relay PWB.
- *: When removing the FFC from the FFC connector with a lock, remove it after release the lock by lifting the lock lever up.
- 7. Remove 5-pin relay connector at rear side of the LSU.





- 8. Remove four screws (A to D) and then remove the LSU.
- 9. Check or replace the LSU and refit all the removed parts.
- *: To re-mount the LSU, secure the screws in the order of A B C- D.
- 10. When replacing the new LSU, proceed as follows:
 - 1)Performs maintenance mode U930 (checking/clearing the charger roller count) and checking the counter value (see page 1-3-173).
 - 2)Performs maintenance mode U119 (Setting the drum) (see page 1-3-73).
 - 3)Performs maintenance mode U930 (checking/clearing the charger roller count) and checking the counter value (see page 1-3-173).
 - 4)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 5)Performs maintenance mode U412 (Adjusting the uneven density) (see page 1-3-146).
 - 6)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 7)Performs maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-138).





1-5-4 Image formation section

(1) Detaching and refitting the inner unit

Procedure

- 1. Open the front cover.
- 2. Remove toner container.
- 3. Remove the waste toner box tray by lifting upwards and from the right side.

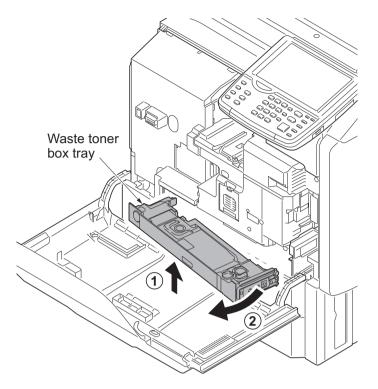


Figure 1-5-57

- Remove the screw and then open the connector cover.
 Release the wire saddle.
- 6. Remove the connector.

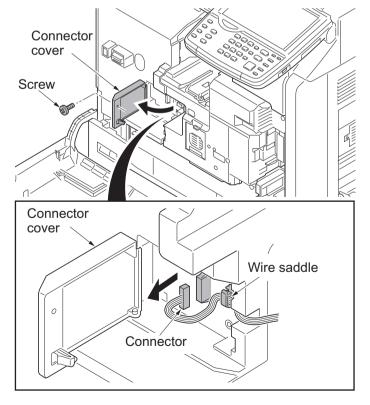


Figure 1-5-58

7. Remove four fixed screws of inner unit.

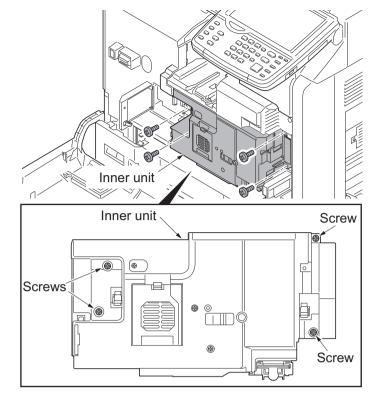


Figure 1-5-59

- 8. Remove the inner unit.
- 9. Release the lock by pushing the fixed levers at the right and left of inner unit.
- 10. Close the toner replenishment shutter of inner unit.

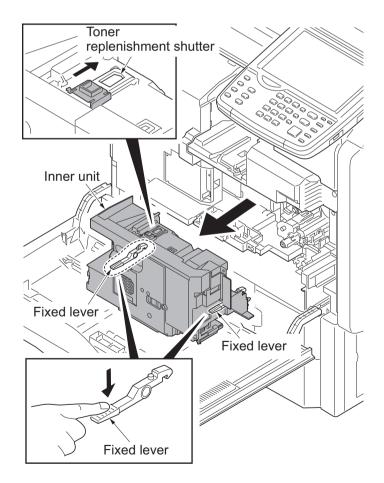


Figure 1-5-60

(2) Detaching and refitting the developer unit

- 1. Remove the inner unit (see page 1-5-33).
- 2. Close the toner supply shutter.
- 3. Remove the connector.
- 4. Turn down the DLP rail lever.

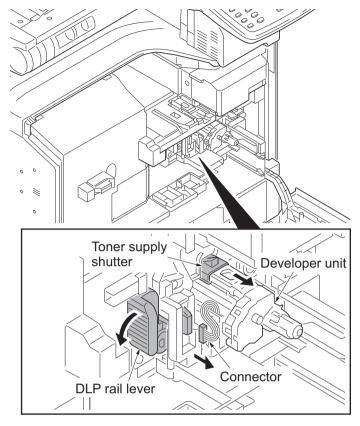


Figure 1-5-61

- 5. Release the lock lever at lower side of the developer unit and then pull out the developer unit.
- 6. Check or replace the developer unit and refit all the removed parts.
- 7. When replacing the new developer unit, proceed as follows:
 - 1) Performs maintenance mode U140 (AC calibration) for 45 ppm/55 ppm model only (see page 1-3-80).
 - 2)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 3)Performs maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-138).

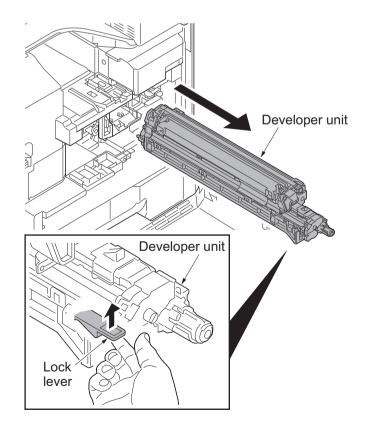


Figure 1-5-62

(3) Detaching and refitting the drum unit

- 1. Remove the inner unit (see page 1-5-33).
- 2. Remove the developer unit (see page 1-5-35).
- 3. Pull the paper conveying unit out.
- 4. Remove the connector.
- 5. Remove the screw.

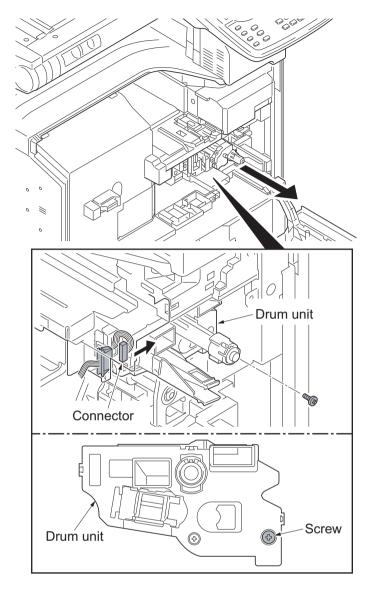


Figure 1-5-63

- 6. Pull out the drum unit.
- 7. Check or replace the drum unit and refit all the removed parts.

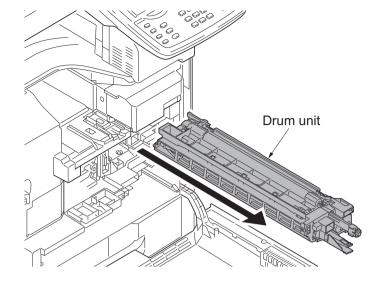


Figure 1-5-64

- 8. When replacing the new drum unit, proceed as follows:
 - 1) Performs maintenance mode U119 (drum setup) (see page 1-3-73).
 - 2) Performs maintenance mode U140 (AC calibration) for 55 ppm model only (see page 1-3-80).
 - 3)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 4)Performs maintenance mode U412 (Adjusting the uneven density) (see page 1-3-146).
 - 5)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 6)Performs maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-138).

(4) Detaching and refitting the charger roller unit

- 1. Remove the inner unit (see page 1-5-33).
- 2. Pull out the charger roller unit by picking and releasing the MC lock lever.
- 3. Check or replace the charger roller unit and refit all the removed parts.
- *: When refitting the charger roller unit, that must hook the hook certain by operating the MC lock lever after inserting the charger roller unit until bumping.
- When replacing the new charger roller unit, proceed as follows: Performs maintenance mode U930 (clearing the charger roller count) (see page 1-3-173).

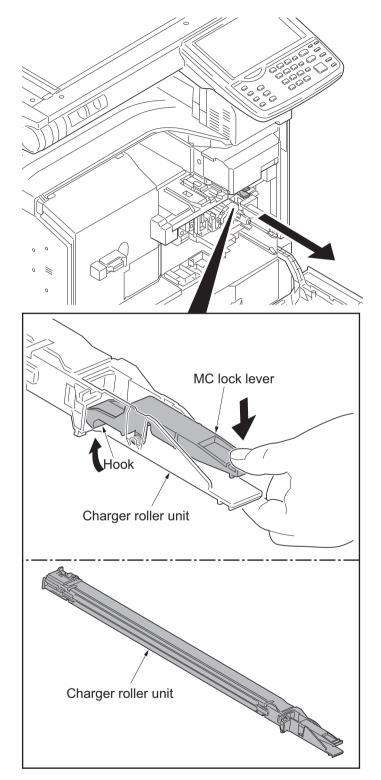


Figure 1-5-65

1-5-5 Transfer section

(1) Detaching and refitting the paper conveying unit

Procedure

- 1. Pull the paper conveying unit out.
- 2. Remove three screws.
- 3. Unhook three hooks and then remove the right front cover.

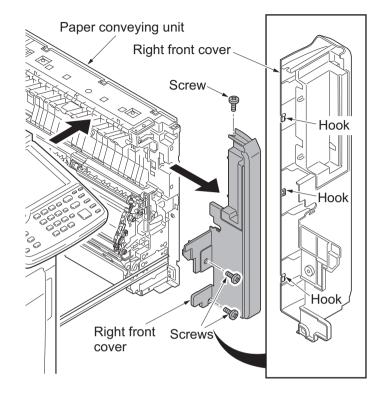


Figure 1-5-66

4. Unhook two hooks and then remove the conveying inner cover from the paper conveying unit.

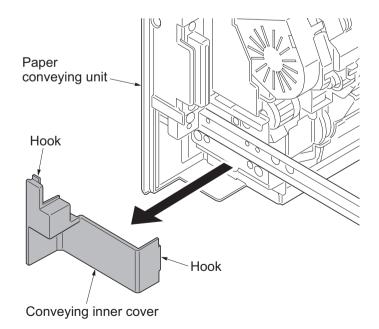


Figure 1-5-67

- 5. Remove four screws.
- 6. Remove the paper conveying unit by lifting upward.

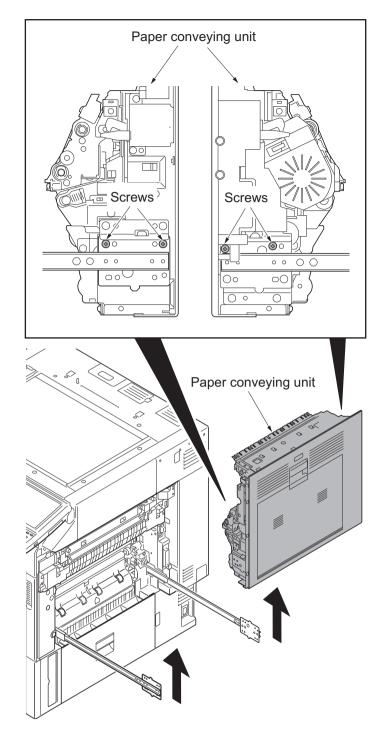
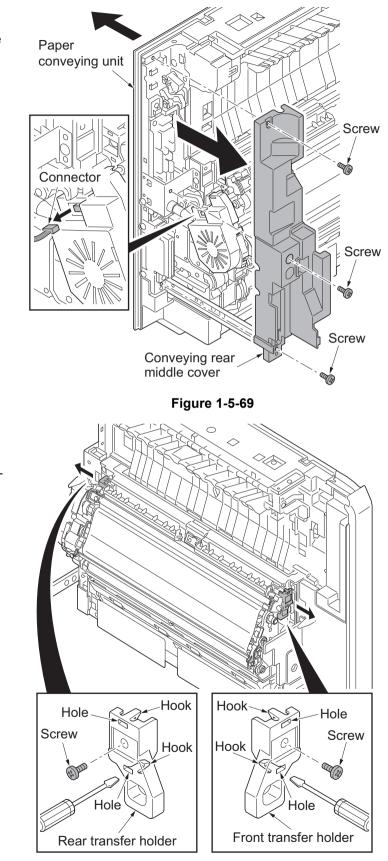


Figure 1-5-68

(2) Detaching and refitting the transfer belt unit

Procedure

- 1. Pull the paper conveying unit out.
- 2. Remove three screws and then remove the conveying rear middle cover.
- 3. Remove the connector.



4. Unhook the two hooks by the tip of a screwdriver though the hole and then remove the front and rear transfer holders.

Figure 1-5-70

- 5. Remove the transfer belt unit.
- 6. Check or replace the transfer belt unit and refit all the removed parts.
- *: When refitting the transfer belt unit, observe the precautions in the following:

Insert the protrusion at the bottom of the transfer belt unit into the square hole on the conveying base.

- 7. When replacing the new transfer belt unit, proceed as follows:
 - 1) Performs maintenance mode U127 (clearing the transfer counter) (see page 1-3-74).
 - 2)Performs maintenance mode U464 (Calibration) (see page 1-3-154).
 - 3)Performs maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-138).

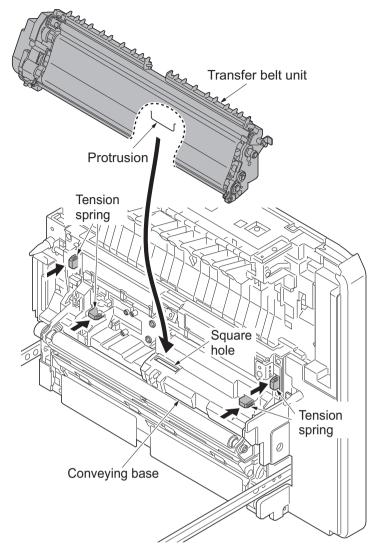


Figure 1-5-71

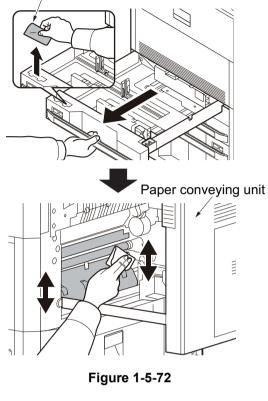
(3) Clean the conveying section

Procedure

Conveying Guide

- 1. Pull out cassette 1 and remove the cloth from the cleaning cloth compartment.
- 2. Wipe off the dirt on both sides of the conveying guide.
- *: Wipe the conveying guide with the dry accessory cloth. Do not use water,soap or solvents for cleaning.Do not touch the photoconductor drum.

Cleaning cloth



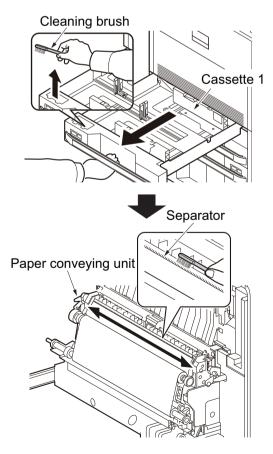


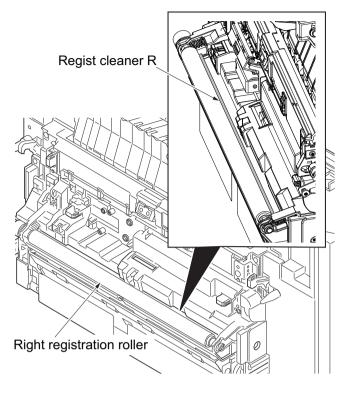
Figure 1-5-73

Separator

- 1. Pull out cassette 1 and remove the cleaning brush (blue colored).
- 2. As shown in the figure, clean dirt from the separator by moving the brush from side to side along the separator.

Right regist cleaner

- 1. Remove the transfer belt unit.
- 2. Clean the regist cleaner R.





Left regist cleaner

- 1. Remove the developer unit. (see page 1-5-35).
- 2. Remove the drum unit. (see page 1-5-36).
- 3. Clean the cleaner unit by pulling out the regist cleaner L.

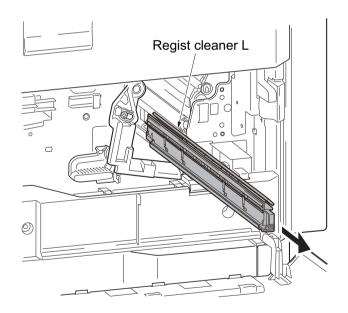


Figure 1-5-75

1-5-6 Fuser section

(1) Detaching and refitting the fuser unit

- 1. Pull out the paper conveying unit.
- 2. Remove the screw and then the fuser wire cover.
- 3. Remove two connectors

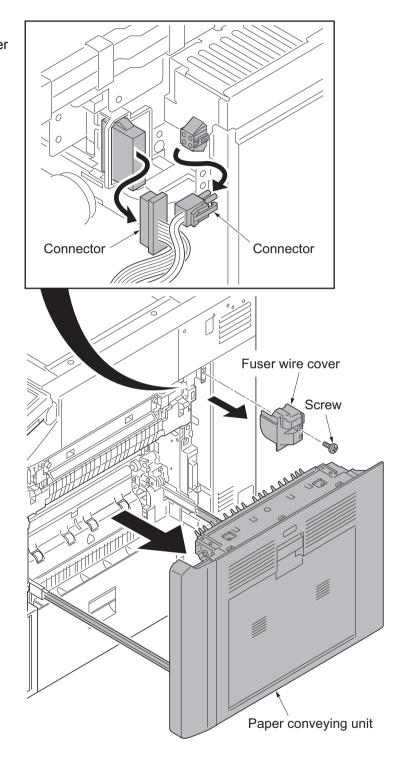


Figure 1-5-76

- 4. Remove two screws (M4 × 12) and then remove the fuser unit.
- 5. Check or replace the fuser unit and refit all the removed parts.
- 6. When replacing the new fuser unit, proceed as follows:
 - 1) Performs maintenance mode U167 (clearing the fuser count) (see page 1-3-90).
 - 2)Performs maintenance mode U464 (Calibration) (see page 1-3-155).
 - 3)Performs maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-138).

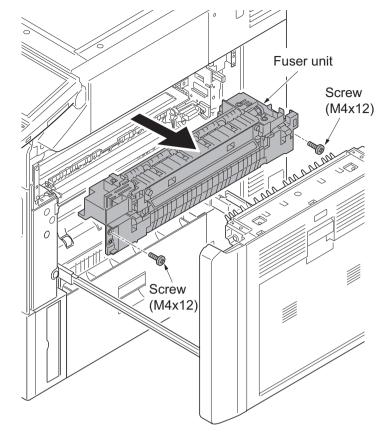
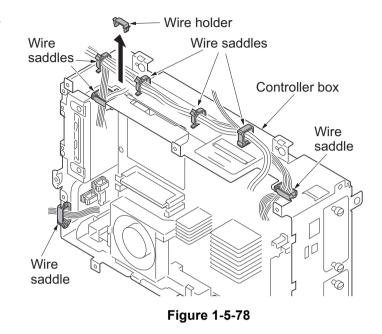


Figure 1-5-77

1-5-7 PWBs

(1) Detaching and refitting the main PWB

- 7. Release seven wire saddles on the controller box.
- 8. Remove the wire holder.



- 9. 1-5-48Remove the connector from the DP relay PWB,
- Remove the following connectors that connected to the main PWB from the outside of the control box. YC25

YC11 YC30 YC24 YC3 (FFC connector with a lock) YC17 (BK) YC21 (WH) YC12

- *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting down the lock lever
- (see figure a and b).
- *: When connecting an FFC furnished with the protrusions at both ends, address the side with a blue-colored tape towards the locking lever, insert the FFC into the connector until the protrusions are recessed, and raise the lock lever to lock the FFC (see figure c).

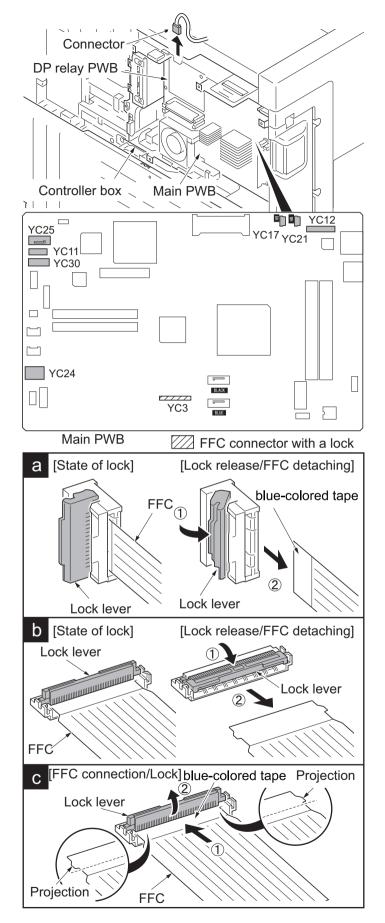


Figure 1-5-79

- 11. Remove five screws.
- 12. Unhook two hooks and then remove the controller box.

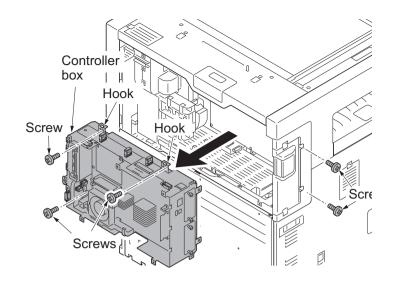


Figure 1-5-80

- 13. Remove the following connectors that connected to the main PWB.
 YC23
 YC27
 YC32
 YC8 (FFC connector with a lock)
 YC9
 YC1 [BLACK] (with a lock)
 YC2 [BLUE] (with a lock)
 - *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting down the lock lever (see page 1-5-48)

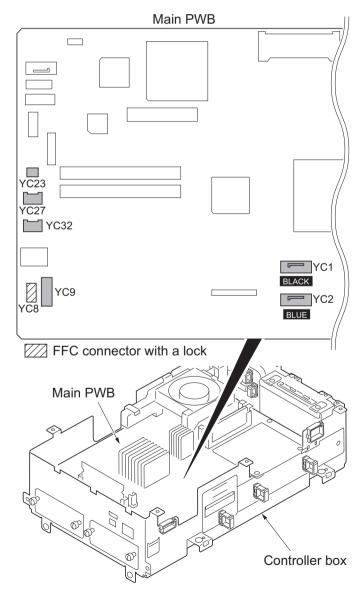


Figure 1-5-81

- 14. Release the wire saddle.
- 15. Remove two wire holders.
- 16. Remove two screws.
- 17. Remove the fan motor holder.

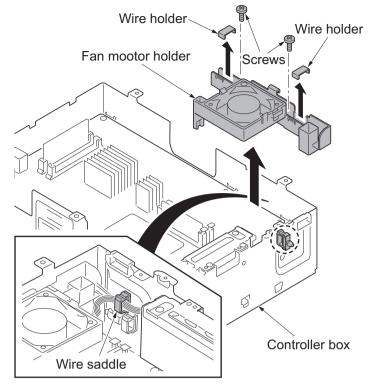


Figure 1-5-82

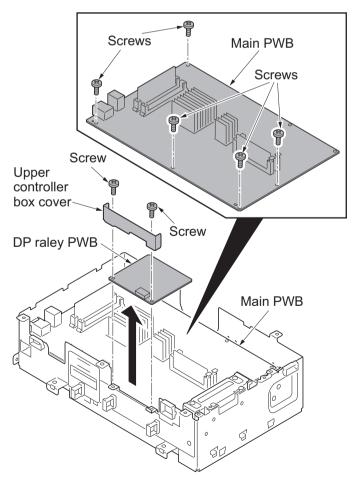


Figure 1-5-83

- 18. Remove two screws and then remove the upper controller box cover and DP relay PWB.
- 19. Remove five screws from the main PWB.

- 20. Remove the main PWB by releasing the projection of ground plate in the net-work connector.
- 21. Check or replace the main PWB and refit all the removed parts.
 - *: When replacing the main PWB, remove the following devices from the main PWB and then reattach it to the new main PWB.(see page 1-6-4)

EEPROM (YC14) Code DIMM (YS4) Memory DDR (YS1)

*: Exchange EEPROM (YC14) and code DIMM (YC4) by the set.

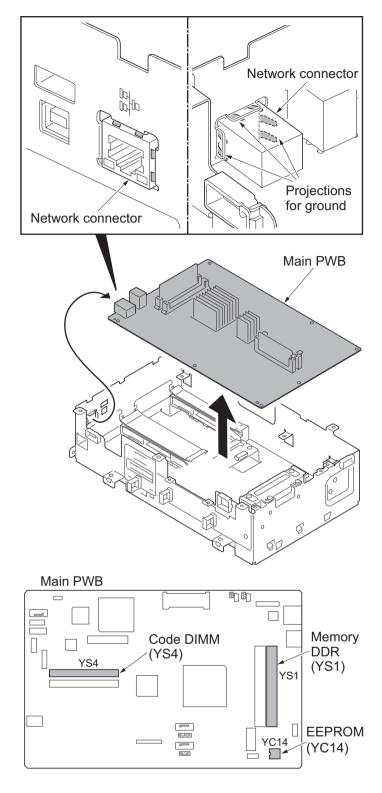


Figure 1-5-84

(2) Detaching and refitting the engine PWB

- 1. Remove the controller box (see page 1-5-47).
- 2. Remove twenty one connectors of following from the engine PWB. YC1 YC2 YC4 (FFC connector with a lock) YC5 (FFC connector with a lock) YC6 (FFC connector with a lock) YC7 YC11 (FFC connector with a lock) **YC13** YC26 YC9 YC8 YC46 (FFC connector with a lock) **YC15 YC16 YC18 YC17 YC19 YC20** YC22 YC45
- *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting down the lock lever (see page 1-5-48)
- *: When removing the FFC from the YC-46 remove the FFC after released by lifting up the lock lever.
- *: When connecting an FFC furnished with the protrusions at both ends, address the side with a blue-colored tape towards the locking lever, insert the FFC into the connector until the protrusions are recessed, and raise the lock lever to lock the FFC(see page 1-5-48).

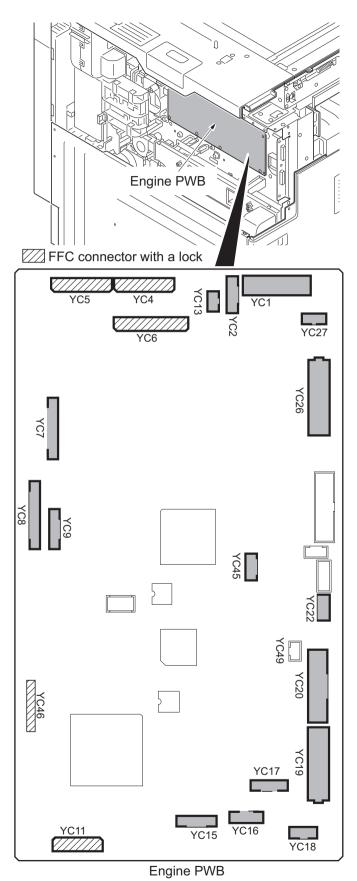


Figure 1-5-85

- 3. Remove six screws.
- 4. Unhook hook and board support and then remove the engine PWB.
- 5. Check or replace the engine PWB and refit all the removed parts.
- *: When replacing the engine PWB, remove the EEPROM (U100) from the engine PWB and then reattach it to the new engine PWB.

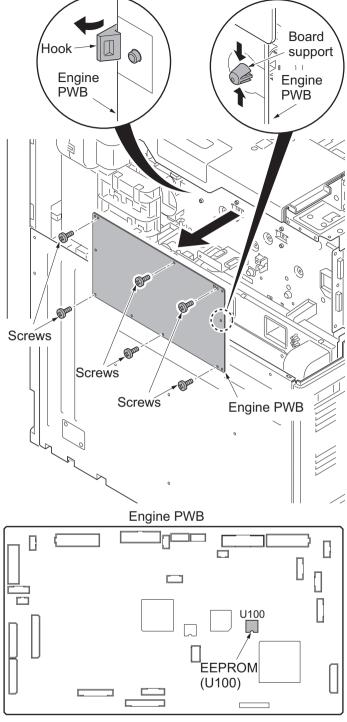


Figure 1-5-86

(3) Detaching and refitting the power source PWB

Procedure

- 1. Remove the rear lower cover (see page 1-5-62).
- 2. Remove the connector.
- 3. Release two wire saddles.

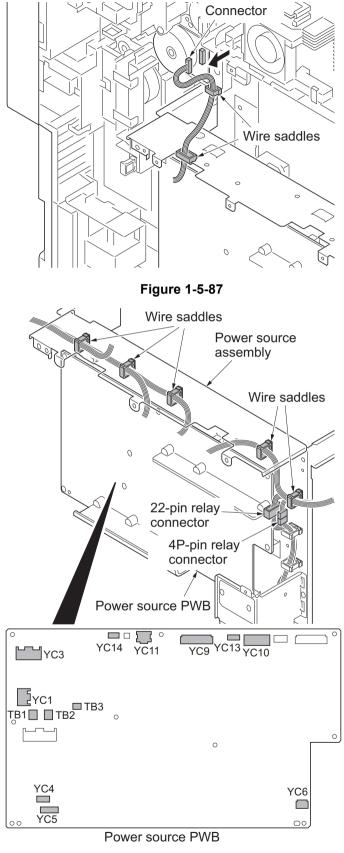


Figure 1-5-88

- 4. Release six wire saddles.
- 5. Remove the following nine connectors and three tabs from the power source PWB.
 - YC1
 - YC3
 - TB1
 - TB2
 - тв3

YC4

YC5

YC14

YC11

YC9

- YC13
- YC10
- 6. Remove 22-pin relay connector and 4pin relay connector.

- 7. Remove two screws.
- 8. Remove the toner box.

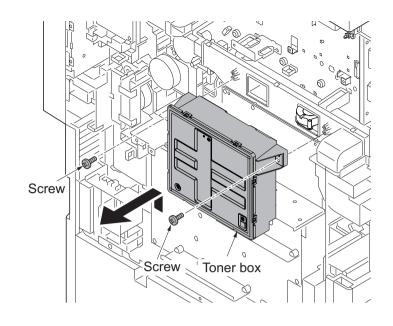


Figure 1-5-89

- 9. Remove two screws.
- 10. Remove the power source assembly.

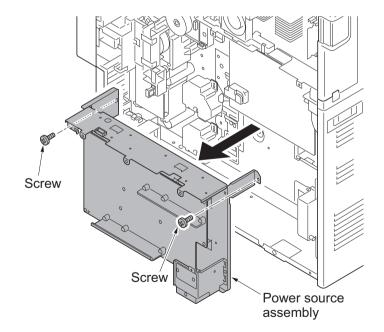


Figure 1-5-90

- 11. Remove eight screws.
- 12. Unhook the hook of the board support and then remove the power source PWB.
- 13. Check or replace the power source PWB and refit all the removed parts.

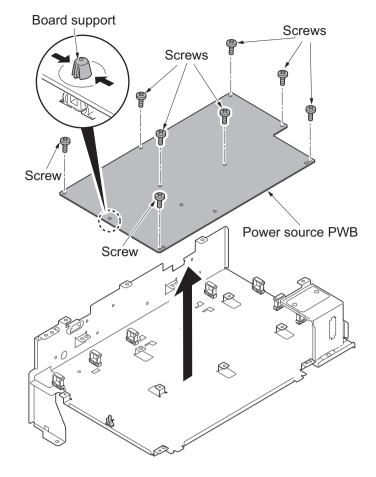


Figure 1-5-91

(4) Detaching and refitting the high voltage PWB

Procedure

- 1. Remove the power source PWB (see page 1-5-54).
- 2. Remove five connectors and four tabs from high voltage PWB.

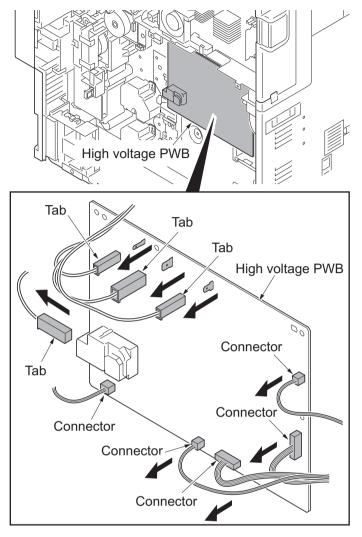


Figure 1-5-92

- 3. Remove four screws.
- 4. Unhook two hooks of PWB spacer and then remove the high voltage PWB.
- 5. Check or replace the high voltage PWB and refit all the removed parts.

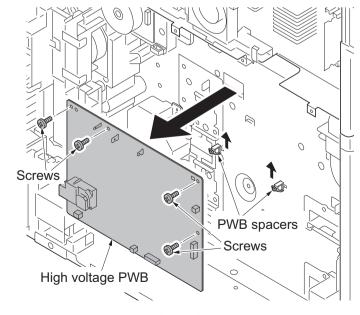


Figure 1-5-93

(5) Detaching and refitting the operation PWB

- 1. Pull the paper conveying unit out.
- 2. Remove the screw from the right upper cover.

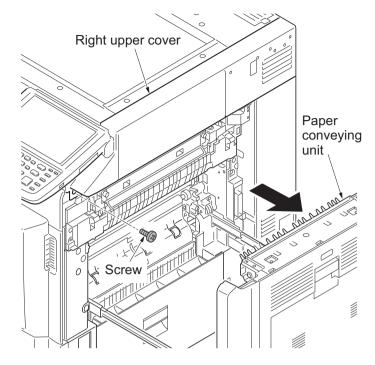


Figure 1-5-94

- 3. Open the front cover.
- 4. Remove the screw and then remove the fan cover.
- 5. Unhook three hooks and then remove the front upper right cover.

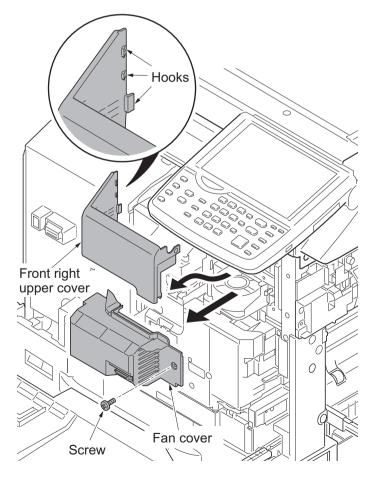


Figure 1-5-95

6. Remove the screw and then remove the operation panel cover.

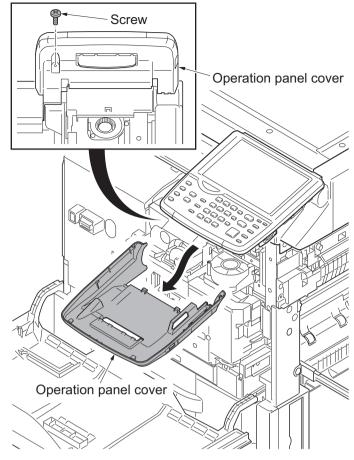


Figure 1-5-96

7. Remove two screws and then remove the USB wire (connector).

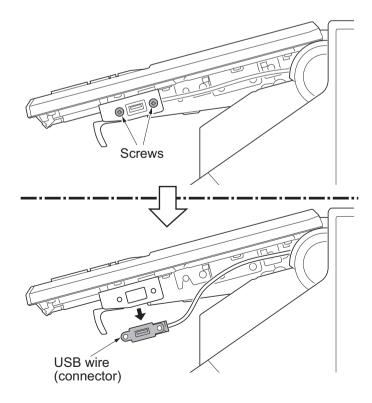
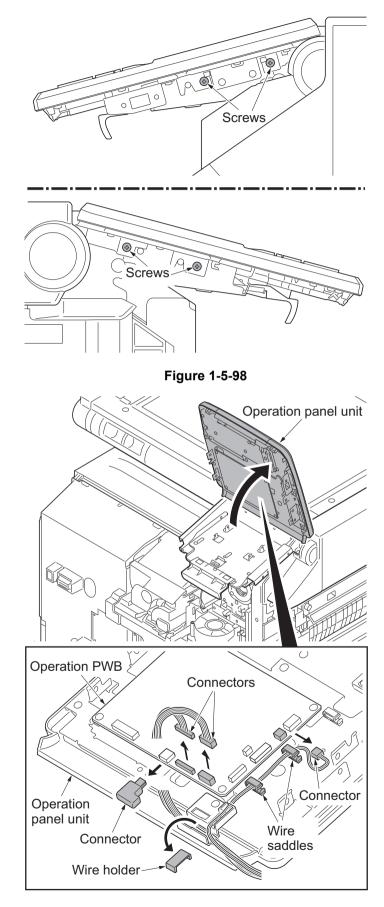


Figure 1-5-97

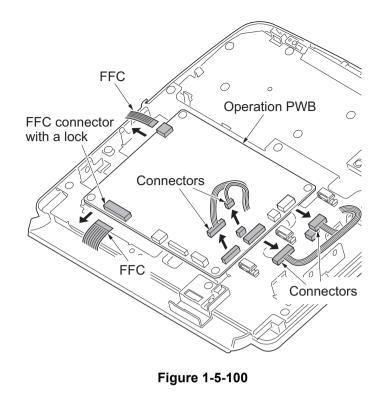
8. Remove four screws.



- 9. Pull the operation panel unit upward.
- 10. Release two wire saddles.
- 11. Remove four connectors from the operation PWB.
- 12. Remove the wire holder.
- 13. Remove the operation panel unit.

Figure 1-5-99

- 14. Remove four connectors and two FFC from the operation PWB.
 - *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting up the lock lever (see page 1-5-48).



- 15. Remove four screws and then remove the operation PWB.
- 16. Check or replace the operation PWB and refit all the removed parts.

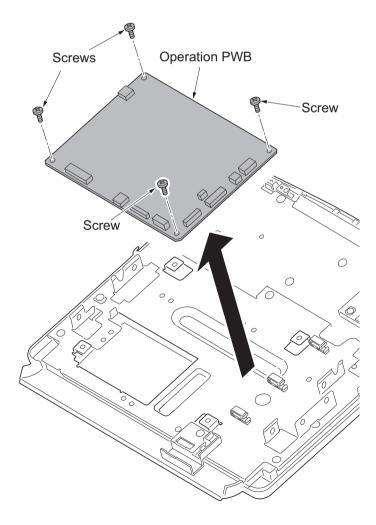


Figure 1-5-101

(6) Detaching and refitting the fuser heater PWB

Procedure

1. Remove eight screws and then remove the rear upper cover.

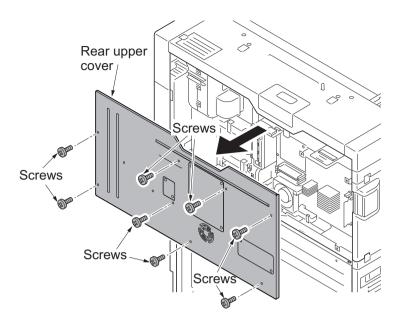


Figure 1-5-102

- 2. Remove nine screws.
- 3. Release two hanging parts and then remove the rear lower cover.
- 4. Remove the fuser unit (see page 1-5-45).

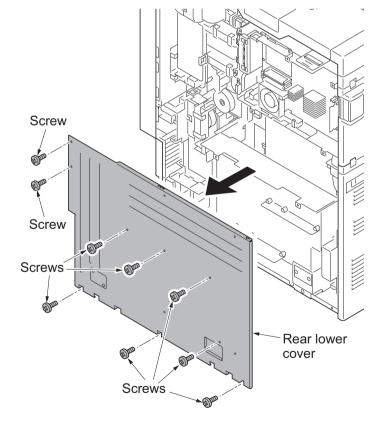


Figure 1-5-103

- 5. Remove two screws and then remove the ISU right cover.
- 6. Remove the screw and five hooks and then remove the right upper cover.

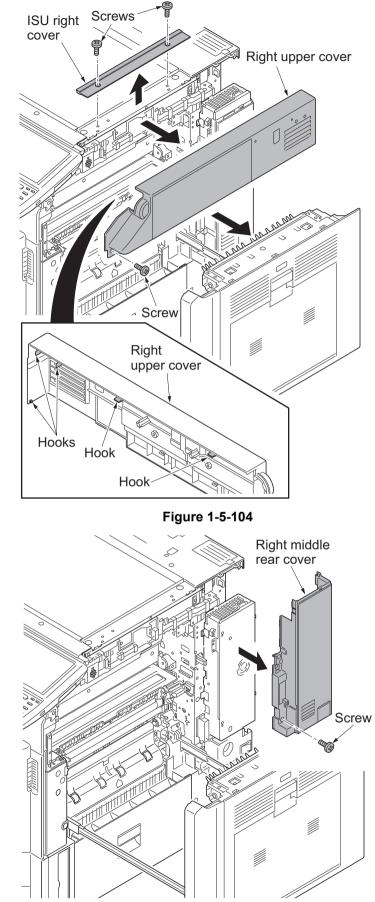
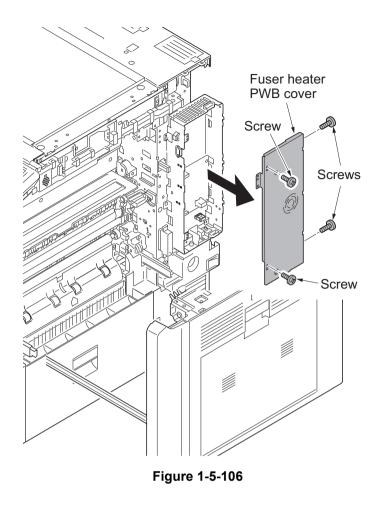


Figure 1-5-105

- 7. Remove the screw.
- 8. Unhook two hooks and then remove the right middle rear cover.

9. Remove four screws and the remove the fuser heater PWB cover.



- 10. Release two wire saddles.
- 11. Remove the connector from the fuser heater PWB.

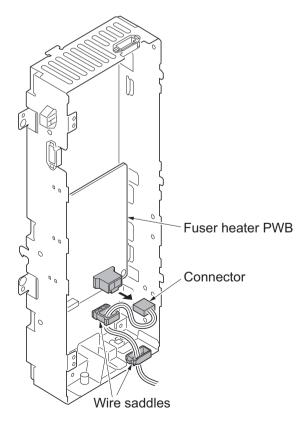


Figure 1-5-107

- 12. Remove two wire holders.
- 13. Remove the connector (YC27) from feed PWB 1.

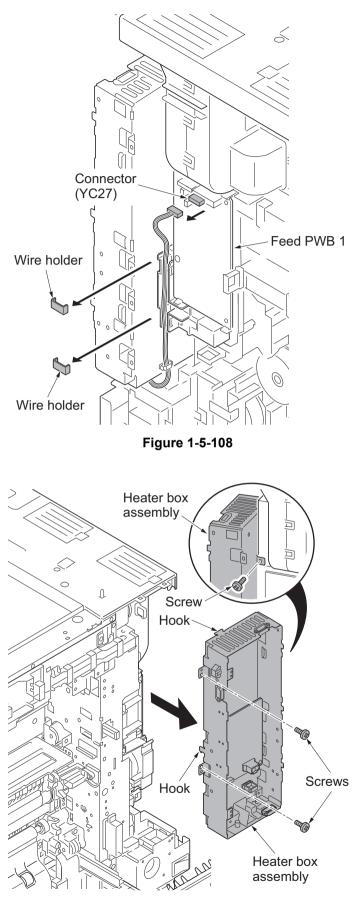


Figure 1-5-109

- 14. Remove three screws.
- 15. Unhook two hooks and then remove heater box assembly.

- 16. Remove two connectors.
- 17. Remove four screws and then remove fuser heater PWB.
- 18. Check or replace the fuser heater PWB and refit all the removed parts.

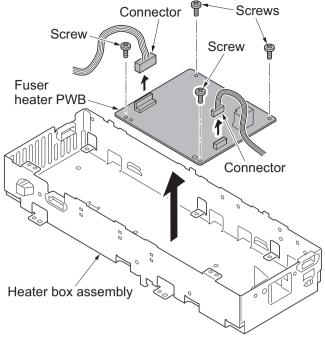


Figure 1-5-110

1-5-8 Drive section

(1) Detaching and refitting the drum drive unit

Procedure

- 1. Remove the developer unit (see page 1-5-35).
- 2. Remove the drum unit (see page 1-5-36).
- 3. Remove the rear upper cover and the rear lower cover (see page 1-5-62).
- 4. Remove the feed PWB 1 assembly (see page 1-5-70).
- 5. Remove the connector.
- 6. Release the wire saddle.

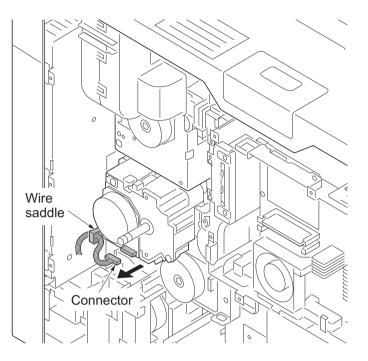


Figure 1-5-111

- 7. Remove three screws.
- 8. Remove the drum drive unit.
- *: Do not have a shaft part alone when you carry drum drive unit. (Have the housing.)
- *: Put support on the tip of the shaft so that the shaft may become the horizontal when you put drum drive unit on the table etc.

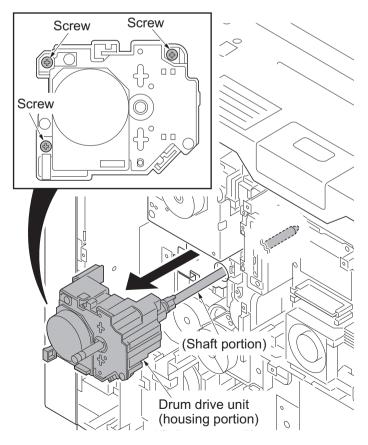


Figure 1-5-112

Detaching the drum motor

- 1. Remove the rear upper cover and the rear lower cover (see page 1-5-62).
- 2. Remove the connector.
- 3. Release the wire saddle.

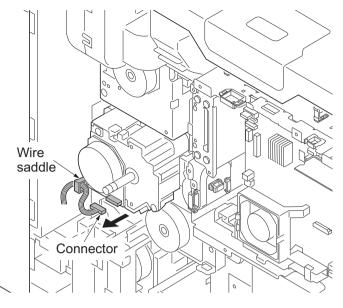


Figure 1-5-113

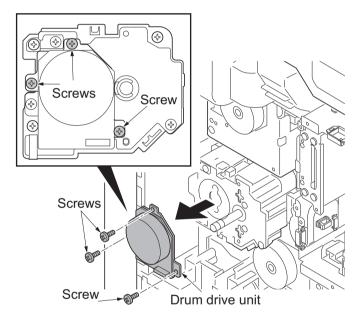


Figure 1-5-114

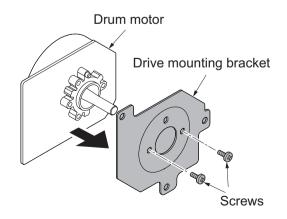


Figure 1-5-115

4. Remove three screws.

6. Remove two screws.

7. Remove the drive mounting bracket K.

5. Remove the drum drive unit.

(2) Detaching and refitting the developer drive unit

- 1. Remove the rear upper cover and the rear lower cover (see page 1-5-62).
- 2. Remove the connector.
- 3. Release the wire saddle.
- 4. Remove two screws and then remove the developer drive unit.
- 5. Check or replace the developer drive unit and refit all the removed parts.

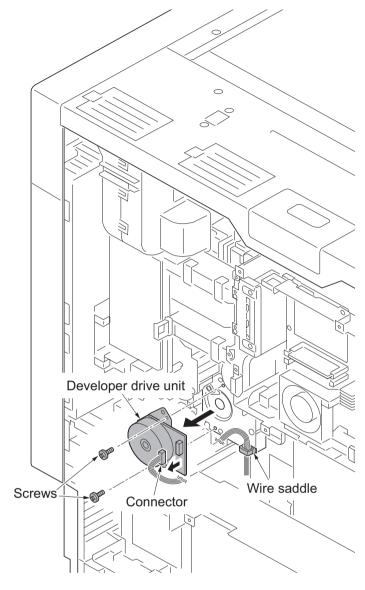


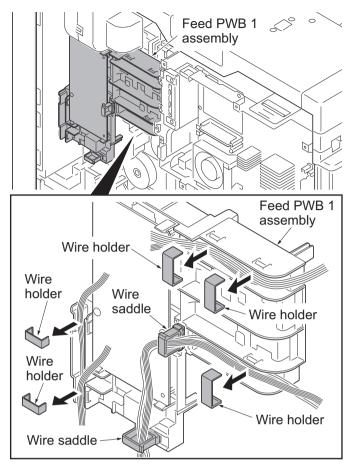
Figure 1-5-116

(3) Detaching and refitting the fuser drive unit and feed drive unit

Procedure

Detaching the fuser drive unit

- 1. Remove the rear upper cover and the rear lower cover (see page 1-5-62).
- 2. Remove five wire holders of feed PWB 1 assembly.
- 3. Release two wire saddles.





- 4. Remove the following twenty two connectors from the feed PWB 1. YC18, YC19 YC20, YC27 YC26, YC3 YC17, YC14 YC10, YC16 YC13, YC12 YC23, YC25 YC15, YC11 YC5, YC4 YC1 (FFC connector with a lock) YC2 (FFC connector with a lock) YC8 YC9
- *: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting down the lock lever (see page 1-5-48).

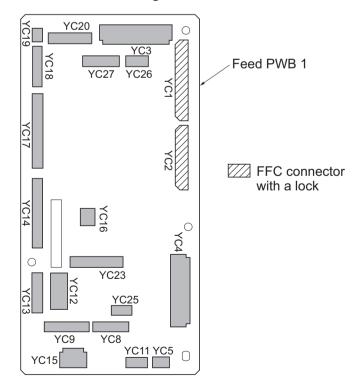


Figure 1-5-118

 Remove the FFC from the FFC connector with a lock (YC4) on the engine PWB.
 Remove the FFC from the FFC connec-

tor with a lock (YC1) on the feed PWB 2.

*: When removing the FFC from the FFC connector with a lock, remove the FFC after released by lifting up the lock lever (see page 1-5-48).

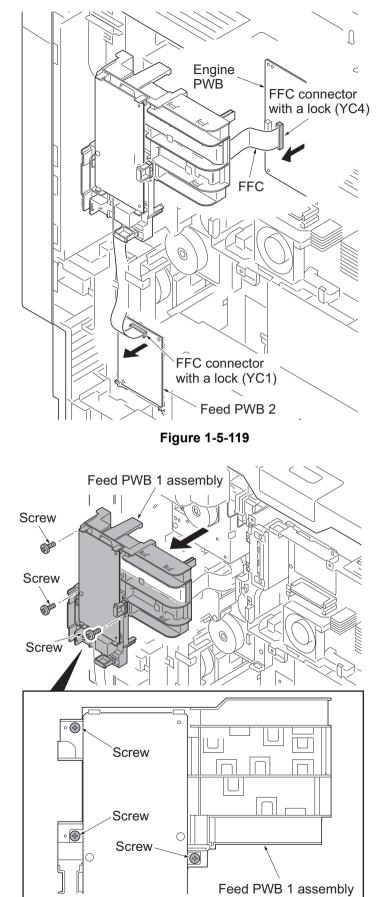


Figure 1-5-120

- 6. Remove three screws.
- 7. Remove the feed PWB 1 assembly.

- 8. Remove the connector.
- 9. Remove three screws.
- 10. Remove the fuser drive unit.

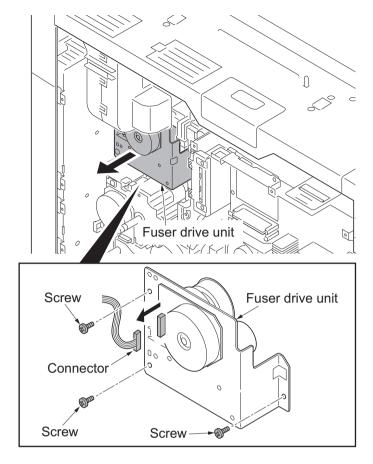
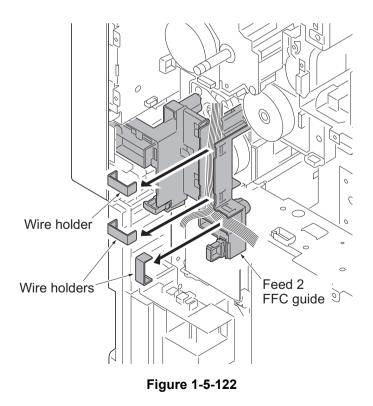


Figure 1-5-121

Detaching the feed drive unit

11. Remove three wire holders from the feed 2 FFC guide.



12. Remove two screws and then remove the feed 2 FFC guide.

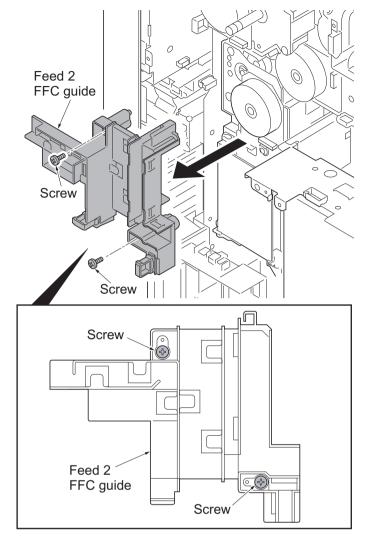


Figure 1-5-123

13. Remove the following five connectors from the feed PWB 2.

YC7

- YC8
- YC3
- YC5
- YC6

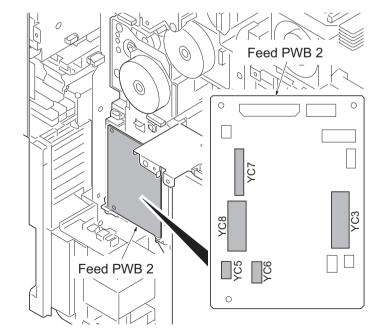
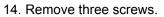
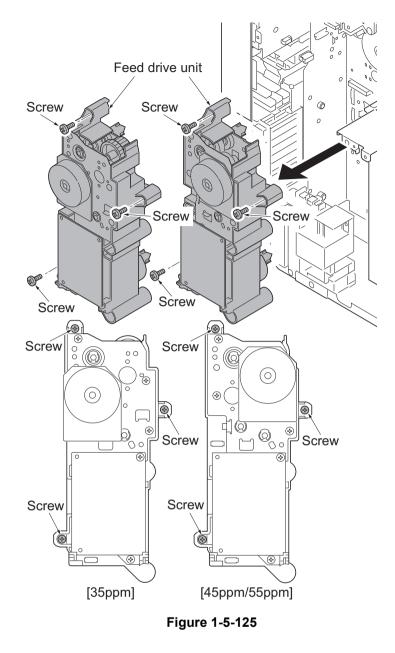


Figure 1-5-124



15. Remove the feed drive unit.



- 16. Check or replace the feed drive unit and refit all the removed parts.
- *: Connect the connector (yellow) to the connector of paper feed clutch 1 on stamp [YELLOW] side as before, when removing the connector of the paper feed clutch as the check of the feed drive unit etc.

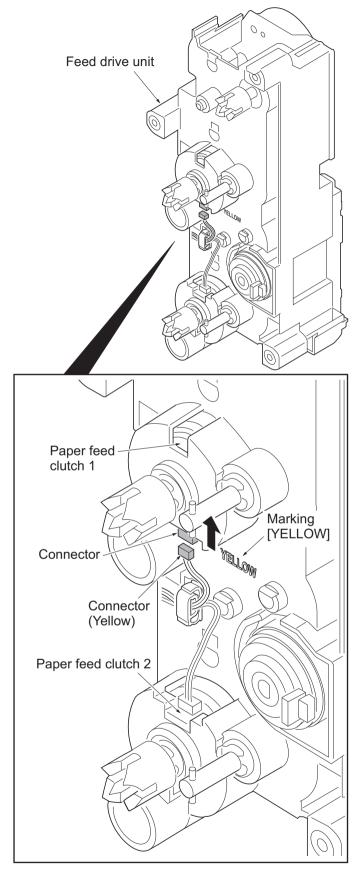


Figure 1-5-126

(4) Detaching and refitting the lift motor 1 and 2

- 1. Remove the power source assembly (see page 1-5-54).
- 2. Remove the connector each.
- 3. Remove two screws each.
- 4. Remove the lift motor 1 and 2.
- 5. Check or replace the lift motor and refit all the removed parts.

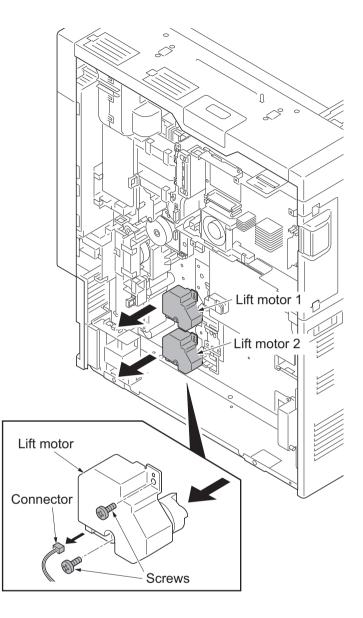


Figure 1-5-127

1-5-9 Others

(1) Detaching the eject filter

Procedure

- 1. Unhook the hook each and remove two eject filter units.
- 2. Remove the eject filter from the eject cover.
- 3. Clean or replace the eject filter and refit the filter.

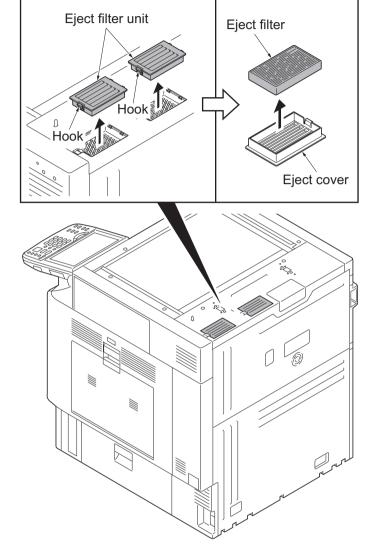


Figure 1-5-128

(2) Detaching and refitting the toner filter

- 1. Remove the toner filter unit while gripping the levers.
- 2. Clean or replace the toner filter unit and refit the filter.

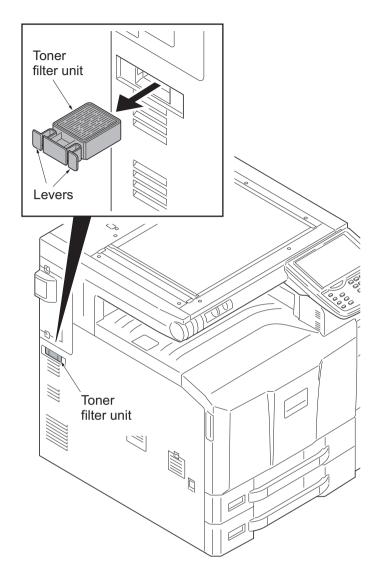


Figure 1-5-129

(3) Detaching and refitting the left filter

- 1. Remove the left filter cover and left filter by releasing the lever.
- 2. Clean or replace the left filter and refit the filter.

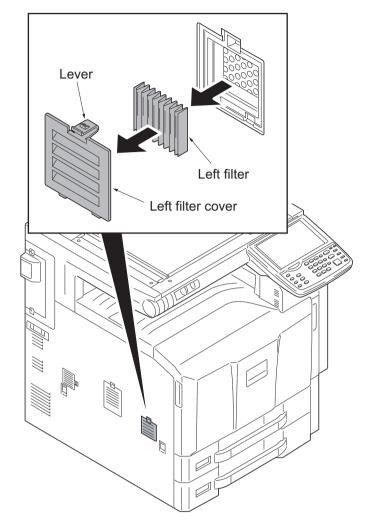


Figure 1-5-130

(4) Detaching and refitting the belt filter

- 1. Remove the belt filter by releasing the lever.
- 2. Clean or replace the belt filter and refit the filter.

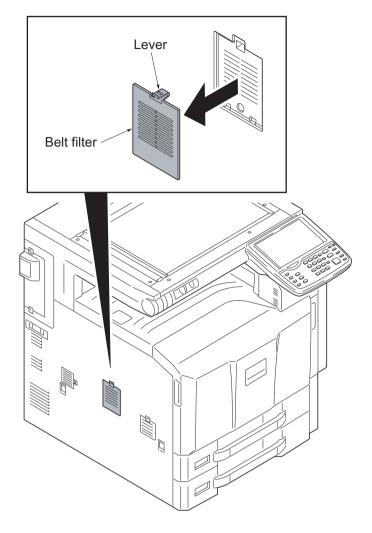


Figure 1-5-131

(5) Detaching and refitting the LSU filter

- 1. Remove the LSU filter by releasing the lever.
- 2. Clean or replace the LSU filter and refit the filter.

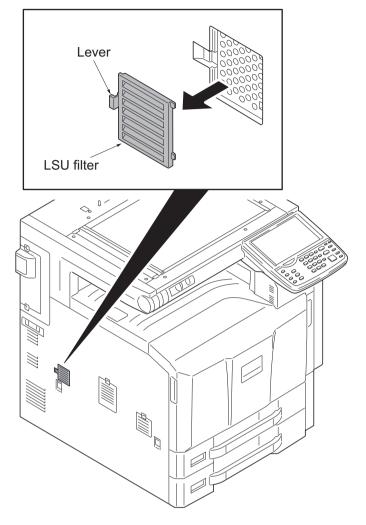


Figure 1-5-132

(6) Detaching and refitting the drum filter and developer filter

- 1. Open the front cover.
- 2. Remove the drum filter and developer filter by releasing the lever.
- 3. Clean the drum filter and developer filter and refit the filter.

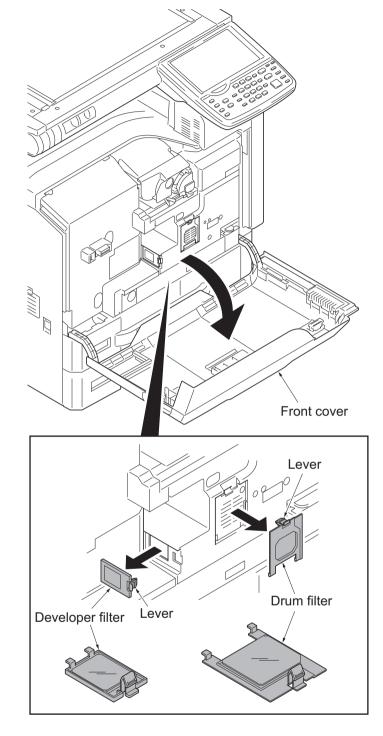


Figure 1-5-133

(7) Detaching and refitting the hard disk unit

Procedure

- 1. Perform maintenance mode U917 (backup data reading) (see page 1-3-169).
- 2. Remove the rear upper cover (see page 1-5-62).
- 3. Release the wire saddle.
- 4. Remove two screws.

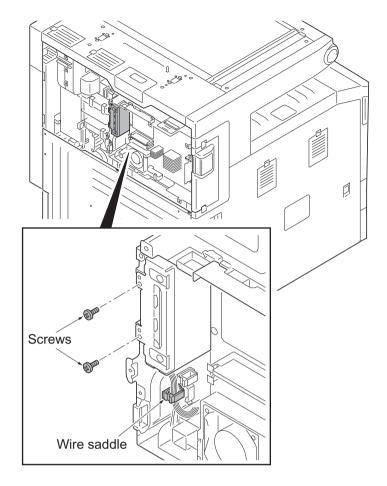


Figure 1-5-134

5. Unhook two hooks and pull out the HDD bracket a little.

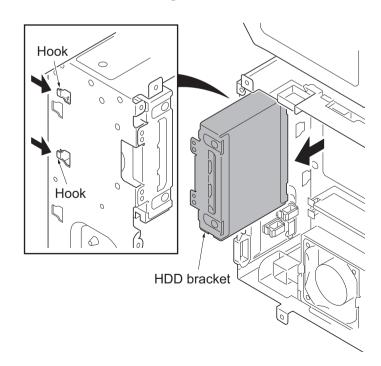


Figure 1-5-135

6. Remove two connectors from the hard disk unit while pushing the lock lever.

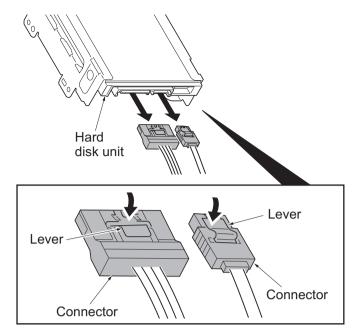


Figure 1-5-136

- 7. Remove four screws and then remove the hard disk unit from the HDD bracket.
- 8. Replace the hard disk unit and refit all the removed parts.
- 9. Perform maintenance mode U024 (HDD formatting) (see page 1-3-28).

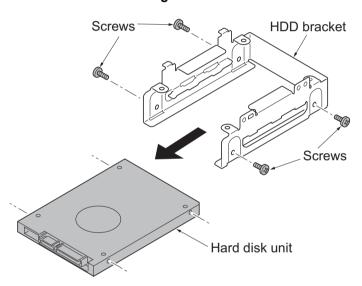


Figure 1-5-137

- 10. Install the firmwares by the following procedure.
 - 1)Connects to the machine the USB memory that preserved Software LANGUAGE BR, JP (Opt Font,Opt Msg), and the PDF1.7 resource. The firmware is installed by switching the main power switch to ON/OFF.
 - 2)Connects to the machine the USB memory that preserved WeeklyTimer, FMU application. Installs the firmware from the application screen of the system menu.
- (Refer to operation guide.)11. Perform maintenance mode U917 (backup data writing) (see page 1-3-169).

(8) Detaching and refitting the eject unit

Procedure

- 1. Remove the right upper cover (see page 1-5-63).
- 2. Remove the fuser unit (see page 1-5-45).
- 3. Remove the connector.
- 4. Remove two screws and then remove the eject unit.
- 5. Check or replace the eject unit and refit all the removed parts.

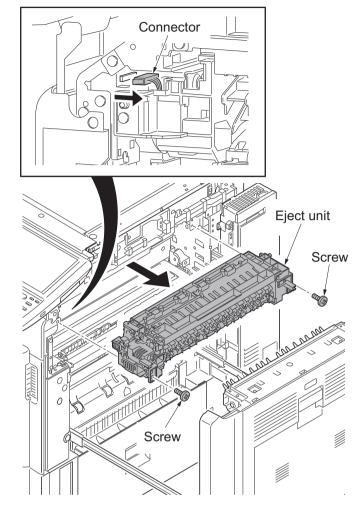


Figure 1-5-138

Cautions on installing the eject unit

When inserting the eject unit into the device, use care that the eject unit does not get in contact with the eject guide, by keeping its actuator lifted while inserting.

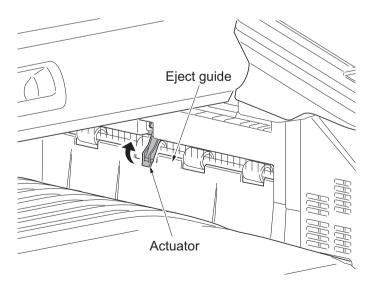


Figure 1-5-139

(9) Direction of installing the principal fan motors

When detaching or refitting the fan motors, be careful of the airflow direction (intake or exhaust).

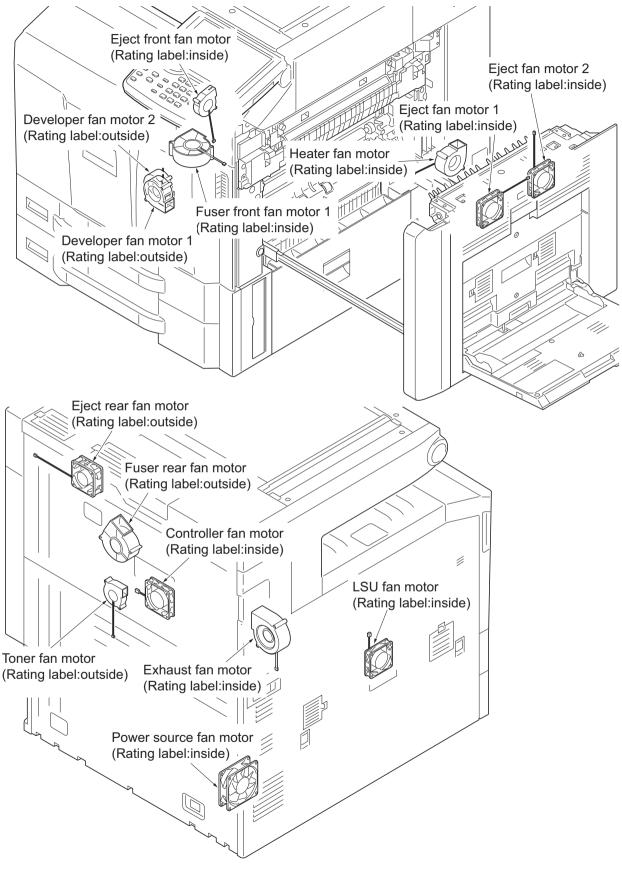


Figure 1-5-140

(10) Skewed paper feeding check/adjustment

At the paper feed source which a sheet of wrinkled paper has caused, check how the paper is fed askew. Run U051 to reduce the curvature of paper at the regist roller and measure how the paper is fed askew.

- 1. Print a maintenance report and note the U051 value.
- 2. Reduce the value by 10 for the paper source in question.(See page -1-5-49.)
- 3. Press the system menu button to print a test chart.

Check the skew value (balance of left and right, B-A).

Less than 1mm: OK

1mm or more:

Correct the skew by using the paper angle adjusting mechanism (in cassette) that modifies the angle of the paper width guides.

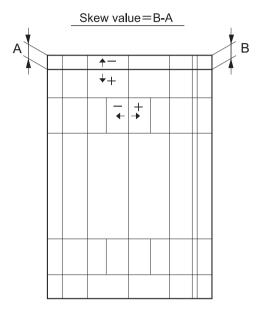


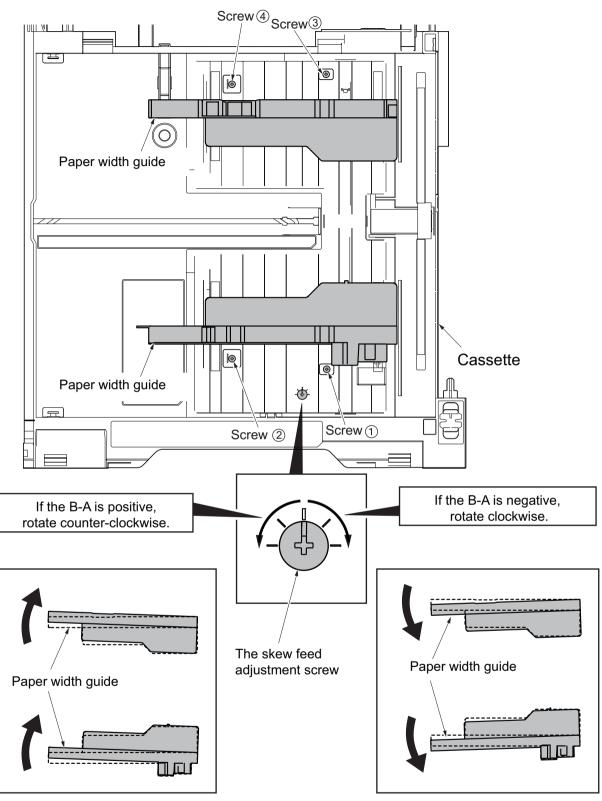
Figure 1-5-141

Procedure

 Unsecure the fixing screws (screw 1 to 4) and adjust the angle of the paper width guide by the skew feed adjustment screw.
 If the B-A is negative, rotate clockwise.

If the B-A is positive, rotate counter-clockwise.

- 2. Tighten the four screw.
 - *: Secure the screws in the order of screws 1, 2, 3, then 4.
- 3. Run U051 and reset the curvature the regist roller.





1-6-1 Upgrading the firmware

Follow the procedure below to upgrade the firmware of main PWB, operation PWB, engine PWB, ISC PWB, optional language and optional devices.

Preparation

Extract the file that has the download firmware and put them in the USB flash device.

Procedure

- 1. Perform maintenance item U000 (maintenance report output) and check U019 ROM version.
- 2. Press the power key on the operation panel, and after verifying the power indicator has gone off, switch off the main power switch.
- 3. Insert the USB flash device in which the firmware has been written into a notch hole of the machine.
- 4. Turn the main power switch on. Upgrading firmware starts (blinking the memory LED).

Caution:

Never turn off the power switch or remove the USB flash device during upgrading.

- 5. [ROM version] is displayed on the touch panel when upgrading is complete.
- 6. Switch off the main power switch.
- 7. Wait for several seconds and then remove the USB flash device from the machine.
- 8. Turn the main power switch on.
- Perform maintenance item U000 (maintenance report output) and check that U019 ROM version has been upgraded.

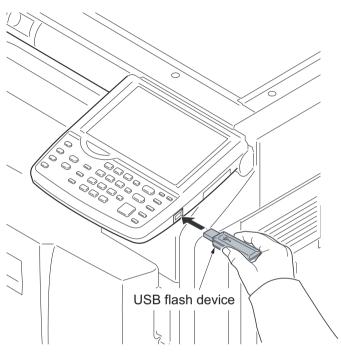


Figure 1-6-1

Procedure for recovery of version upgrade using operation PWB

Perform the following if the panel will not be activated due to a power failure during upgrading the version:

Procedure

- 1. Turn the power switch on the machine off and unplug the power cable. Remove the USB flash device.
- 2. Set the slide switch from NORMAL to BOOT (This engages the panel to the update mode).
- 3. Plug the power cable to power and turn the power switch on.

When the memory indicator is lit up (in approx. 1 minute after the power switch is turned on - the recovery firmware for the operation panel PWB has been updated.), turn the power switch off and unplug the power cable.

- * : Set the slide switch on the operation PWB from BOOT to NORMAL.For normal use, leave the switch in NORMAL (not BOOT).The panel display is deactivated if this switch is set to BOOT.
- * : The minimum parameters of the firmware required for recovery are restored (update mode for rebooting).Perform the normal upgrade procedure.

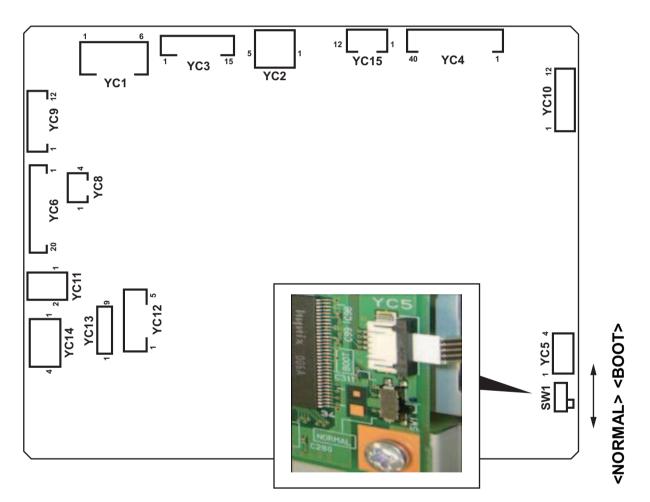


Figure 1-6-2

Emergency-UPDATE

If the device is accidentally switched off and upgrading was incomplete, upgrade becomes impossible from a USB flash device.

In that case, retry upgrading after recovering the software by following the procedure below.

Preparation

The CF memory card must be formatted in FAT or FAT32 in advance.

Extract the main firmware to download from the file.

Rename the file which was extracted from the archive. [DL_CTRL.2LH] to [KM_EMRG.2LH] Copy the all extracted files to the root of the CF memory.

- 1. Turn the main power switch off.
- 2. Install the CF memory card which contains the firmware onto the main PWB.
- 3. Turn the main power switch on.
- Rewriting of the PWB software will start for restoration.
 The memory and attention LEDs will be
- blinking. 5. Only the Memory LED will be blinking
- when rewriting is successful.* : Only the Attention LED will be blinking when rewriting is failed.
- 6. Turn the main power switch off.
- 7. Wait for several seconds and then remove the CF memory from the main PWB.
- 8. Extract the firmware to download from the archive and copy to the root of the USB flash device.
- 9. Insert the USB flash device in which the firmware was copied into the slot on the machine.
- 10. Perform steps 4 to 7 on the previous page.
- 11. Turn the main power switch on.
- 12. Perform maintenance item U000 (Print a maintenance report) to check that the version of ROM U109 has been upgraded.

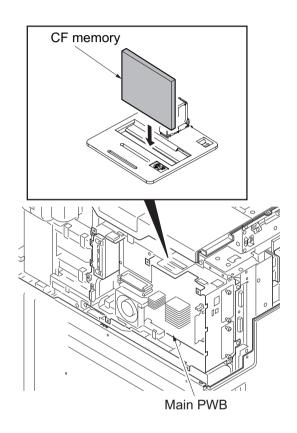


Figure 1-6-3

1-6-2 Remarks on main PWB replacement

When replacing the main PWB, remove the EEPROM (YC14) and code DIMM (YS4) from the main PWB that has been removed and then reattach it to the new main PWB.

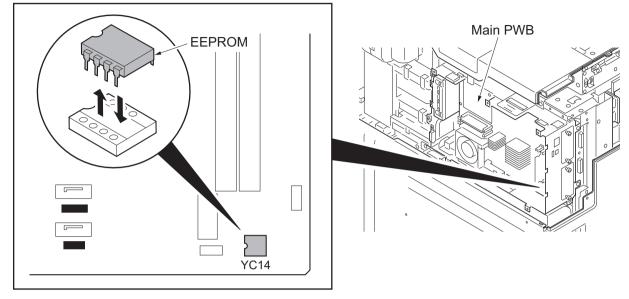
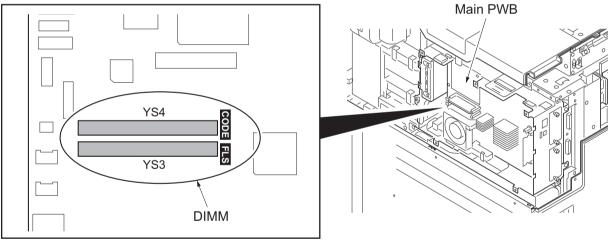


Figure 1-6-4

When refitting DIMM, check "CODE" and "FLS" marked on the PWB and refit them to the original positions.





If the code DIMM (YS4) was replaced with a service supplied part, perform the following.

- 1. Insert the USB flash device in which the latest firmware was copied, into the slot on the machine and turn power on.(see page P.1-6-1)
- Referring to the U000 maintenance report printed previously, enter the following values. U252 Setting the destination U265 Setting OEM purchaser code U278 Setting the delivery date U402 Adjusting margins of image printing U952 Maintenance mode workflow
- Reset machine settings.(Resets system menu settings modified at setup to their defaults.) Main items for settings [Date/Timer] - Date/Time settings

[Date/Timer] - Timer settings (Sleep timer)
[Edit Destination] - One-touch presetting
[User/Job accounting] - Defaults for user authentication and job accounting only. Resettings are not required as the data are stored in harddisk.
[FAX] - FAX transmittion settings (tel. no. of itself)
[System] - Network settings (IP address)
[Adjustment/Maintenance] - Silent Mode setting
4. Run the maintenance mode for image adjustments which follows.

- 1. Performs maintenance mode U464 (Calibration) (see page P.1-3-154).
- 2. Performs maintenance mode U410 (Adjusting the halftone automatically) (see page P.1-3-154).

When connecting the hard disk cables (YC1, YC2) to the PWB, match "BLACK" and "BLUE" marked on the PWB with the connector colors.

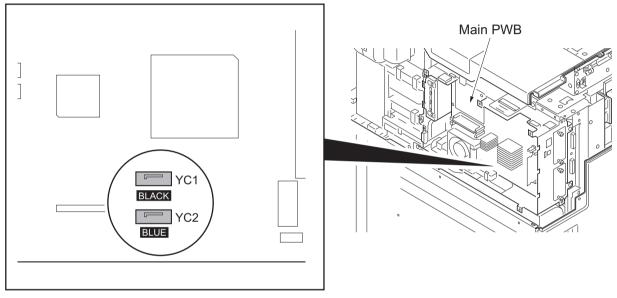


Figure 1-6-6

When connecting the USB cables (YC17, YC21) to the PWB, match "BK" and "WH" marked on the PWB with the connector colors.

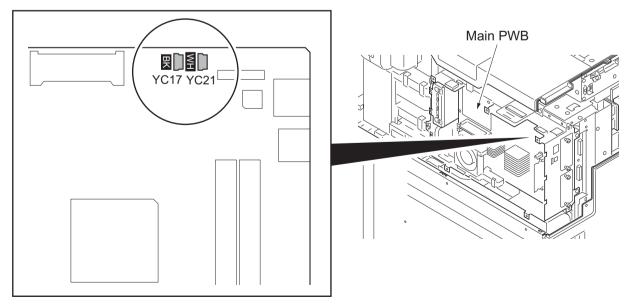


Figure 1-6-7

1-6-3 Remarks on engine PWB replacement

When replacing the engine PWB, remove the EEPROM (U100) from the engine PWB that has been removed and then reattach it to the new engine PWB.

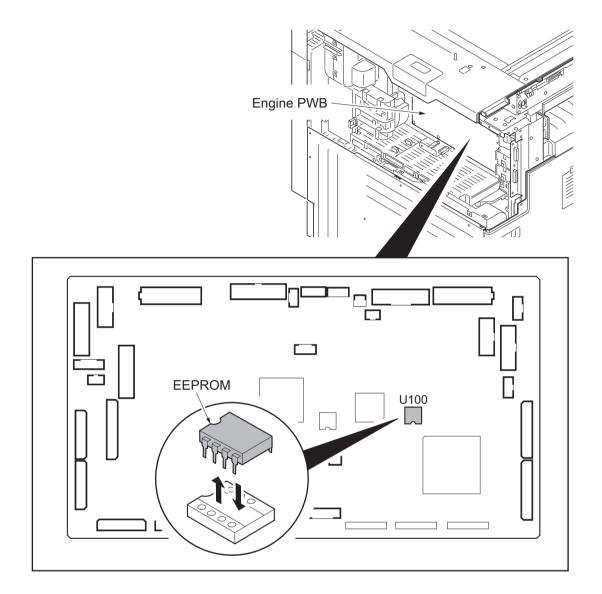


Figure 1-6-8

2-1-1 Paper feed/conveying section

Paper feed/conveying section consists of the paper feed unit that feeds paper from the cassette and the MP tray paper feed unit that feeds paper from the MP tray, and the paper conveying section that conveys the fed paper to the transfer/separation section.

(1) Cassette paper feed section

Cassette paper feed section consists of the paper holder with the cassette operation plate activated by lift motor 1 and 2, and the pulleys, such as the forwarding pulley, the paper feed pulley and the separation pulley, for extracting and conveying the paper. Paper is fed out of the cassette by the rotation of the forwarding pulley, paper feed pulley and separation pulley.

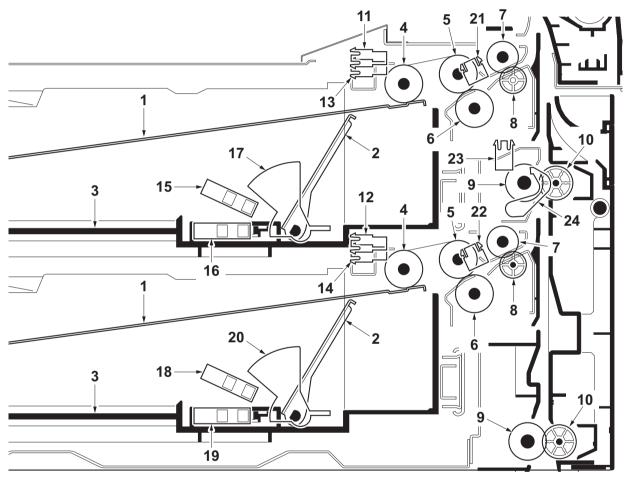


Figure 2-1-1 Cassette paper feed section

- 1. Cassette base
- 2. Cassette operation plate
- 3. Cassette
- 4. Forwarding pulleys
- 5. Paper feed pulleys
- 6. Separation pulleys
- 7. Assist rollers*
- 8. Assist pulleys*
- 9. Paper conveying roller
- 10. Paper conveying pulley
- 11. Paper sensor 1 (PS1)

- 12. Paper sensor 2 (PS2)
 - 13. Lift sensor 1 (LS1)
 - 14 Lift concorr 2 (LC2)
 - 14. Lift sensor 2 (LS2)
 - 15. Paper gauge sensor 1 (U) (PGS1(U))
 - 16. Paper gauge sensor 1 (L) (PGS1(L))
 - 17. Actuator (Paper gauge sensor 1)
 - 18. Paper gauge sensor 2 (U) (PGS2(U))

- 19. Paper gauge sensor 2 (L) (PGS2(L))
- 20. Actuator
- (Paper gauge sensor 2)
- 21. Feed sensor 1 (FS1)
- 22. Feed sensor 2 (FS2)
- 23. Paper conveying sensor (PCS)
- 24. Actuator (Paper conveying sensor)
- *: 45 ppm/55 ppm model only

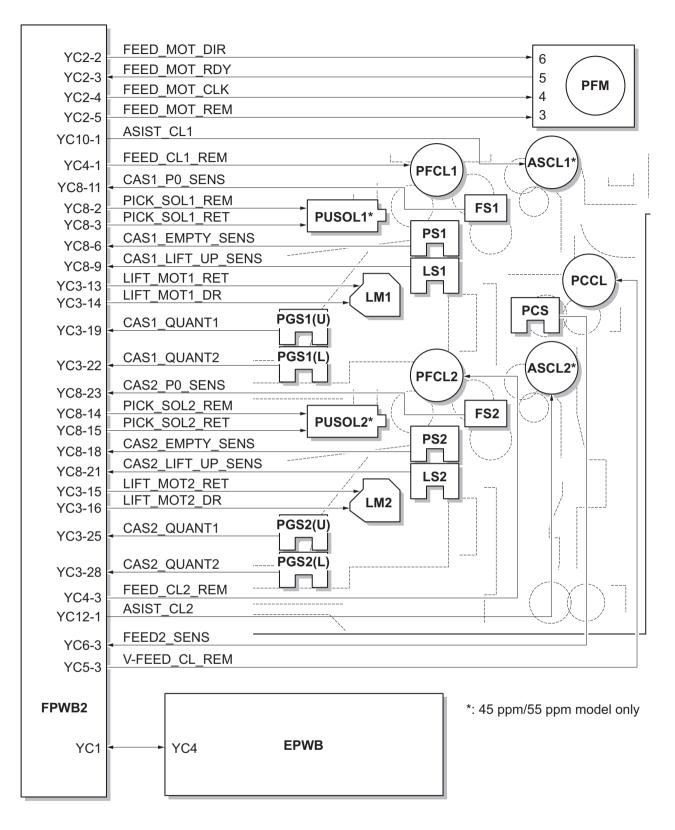


Figure 2-1-2 Cassette paper feed section block diagram

(2) MP tray paper feed section

Paper is fed out of the MP tray by the rotation of the MP forwarding pulley, MP paper feed pulley and MP separation pulley. The MP separation pulley prevents multiple sheets from being fed at one time by the torque limiter.

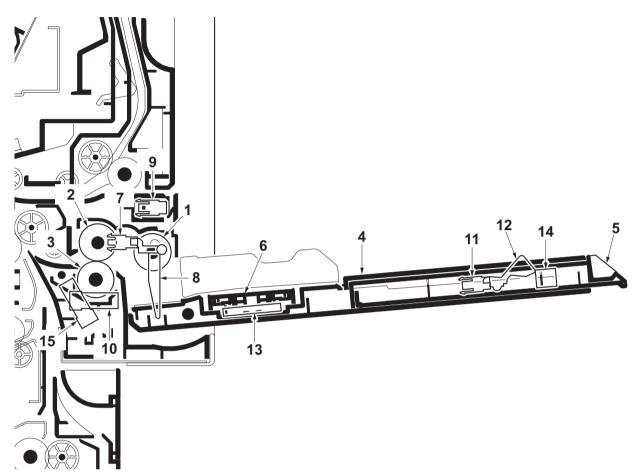


Figure 2-1-3 MP tray paper feed section

- 1. MP forwarding pulley
- 2. MP paper feed pulley
- 3. MP separate pulley
- 4. MP table
- 5. MP support Tray
- 6. MP lift base
- 7. MP paper sensor (MPPS)
- 8. Actuator (MP paper sensor)
- 9. MP lift sensor 1 (MPLS1)

- 10. MP lift sensor 2 (MPLS2)
- 11. MP paper length switch (MPPLSW)
- 12. Actuator (MP paper length switch)
- 13. MP paper width switch (MPPWSW)
- 14. MP tray switch (MPTSW)
- 15. MP feed sensor (MPFS)

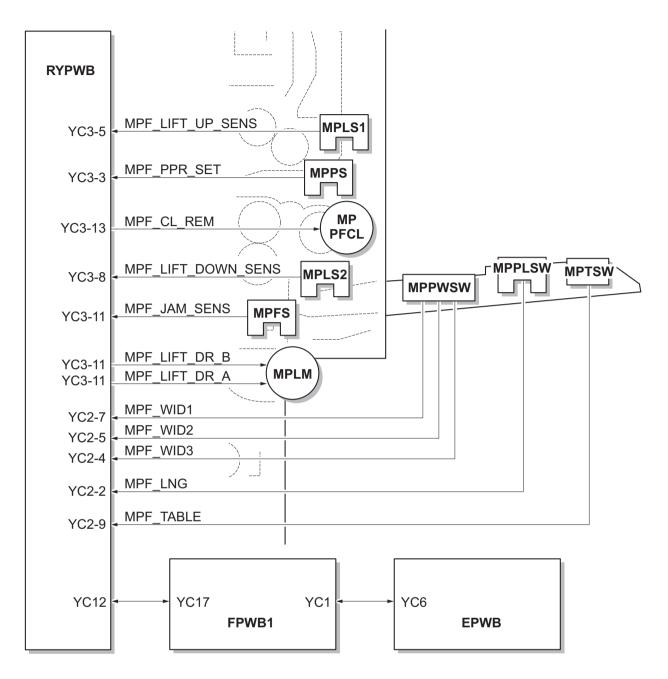


Figure 2-1-4 MP tray paper feed section block diagram

(3) Paper conveying section

The paper conveying section conveys paper to the transfer/separation section as paper feeding from the cassette or MP tray, or as paper refeeding for duplex printing. Paper by feeding is conveyed by the middle roller to the position where the registration sensor (RS) is turned on, and then sent to the transfer/separation section by the right registration roller and left registration roller.

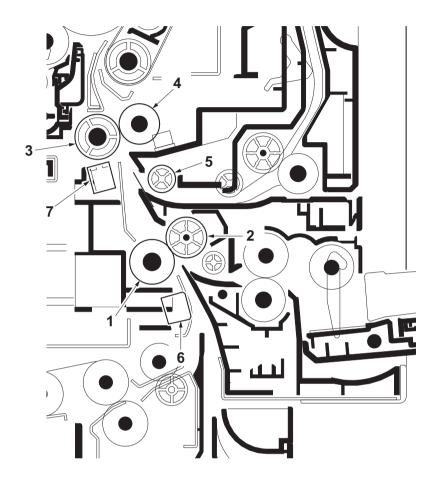


Figure 2-1-5 Paper conveying section

- 1. Middle roller
- 2. Middle pulley
- 3. Left registration roller
- 4. Right registration roller
- 5. Paper conveying pulley
- 6. Middle sensor (MS)
- 7. Registration sensor (RS)

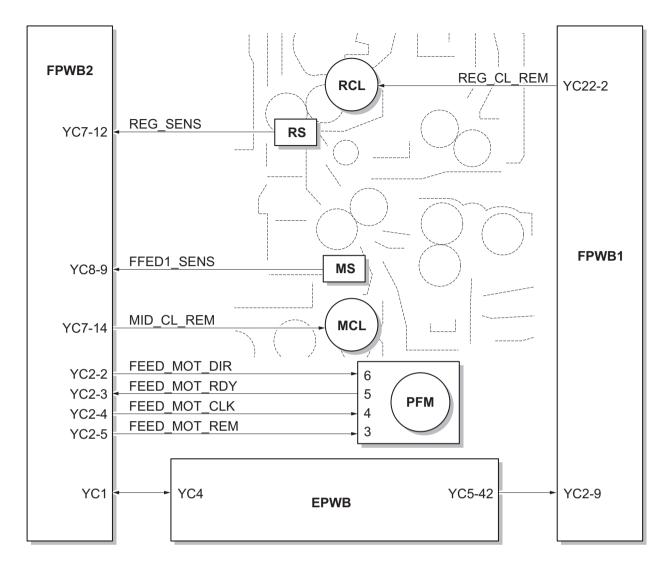


Figure 2-1-6 Paper conveying section block diagram (35 ppm model)

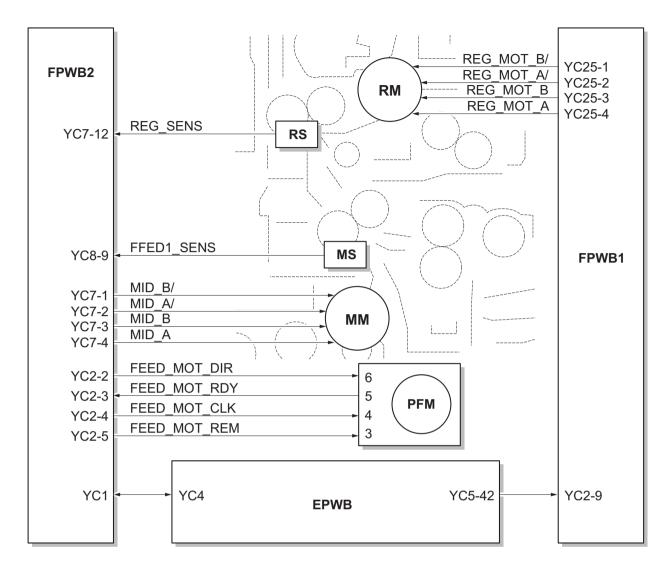


Figure 2-1-7 Paper conveying section block diagram (45 ppm/55 ppm model)

2-1-2 Drum section

The drum section consists of the charger roller unit, drum and cleaning section. The drum is electrically charged uniformly by means of a charger roller to form a latent image on the surface. The cleaning section consists of the cleaning blade and the cleaning roller which remove residual toner from the drum surface after transfer. The cleaning lamp (CL) consists of LEDs and removes residual charge on the drum before main charging.

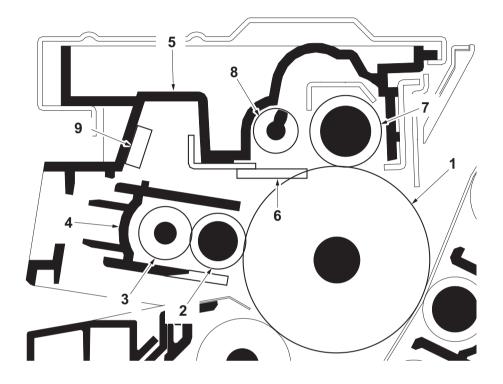


Figure 2-1-8 Drum section

- 1. Drum
- 2. Charger roller
- 3. Charger cleaning roller
- 4. Charger case
- 5. Drum frame

- 6. Cleaning blade
- 7. Cleaning roller
- 8. Drum screw
- 9. Cleaning lamp (CL)

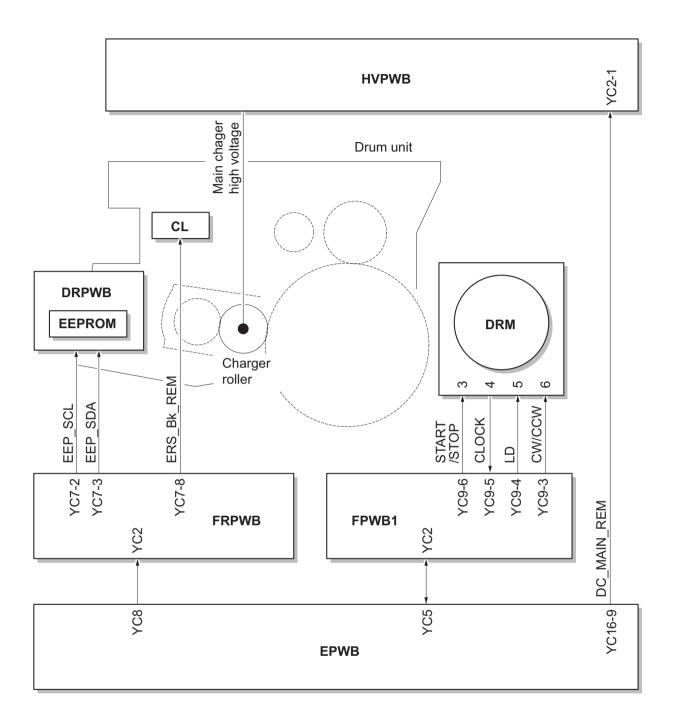


Figure 2-1-9 Drum section block diagram

2-1-3 Developer section

The developer unit consists of the sleeve roller that forms the magnetic brush, the magnet roller, the developer oper blade and the developer screws that agitate the toner. Also, the toner sensor (TS) checks whether or not toner remains in the developer unit.

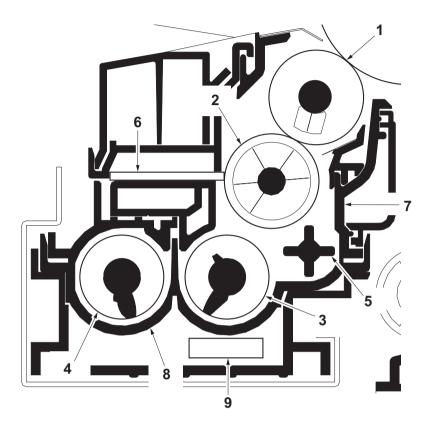


Figure 2-1-10 Developer section

- 1. Sleeve roller
- 2. Magnet roller
- 3. Developer screw A
- 4. Developer screw B
- 5. Developer paddle

- 6. Developer blade
- 7. Developer case
- 8. Developer cover
- 9. Toner sensor (TS)

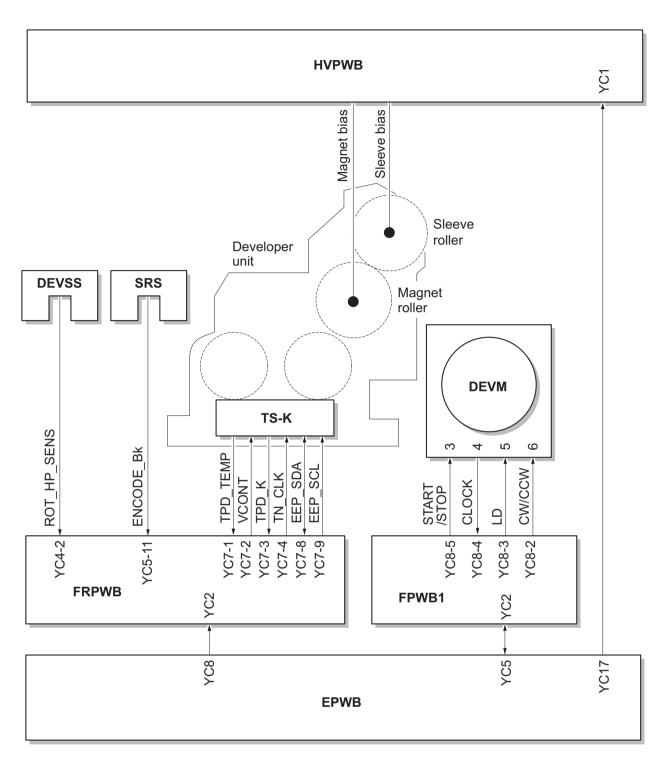


Figure 2-1-11 Developer section block diagram

2-1-4 Optical section

The optical section consists of the image scanner section for scanning and the laser scanner section for printing.

(1) Image scanner section

The original image is illuminated by the LED lamp and scanned by the CCD image sensor in the CCD PWB (CCDPWB) via the three mirrors and ISU lens, the reflected light being converted to an electrical signal. The mirror frame A and B travel to scan on the optical rails on the front and rear of the machine to scan from side to side. The speed of the mirror frame B is half the speed of the mirror frame A.

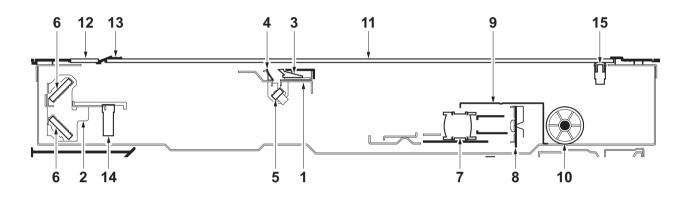


Figure 2-1-12 Image scanner section

- 1. Mirror frame A
- 2. Mirror frame B
- 3. LED mount
- 4. Scanner reflector
- 5. Mirror A
- 6. Mirror B
- 7. ISU lens
- 8. CCD PWB (CCDPWB)

- 9. ISU cover
- 10. Scanner wire drum
- 11. Contact glass
- 12. Slit glass
- 13. Original size indicator plate
- 14. Home position sensor (HPS)
- 15. Original detection switch (ODSW)

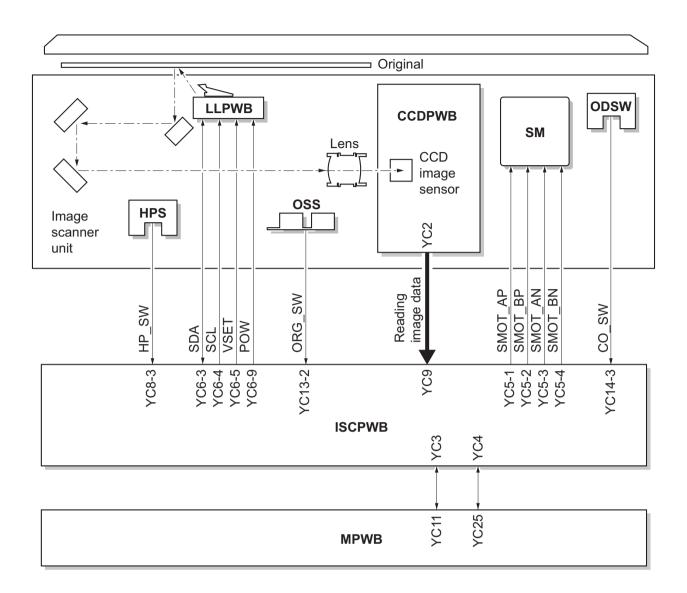


Figure 2-1-13 Image scanner section block diagram

(2) Laser scanner section

The charged surface of the drum is then scanned by the laser beam from the laser scanner unit. The laser beam is dispersed as the polygon motor (PM) revolves to reflect the laser beam over the drum. Various lenses are housed in the laser scanner unit, adjust the diameter of the laser beam, and focalize it at the drum surface.

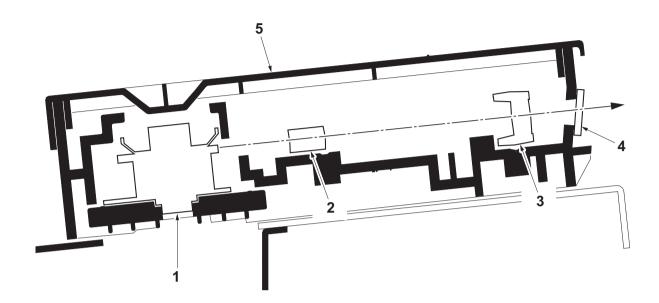
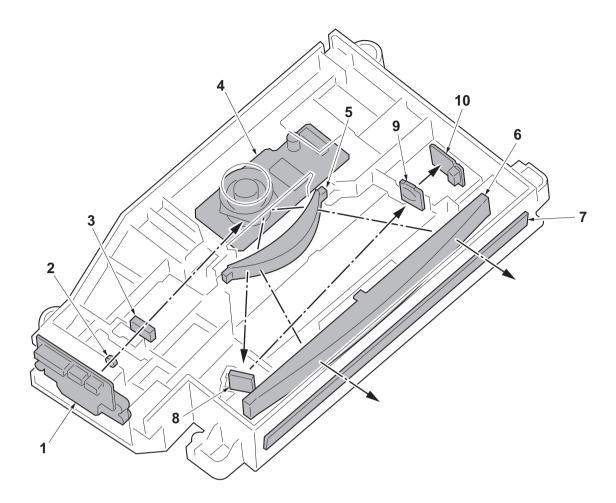


Figure 2-1-14 Laser scanner section

- 1. Polygon motor (PM)
- 2. f- θ lens A
- 3. f- θ lens B
- 4. LSU dust shield glass
- 5. LSU cover





- 1. APC PWB (APCPWB)
- 2. Collimate lens
- 3. Cylindrical lens
- 4. Polygon motor (PM)
- 5. f- θ lens A

- 6. f- θ lens B
- 7. LSU dust shield glass
- 8. Mirror lens
- 9. PD lens
- 10. PD PWB (PDPWB)

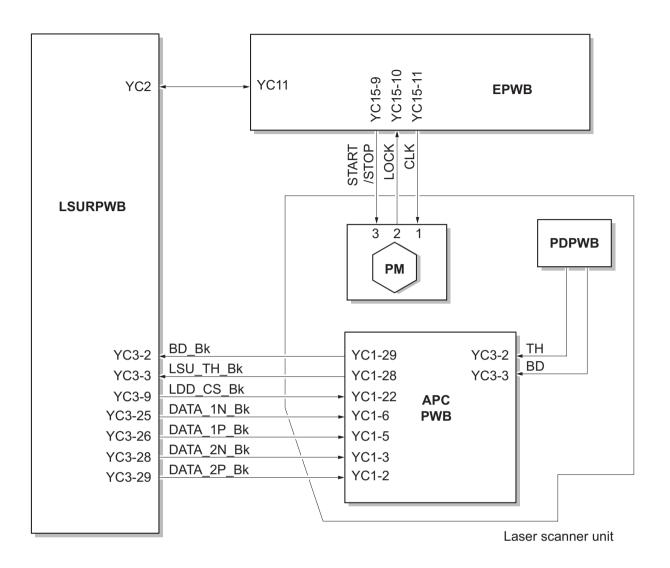


Figure 2-1-16 Laser scanner section block diagram

2-1-5 Transfer/Separation section

(1) Transfer belt unit section

The transfer belt unit section consists of the transfer belt, transfer roller and the charge erasing brush. To the transfer roller, DC bias is applied from the high voltage PWB (HVPWB). The toner image formed on the drum is transferred to the paper by the potential difference and the paper is discharged with the discharging brush. Also with the ID sensors (IDS), the toner density on the transfer belt is measured.

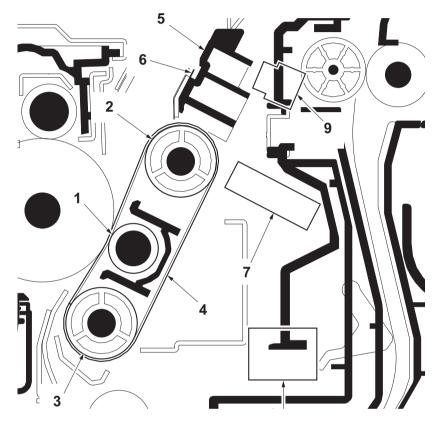


Figure 2-1-17 Transfer belt unit section

- 1. Transfer roller
- 2. Idle roller
- 3. Drive roller
- 4. Transfer belt
- 5. Transfer rear guide

- 6. Charge erasing brush
- 7. ID sensor (IDS)
- 8. Cleaning solenoid (CLSOL)
- 9. Loop sensor (LPS)

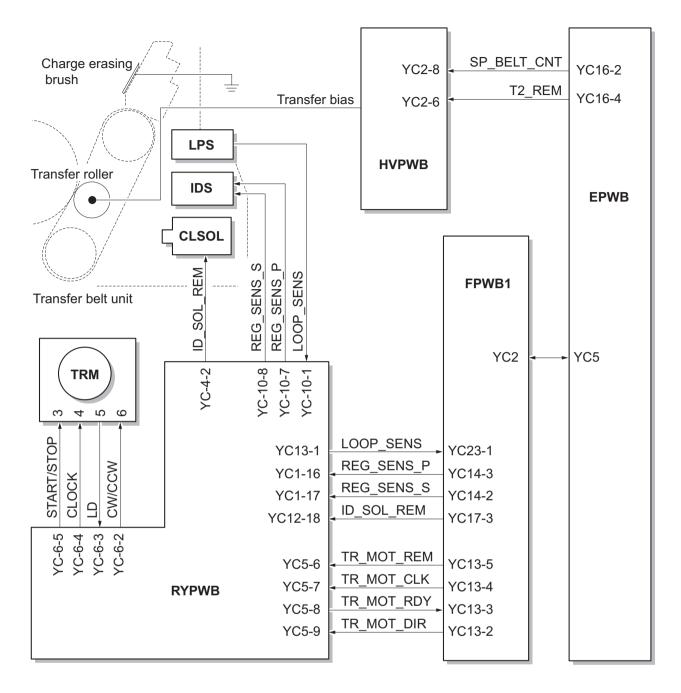


Figure 2-1-18 Transfer belt unit section block diagram

2-1-6 Fuser section

The paper sent from the transfer/separation section is interleaved between the heat roller and the press roller. The heat roller is heated by the fuser heater (FH), and the toner is fused by heat and pressure and fixed onto the paper because the press roller is pressed by the fuser press spring. The surface temperature of heat roller and press roller are detected by the fuser thermistor (FTH) and controlled by the engine PWB (EPWB).

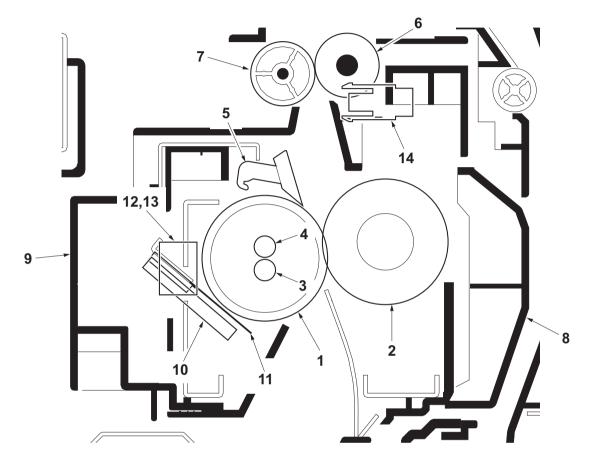


Figure 2-1-19 Fuser section

- 1. Heat roller
- 2. Press roller
- 3. Fuser heater 1 (FH1)
- 4. Fuser heater 2 (FH2)
- 5. Separators
- 6. Fuser eject roller
- 7. Fuser eject pulley

- 8. Right fuser cover
- 9. Left fuser guide
- 10. Fuser thermistor 1 (FTH1)
- 11. Fuser thermistor 2 (FTH2)
- 12. Fuser thermostat 1 (FTS1)
- 13. Fuser thermostat 2 (FTS2)
- 14. Fuser eject sensor (FUES)

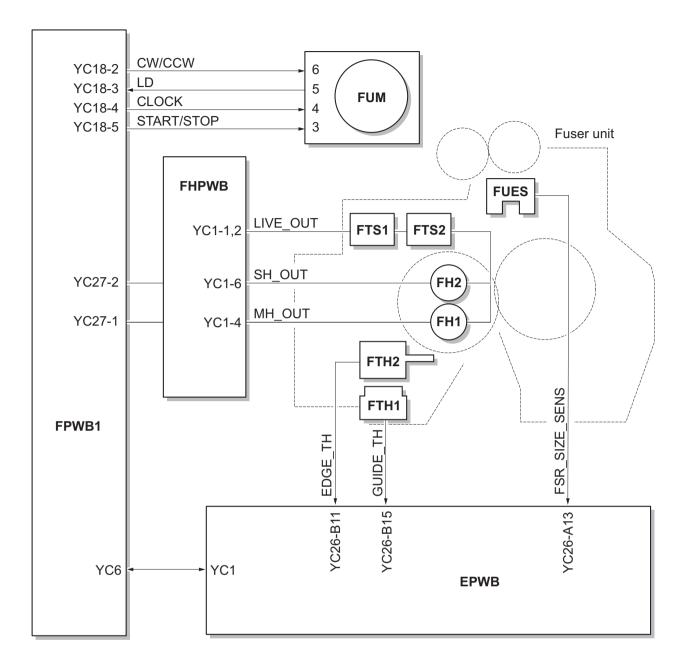


Figure 2-1-20 Fuser section block diagram

2-1-7 Eject/Feedshift section

The paper eject/feedshift section consists of the conveying path which sends the paper that has passed the fuser section to the top tray, duplex conveying section or job separator.

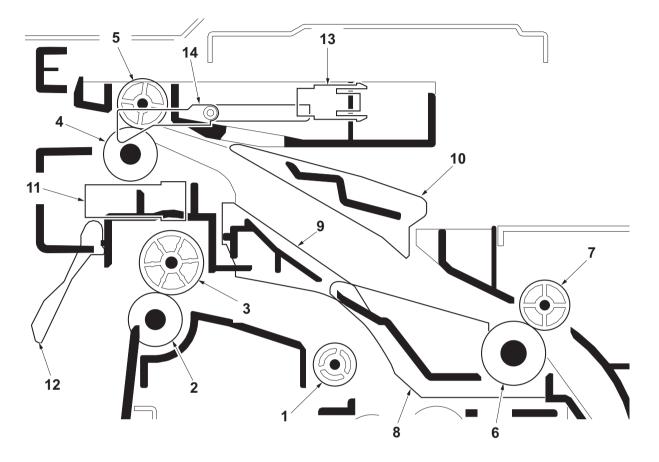


Figure 2-1-21 Eject/Feed shift section

- 1. Middle pulley
- 2. Eject roller
- 3. Eject pulley
- 4. Eject roller B
- 5. Eject pulley B
- 6. Upper duplex roller
- 7. Duplex pulley

- 8. Lower duplex roller
- 9. Lower change guide
- 10. Upper change guide
- 11. Eject full sensor (EFS)
- 12. Actuator (eject full sensor)
- 13. Switchback sensor (SBS)
- 14. Actuator (switchback sensor)

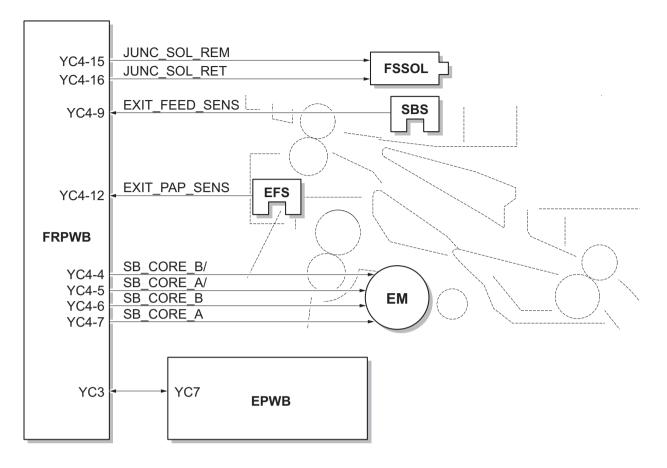


Figure 2-1-22 Eject/Feed shift section block diagram

2-1-8 Duplex conveying section

The duplex conveying section consists of conveying path which sends the paper sent from the eject/feedshift section to the paper feed/conveying section when duplex printing.

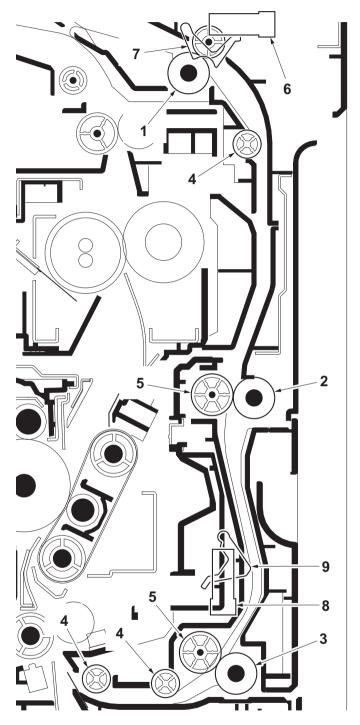


Figure 2-1-23 Duplex conveying section

- 1. Upper duplex roller
- 2. Middle duplex roller
- 3. Lower duplex roller
- 4. Duplex pulleys A
- 5. Duplex pulleys B

- 6. Duplex sensor 1 (DUS1)
- 7. Actuator (duplex sensor 1)
- 8. Duplex sensor 2 (DUS2)
- 9. Actuator (duplex sensor 2)

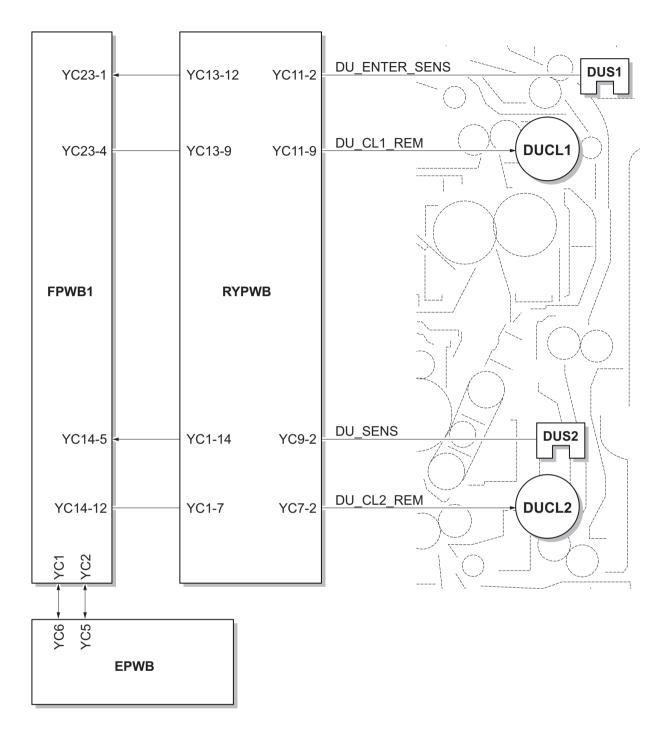


Figure 2-1-24 Duplex conveying section block diagram (35 ppm model)

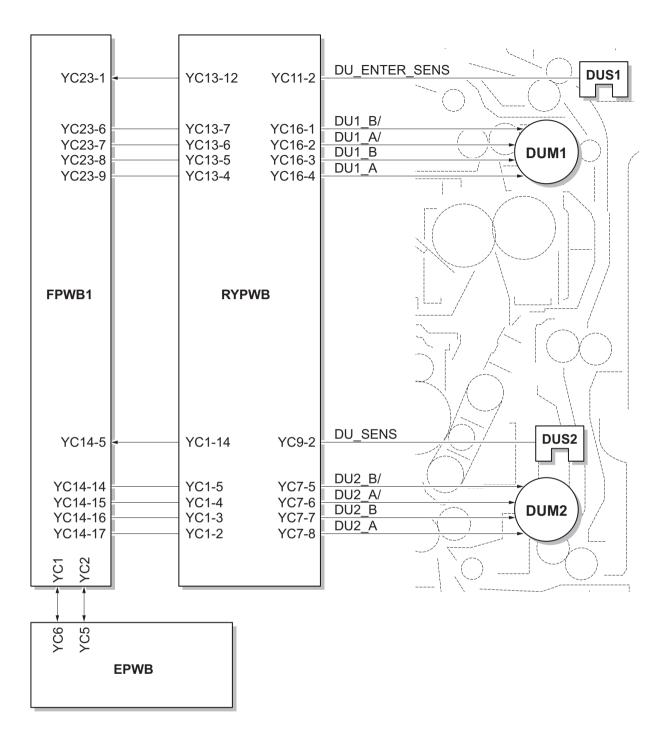


Figure 2-1-25 Duplex conveying section block diagram (45 ppm/55 ppm model)

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2-2-1 Electrical parts layout

(1) PWBs

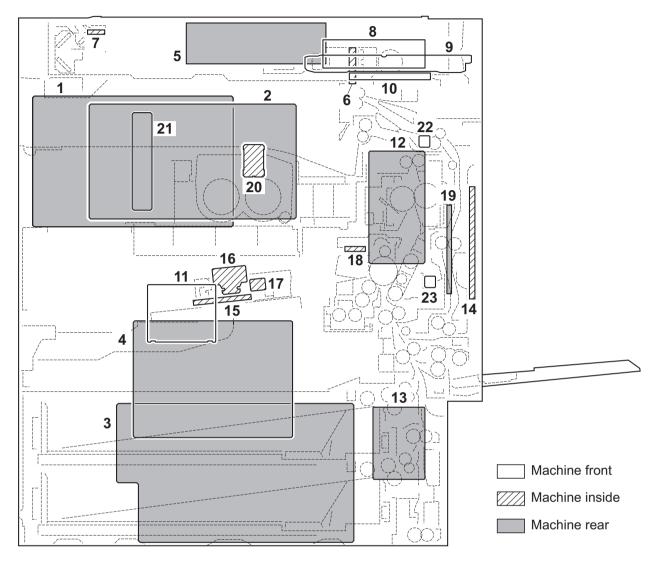


Figure 2-2-1 PWBs

1. Main PWB (MPWB)	. Controls the software such as the print data processing and provides the interface with computers.
2. Engine PWB (EPWB)	
3. Power source PWB (PSPWB)	After full-wave rectification of AC power source input, switching for converting to 24 V DC and 12 V DC for output. Controls the fuser Heater.
4. High voltage PWB (HVPWB)	. Generates main charging, developer bias, transfer bias and sepa- ration bias.
5. ISC PWB (ISCPWB)	. Controls the scanner section.
6. CCD PWB (CCDPWB)	. Reads the image of originals.
7. LED lamp PWB (LLPWB)	. Exposes originals.
8. Operation PWB 1 (OPWB1)	. Controls touch panel and LCD indication.
9. Operation PWB 2 (OPWB2)	. Consists of the LED indicators and key switches.

10. Operation PWB 3 (OPWB3)	. Consists of the LED indicators. . Consists of wiring relay circuit between engine PWB and drum
	units, developer units, eject unit.
12. Feed PWB 1 (FPWB1)	Consists of wiring relay circuit between engine PWB and fuser drive unit, relay PWB.
13. Feed PWB 2 (FPWB2)	Consists of wiring relay circuit between engine PWB and paper conveying section, drive section.
14. Relay PWB (RPWB)	Consists of wiring relay circuit between feed PWB 1 and paper conveying unit.
15. LSU relay PWB (LSURPWB)	Consists of wiring relay circuit between engine PWB and laser scanner unit.
16. APC PWB (APCPWB)	Generates and controls the laser beam.
17. PD PWB (PDPWB)	Controls horizontal synchronizing timing of laser beam.
18. Drum PWB(DRPWB)	Drum individual information in EEPROM storage.
19. Fuser heater PWB (FHPWB)	Controls the fuser heater.
20. RFID PWB (RFPWB)	. Reads the container information.
21. Interface PWB (IFPWB)	Consists of wiring relay circuits between main PWB and Fax con-
	trol PWB.
22. LED PWB 1 (LEDPWB1)	Controls LED indication.
23. LED PWB 2 (LEDPWB2	Controls LED indication.

List of correspondences of PWB names

No.	Name used in service manual	Name used in parts list
1	Main PWB (MPWB)	PARTS PWB MAIN ASSY SP
2	Engine PWB (EPWB)	PARTS PWB ENGINE ASSY SP
3	Power source PWB (PSPWB)	PARTS UNIT LOW VOLTAGE SP
4	High voltage PWB (HVPWB)	PARTS UNIT HIGH VOLTAGE MAIN SP
5	ISC PWB (ISCPWB)	PARTS PWB ISC ASSY SP
6	CCD PWB (CCDPWB)	-
7	LED lamp PWB (LLPWB)	-
8	Operation PWB 1 (OPWB1)	PARTS PWB PANEL MAIN ASSY J SP
9	Operation PWB 2 (OPWB2)	PARTS PWB OPERATION ASSY SP
10	Operation PWB 3 (OPWB3)	PARTS PWB OPERATION LED ASSY SP
11	Front PWB (FRPWB)	PARTS PWB FRONT MONO ASSY SP
12	Feed PWB 1 (FPWB1)	PARTS PWB FEED 1 ASSY SP
13	Feed PWB 2 (FPWB2)	PARTS PWB FEED 2 ASSY SP
14	Relay PWB (RPWB)	PARTS PWB JUNCTION ASSY SP
15	LSU relay PWB (LSURPWB)	PARTS PWB LSU JUNC MONO ASSY SP
16	APC PWB (APCPWB)	-
17	PD PWB (PDPWB)	-
18	Drum PWB (DRPWB)	-
19	Fuser heater PWB (FHPWB)	PARTS PWB HEATER ASSY SP
20	RFID PWB (RFPWB)	PARTS PWB RFID ASSY SP
21	Interface PWB (IFPWB)	PARTS PWB KUIO ASSY SP
22	LED PWB 1 (LEDPWB1)	PARTS MOUNT LED UNIT SP
23	LED PWB 2 (LEDPWB2)	PARTS MOUNT LED UNIT SP

(2) Switches and sensors

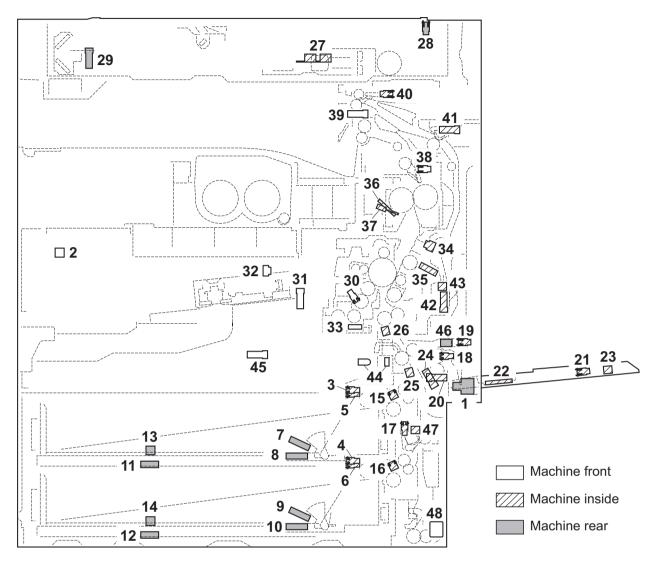


Figure 2-2-2 Switches and sensors

- 1. Main power switch (MSW) Turns ON/OFF the AC power source.
- 2. Front cover switch (FRCSW) Detects the opening and closing of the front cover.
- 3. Paper sensor 1 (PS1) Detects the presence of paper (cassette 1).
- 4. Paper sensor 2 (PS2) Detects the presence of paper (cassette 2).
- 5. Lift sensor 1 (LS1)..... Detects activation of upper limit of the bottom plate (cassette 1).
- 6. Lift sensor 2 (LS2)..... Detects activation of upper limit of the bottom plate (cassette 2).
- 7. Paper gauge sensor 1 (U) (PGS1(U))... Detects the paper gauge (cassette 1).
- 8. Paper gauge sensor 1 (L) (PGS1(L)).... Detects the paper gauge (cassette 1).
- 9. Paper gauge sensor 2 (U) (PGS2(U))... Detects the paper gauge (cassette 2).
- 10. Paper gauge sensor 2 (L) (PGS2(L)).... Detects the paper gauge (cassette 2).
- 11. Paper length switch 1 (PLSW1)..... Detects the length of paper (cassette 1).
- 12. Paper length switch 2 (PLSW2)..... Detects the length of paper (cassette 2).
- 13. Paper width switch 1 (PWSW1)..... Detects the width of paper (cassette 1).
- 14. Paper width switch 2 (PWSW2) Detects the width of paper (cassette 2).
- 15. Feed sensor 1 (FS1)..... Detects a paper misfeed in the paper feed section (cassette 1).
- 16. Feed sensor 2 (FS2)..... Detects a paper misfeed in the paper feed section (cassette 2).
- 17. Paper conveying sensor (PCS)..... Detects a paper misfeed in the vertical conveying section.
- 18. MP paper sensor (MPPS) Detects the presence of paper (MP tray).

	,	Detects activation of upper limit of the MP plate.
		Detects activation of lower limit of the MP plate. Detects the length of paper (MP tray).
	, , , , , , , , , , , , , , , , , , ,	Detects the width of paper (MP tray).
	. , ,	
		Detects the MP tray extension is extend.
	. ,	Detects a paper misfeed in the MP paper feed section.
•		Detects a paper misfeed in the paper conveying section.
•		Controls the secondary paper feed start timing.
-	. ,	Detects the size of the original.
-	. ,	Detects the opening/closing of the document processor.
•	. ,	Detects the optical system in the home position.
		Controls the toner replenishing for the toner container.
-	. ,	Detects the opening and closing of the developer shutter.
		Detects the quantity of toner in a toner hopper.
•	•	Detects the toner density in the developer unit.
34. Loop sensor (LP	5)	Detects a paper misfeed. Controls the fuser motor by detecting
		deflection in the paper.
		Measures image density for calibration.
	. ,	Detects the heat roller temperature.
	, ,	Detects the heat roller temperature.
•	, ,	Detects a paper misfeed in the fuser section.
	. ,	Detects a paper misfeed in the eject section. Detects when the inner tray is full.
	. ,	Detects a paper misfeed in the eject and switchback sections.
•	· /	Detects a paper misfeed in the duplex section.
42. Duplex sensor 2	(DUS2)	Detects a paper misfeed in the duplex section.
		Detects the opening and closing of the duplex cover.
44. Waste toner sens	sor 1 (WTS1)	Detects when the waste toner box is full.
		Detects when the waste toner box is near end.
46. Paper conveying	unit switch	
		Detects the opening and closing of the paper conveying unit.
47. Paper conveying	cover switch	
. ,		Detects the opening and closing of the paper conveying cover.
48. Outer temperatur		
(OTEMS)		Detects the outside temperature and humidity.

(3) Motors

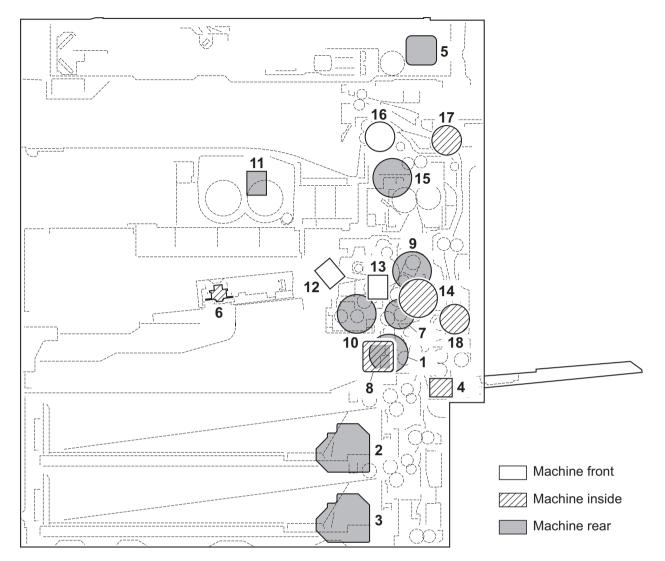


Figure 2-2-3 Motors

- 1. Paper feed motor (PFM) Drives the paper feed section.
- 2. Lift motor 1 (LM1)..... Operates the bottom plate (cassette 1).
- 3. Lift motor 2 (LM2)..... Operates the bottom plate (cassette 2).
- 4. MP lift motor (MPLM) Operates the MP plate.
- 5. Scanner motor (SM)..... Drives the optical system.
- 6. Polygon motor (PM)..... Drives the polygon mirror.
- 7. Registration motor (RM)^{*}..... Drives the registration section.
- 8. Middle motor (MM)^{*}..... Drives the paper conveying section.
- 9. Drum motor (DRM) Drives the drum unit.
- 10. Developer motor (DEVM)..... Drives the developer unit.
- 11. Toner motor (TM) Drives the toner container.
- 12. Toner hopper motor (THM) Replenishes toner to the developer unit.
- 13. Inner motor (INM)..... Drives the inner unit.
- 14. Transfer motor (TRM) Drives the transfer section.
- 15. Fuser motor (FUM) Drives the fuser section.
- 16. Eject motor (EM)..... Drives the eject section.
- 17. Duplex motor 1 (DUM1)*..... Drives the duplex section.
- 18. Duplex motor 2 (DUM2)*..... Drives the duplex section.

*: 45 ppm model /55 ppm model only.

(4) Fan motors

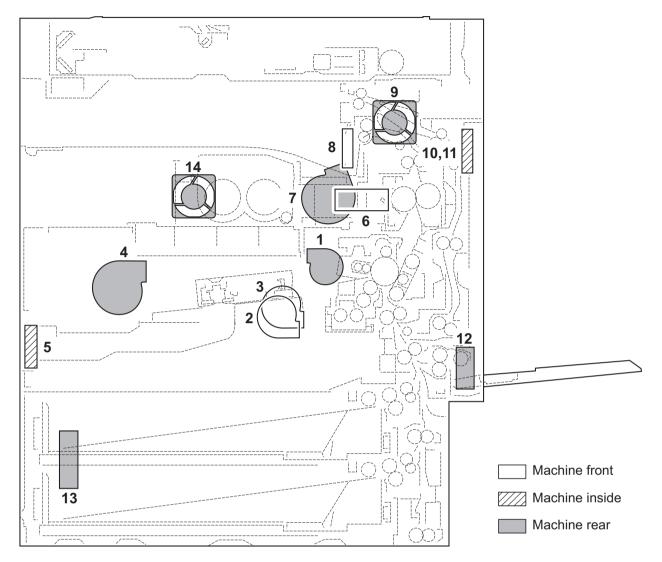


Figure 2-2-4 Motors

- 1. Toner fan motor (TFM)..... Cools the toner container section.
- 2. Developer fan motor 1 (DEVFM1) Cools the developer section.
- 3. Developer fan motor 2 (DEVFM2) Cools the developer section.
- 4. Exhaust fan motor (EXFM) Cools the machine inside.
- 5. LSU fan motor (LSUFM) Cools the laser scanner unit section.
- 6. Fuser front fan motor (FUFFM)..... Cools the fuser section (front side).
- 7. Fuser rear fan motor (FURFM) Cools the fuser section (rear side).
- 8. Eject front fan motor (EFFM) Cools the eject section (front side).
- 9. Eject rear fan motor (ERFM)..... Cools the eject section (rear side).
- 10. Eject fan motor 1 (EFM1)..... Cools the eject section.
- 11. Eject fan motor 2 (EFM2)..... Cools the eject section.
- 12. Heater fan motor (HFM)..... Cools the fuser heater PWB.
- 13. Power source fan motor (PSFM) Cools the power source section.
- 14. Controller fan motor (CONFM)..... Cools the controller section.

(5) Others

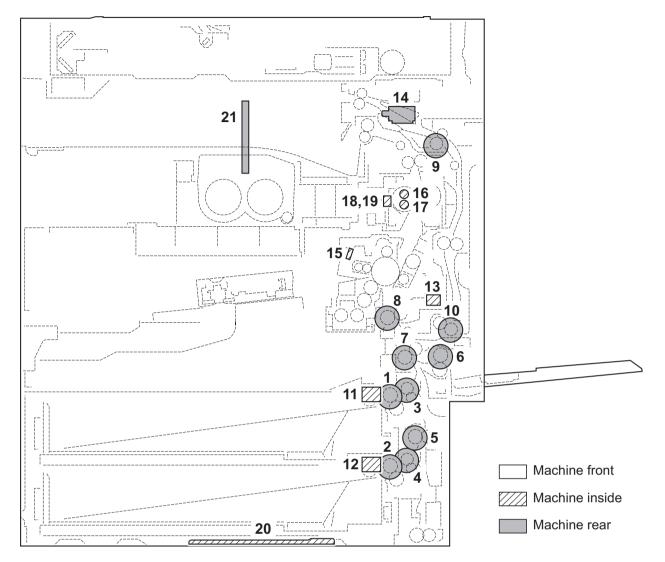


Figure 2-2-5 Others

- 1. Paper feed clutch 1 (PFCL1) Primary paper feed from cassette 1.
- 2. Paper feed clutch 2 (PFCL2) Primary paper feed from cassette 2.
- 3. Assist clutch 1 (ASCL1)^{*2} Controls the drive of the assist roller (cassette 1).
- 4. Assist clutch 2 (ASCL2)⁺²...... Controls the drive of the assist roller (cassette 2).
- 5. Paper conveying clutch (PCCL)..... Controls the drive of vertical conveying section.
- 6. MP paper feed clutch (MPPFCL) Controls primary paper feed from the MP tray.
- 7. Middle clutch (MCL)^{*1}..... Controls the drive of paper conveying section.
- 8. Registration clutch (RCL)^{*1}..... Controls the secondary paper feed.
- 9. Duplex clutch 1 (DUCL1)^{*1} Controls the drive of duplex section.
- 10. Duplex clutch 2 (DUCL2)^{*1} Controls the drive of duplex section.
- 11. Pickup solenoid 1 (PUSOL1)^{*2} Operates the forwarding pulley (cassette 1).
- 12. Pickup solenoid 2 (PUSOL2)^{*2} Operates the forwarding pulley (cassette 2).
- 13. Cleaning solenoid (CLSOL) Controls the ID sensor cleaning.
- 14. Feedshift solenoid (FSSOL)..... Controls the feedshift guide.
- 15. Cleaning lamp (CL)..... Eliminates the residual electrostatic charge on the drum.
- 16. Fuser heater 1 (FH1) Heats the heat roller.
- 17. Fuser heater 2 (FH2) Heats the heat roller.

- 18. Fuser thermostat 1 (FTS1)..... Prevents overheating of the heat roller.
- 19. Fuser thermostat 2 (FTS2)..... Prevents overheating of the heat roller.
- 20. Cassette heater (CH)..... Dehumidifies the cassette section (option).
- 21. Hard disk (HDD)..... Storages the image data and information of job accounting mode.

*1: 35 ppm model only.

*2: 45 ppm model /55 ppm model only.

2-3-1 Main PWB

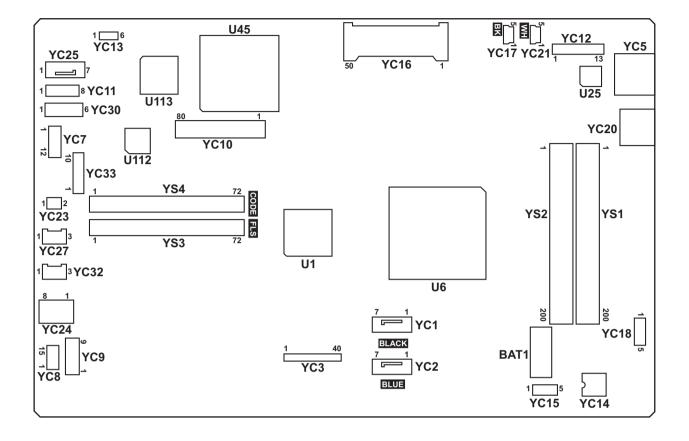


Figure 2-3-1 Main PWB silk-screen diagram

YC1 Connected to hard disk	1 2	GND	_		
	2			-	Ground
hard disk		TXP	0	-	HDD data signal
	3	TXN	0	-	HDD data signal
	4	GND	-	-	Ground
	5	RXN	Т	-	HDD data signal
	6	RXP	Ι	-	HDD data signal
	7	GND	-	-	Ground
YC3	1	HSYNC_AN	0	0/3.3 V DC (pulse)	Image control signal
Connected to	2	HSYNC_AP	0	0/3.3 V DC (pulse)	Image control signal
engine PWB	3	HSYNC_BN	0	0/3.3 V DC (pulse)	Image control signal
	4	HSYNC_BP	0	0/3.3 V DC (pulse)	Image control signal
	5	HSYNC_CN	0	0/3.3 V DC (pulse)	Image control signal
	6	HSYNC_CP	0	0/3.3 V DC (pulse)	Image control signal
	7	HSYNC_DN	0	0/3.3 V DC (pulse)	Image control signal
	8	HSYNC_DP	0	0/3.3 V DC (pulse)	Image control signal
	9	VSYNC_AN	0	0/3.3 V DC (pulse)	Image control signal
	10	VSYNC_AP	0	0/3.3 V DC (pulse)	Image control signal
	11	VSYNC_BN	0	0/3.3 V DC (pulse)	Image control signal
	12	VSYNC_BP	0	0/3.3 V DC (pulse)	Image control signal
	13	VSYNC_CN	0	0/3.3 V DC (pulse)	Image control signal
	14	VSYNC_CP	0	0/3.3 V DC (pulse)	Image control signal
	15	VSYNC_DN	0	0/3.3 V DC (pulse)	Image control signal
	16	VSYNC_DP	0	0/3.3 V DC (pulse)	Image control signal
	17	SGND	-	-	Ground
	18	TCLKP	0	0/3.3 V DC (pulse)	Clock signal
	19	TCLKN	0	0/3.3 V DC (pulse)	Clock signal
	20	SGND	-	-	Ground
	21	ТСР	0	0/3.3 V DC (pulse)	Image control signal
	22	TCN	0	0/3.3 V DC (pulse)	Image control signal
	23	SGND	-	-	Ground
	24	ТВР	0	0/3.3 V DC (pulse)	Image control signal
	25	TBN	0	0/3.3 V DC (pulse)	Image control signal
	26	SGND	-	-	Ground
	27	ТАР	0	0/3.3 V DC (pulse)	Image control signal
	28	TAN	0	0/3.3 V DC (pulse)	Image control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC3	29	SGND	-	-	Ground
Connected to	30	SLEEP	0	0/3.3 V DC	Sleep signal
engine PWB	31	HLD_ENG	0	0/3.3 V DC	Engine hold signal
	32	NC	-	-	Not used
	33	SGND	-	-	Ground
	34	EG IRN	0	0/3.3 V DC	Engine interrupt signal
	35	EG SO	I	0/3.3 V DC (pulse)	Serial communication data signal
	36	EG SBSY	0	0/3.3 V DC	Engine busy signal
	37	EG SDIR	0	0/3.3 V DC	Engine communication direction sig- nal
	38	EG_SI	0	0/3.3 V DC (pulse)	Serial communication data signal
	39	EG_SCLK	0	0/3.3 V DC (pulse)	Engine lock signal
	40	SGND	-	-	Ground
YC5	1	TD1+	0	0/3.3 V DC (pulse)	Transmission data
Connected to	2	TD1-	0	0/3.3 V DC (pulse)	Transmission data
ethernet	3	TD2+	0	0/3.3 V DC (pulse)	Transmission data
	4	TD2-	0	0/3.3 V DC (pulse)	Transmission data
	5	CT1	0	3.3 V DC	3.3 V DC power output
	6	CT2	0	3.3 V DC	3.3 V DC power output
	7	TD3+	0	0/3.3 V DC (pulse)	Transmission data
	8	TD3-	0	0/3.3 V DC (pulse)	Transmission data
	9	TD4+	0	0/3.3 V DC (pulse)	Transmission data
	10	TD4-	0	0/3.3 V DC (pulse)	Transmission data
	11	GRLED_A1	0	0/3.3 V DC	LED emitter signal
	12	GRLED_K1	0	0/3.3 V DC	LED emitter signal
	13	YWLED_A2	0	0/3.3 V DC	LED emitter signal
	14	YWLED_K2	0	0/3.3 V DC	LED emitter signal

KMDET NC KMDREQ KMACK KMRXD SGND SGND SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0 USB_DN0	I - - - - - - - - - - 0 0 - 1 - - 1 0 1 - - 1/0	0/3.3 V DC - 0/3.3 V DC 0/3.3 V DC 0/3.3 V DC (pulse) - 0/3.3 V DC (pulse) - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC 0/3.3 V DC 0/3.3 V DC Analog -	KMAS set signal Not used KMAS control signal KMAS control signal KMAS received data signal Ground KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal Ground
KMDREQ KMACK KMRXD SGND KMTXD SGND SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 - 1 - 0 0 1 0 1 - -	0/3.3 V DC 0/3.3 V DC (pulse) - 0/3.3 V DC (pulse) - - - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC	KMAS control signal KMAS control signal KMAS received data signal Ground KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
KMACK KMRXD SGND SGND SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 - 1 - 0 0 1 0 1 - -	0/3.3 V DC 0/3.3 V DC (pulse) - 0/3.3 V DC (pulse) - - - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC	KMAS control signal KMAS received data signal Ground KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
KMRXD SGND KMTXD SGND SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 - - - 0 0 0 1 -	0/3.3 V DC (pulse) - 0/3.3 V DC (pulse) - - - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC 0/3.3 V DC	KMAS received data signal Ground KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
SGND KMTXD SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	- - - 0 0 1 0 1 -	- 0/3.3 V DC (pulse) - - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC	Ground KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
KMTXD SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	 - - 0 0 1 -	- - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC	KMAS transmission data signal Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
SGND SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	- - 0 0 1 0 1	- - 5 V DC 5 V DC 0/3.3 V DC 0/3.3 V DC	Ground Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
SGND SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 -	5 V DC 0/3.3 V DC 0/3.3 V DC	Ground Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
SGND +5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 -	5 V DC 0/3.3 V DC 0/3.3 V DC	Ground 5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
+5V +5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 -	5 V DC 0/3.3 V DC 0/3.3 V DC	5 V DC power to KMAS 5 V DC power to KMAS Reset signal Control signal Audio signal
+5V RESET0 WAKEUP0 AUDIO0 GND USB_DP0	0 0 -	5 V DC 0/3.3 V DC 0/3.3 V DC	5 V DC power to KMAS Reset signal Control signal Audio signal
RESET0 WAKEUP0 AUDIO0 GND USB_DP0	 0 -	0/3.3 V DC 0/3.3 V DC	Reset signal Control signal Audio signal
WAKEUP0 AUDIO0 GND USB_DP0	0 -	0/3.3 V DC	Control signal Audio signal
AUDIO0 GND USB_DP0	 -		Audio signal
GND USB_DP0	-	Analog -	-
USB_DP0	- I/O	-	Ground
_	I/O		
USB DNO		-	USB data signal
	I/O	-	USB data signal
VBUS0	0	3.3 V DC	3.3 V DC power to IFPWB
GND	-	-	Ground
RESET1	I	0/3.3 V DC	Reset signal
WAKEUP1	0	0/3.3 V DC	Control signal
AUDIO1	I	Analog	Audio signal
GND	-	-	Ground
USB_DP1	I/O	-	USB data signal
USB_DN1	I/O	-	USB data signal
VBUS1	0	3.3 V DC	3.3 V DC power to IFPWB
GND	-	-	Ground
5V_CUT0	I	0/3.3 V DC	5 V DC cut signal
GND	-	-	Ground
5V	0	5 V DC	5 V DC power to IFPWB
GND	-	-	Ground
	I	0/3.3 V DC	5 V DC cut signal
5V_CUT1			
5V_CUT1		1	
	GND 5V GND	GND - 5V O GND -	GND - - 5V O 5 V DC GND - -

Connector	Pin	Signal	I/O	Voltage	Description
YC10	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
DP relay PWB	3	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
FVVD	4	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	5	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	6	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	7	VCLKB	I	0/3.3 V DC (pulse)	DPRPWB clock signal
	8	VSYNCB	Ι	0/3.3 V DC (pulse)	DPRPWB VSYNCB signal
	9	HSYNCB	Ι	0/3.3 V DC (pulse)	DPRPWB HSYNCB signal
	10	MREB	Ι	0/3.3 V DC (pulse)	DPRPWB MREB signal
	11	GND	-	-	Ground
	12	DRB0	Ι	0/3.3 V DC (pulse)	Image data signal
	13	DRB1	Ι	0/3.3 V DC (pulse)	Image data signal
	14	DRB2	Ι	0/3.3 V DC (pulse)	Image data signal
	15	DRB3	I	0/3.3 V DC (pulse)	Image data signal
	16	DRB4	Ι	0/3.3 V DC (pulse)	Image data signal
	17	DRB5	Ι	0/3.3 V DC (pulse)	Image data signal
	18	DRB6	Ι	0/3.3 V DC (pulse)	Image data signal
	19	DRB7	Ι	0/3.3 V DC (pulse)	Image data signal
	20	GND	-	-	Ground
	21	DGB0	T	0/3.3 V DC (pulse)	Image data signal
	22	DGB1	T	0/3.3 V DC (pulse)	Image data signal
	23	DGB2	T	0/3.3 V DC (pulse)	Image data signal
	24	DGB3	T	0/3.3 V DC (pulse)	Image data signal
	25	DGB4	T	0/3.3 V DC (pulse)	Image data signal
	26	DGB5	T	0/3.3 V DC (pulse)	Image data signal
	27	DGB6	T	0/3.3 V DC (pulse)	Image data signal
	28	DGB7	I	0/3.3 V DC (pulse)	Image data signal
	29	GND	-	-	Ground
	30	DBB0	T	0/3.3 V DC (pulse)	Image data signal
	31	DBB1	I	0/3.3 V DC (pulse)	Image data signal
	32	DBB2	Ι	0/3.3 V DC (pulse)	Image data signal
	33	DBB3	I	0/3.3 V DC (pulse)	Image data signal
	34	DBB4	Ι	0/3.3 V DC (pulse)	Image data signal
	35	DBB5	Ι	0/3.3 V DC (pulse)	Image data signal
	36	DBB6	Ι	0/3.3 V DC (pulse)	Image data signal

Connector	Pin	Signal	I/O	Voltage	Description
YC10	37	DBB7	Ι	0/3.3 V DC (pulse)	Image data signal
Connected to	38	HHALF	0	0/3.3 V DC	DPRPWB Control signal
DP relay PWB	39	SLEEP	0	0/3.3 V DC	DPRPWB Control signal
	40	TWS_DET	Ι	0/3.3 V DC	DPRPWB Control signal
	41	GND	-	-	Ground
	42	LA2	0	0/3.3 V DC (pulse)	Address bus signal
	43	LA3	0	0/3.3 V DC (pulse)	Address bus signal
	44	LA4	0	0/3.3 V DC (pulse)	Address bus signal
	45	LA5	0	0/3.3 V DC (pulse)	Address bus signal
	46	LA6	0	0/3.3 V DC (pulse)	Address bus signal
	47	LA7	0	0/3.3 V DC (pulse)	Address bus signal
	48	LA8	0	0/3.3 V DC (pulse)	Address bus signal
	49	LA9	0	0/3.3 V DC (pulse)	Address bus signal
	50	LA10	0	0/3.3 V DC (pulse)	Address bus signal
	51	LA11	0	0/3.3 V DC (pulse)	Address bus signal
	52	LA12	0	0/3.3 V DC (pulse)	Address bus signal
	53	LA13	0	0/3.3 V DC (pulse)	Address bus signal
	54	LA14	0	0/3.3 V DC (pulse)	Address bus signal
	55	LA15	0	0/3.3 V DC (pulse)	Address bus signal
	56	LA16	0	0/3.3 V DC (pulse)	Address bus signal
	57	LA17	0	0/3.3 V DC (pulse)	Address bus signal
	58	GND	-	-	Ground
	59	LD0	I/O	0/3.3 V DC (pulse)	Data bus signal
	60	LD1	I/O	0/3.3 V DC (pulse)	Data bus signal
	61	LD2	I/O	0/3.3 V DC (pulse)	Data bus signal
	62	LD3	I/O	0/3.3 V DC (pulse)	Data bus signal
	63	LD4	I/O	0/3.3 V DC (pulse)	Data bus signal
	64	LD5	I/O	0/3.3 V DC (pulse)	Data bus signal
	65	LD6	I/O	0/3.3 V DC (pulse)	Data bus signal
	66	LD7	I/O	0/3.3 V DC (pulse)	Data bus signal
	67	GND	-	-	Ground
	68	INT	Ι	0/3.3 V DC	DPRPWB Control signal
	69	RESETZ	0	0/3.3 V DC	DPRPWB Control signal
	70	GND	-	-	Ground
	71	CEZ	0	0/3.3 V DC (pulse)	DPRPWB Control signal
	72	WEZ	0	0/3.3 V DC (pulse)	DPRPWB Control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC10	73	OEZ	0	0/3.3 V DC (pulse)	DPRPWB Control signal
Connected to	74	SCLKIN	0	0/3.3 V DC (pulse)	DPRPWB clock signal
DP relay PWB	75	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	76	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	77	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	78	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
	79	GND	-	-	Ground
	80	GND	-	-	Ground
YC11	1	GND	-	-	Ground
Connected to	2	SC_IRN	0	0/3.3 V DC	Scanner interrupt signal
ISC PWB	3	SC_DIR	0	0/3.3 V DC	Scanner communication direction sig- nal
	4	SC_HLDN	0	0/3.3 V DC	Scanner hold signal
	5	SC_BSY	0	0/3.3 V DC	Scanner busy signal
	6	SC_SI	0	0/3.3 V DC (pulse)	Serial communication data signal
	7	SC_SO	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	8	SC_CLK	0	0/3.3 V DC (pulse)	Scanner clock signal
YC12	1	DEEP_POWERO N	0	0/3.3 V DC	Sleep return signal
Connected to	2	ENERGY_SAVE	0	0/3.3 V DC	Energy save signal
operation PWB 1	3	SUPND_POWER	0	3.3 V DC	3.3 V DC power to OPWB1
	4	LED_MEMORY_N	0	0/3.3 V DC	Memory LED control signal
	5	LED_ATTENTION _N	0	0/3.3 V DC	Attention LED control signal
	6	LED_PROCESSI NG_N	0	0/3.3 V DC	Processing LED control signal
	7	SHUT_DOWN	0	0/3.3 V DC	24 V down signal
	8	LIGHTOFF_POW ERON	0	0/3.3 V DC	Sleep return signal
	9	AUDIO	0	Analog	Audio output signal
	10	PANEL RESET	0	0/3.3 V DC	Reset signal
	11	INT_POWERKEY _N	I	0/3.3 V DC	Power key: On/Off
	12	PANEL_STATUS	Ι	0/3.3 V DC	Operation panel status signal
	13	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC16	1	GND	-	-	Ground
Connected to	2	D3	I/O	0/3.3 V DC (pulse)	Data bus signal
CF card	3	D4	I/O	0/3.3 V DC (pulse)	Data bus signal
	4	D5	I/O	0/3.3 V DC (pulse)	Data bus signal
	5	D6	I/O	0/3.3 V DC (pulse)	Data bus signal
	6	D7	I/O	0/3.3 V DC (pulse)	Data bus signal
	7	/CE1	0	0/3.3 V DC	Control signal
	8	A10	0	0/3.3 V DC (pulse)	Address bus signal
	9	/OE	0	0/3.3 V DC	Control signal
	10	A9	0	0/3.3 V DC (pulse)	Address bus signal
	11	A8	0	0/3.3 V DC (pulse)	Address bus signal
	12	A7	0	0/3.3 V DC (pulse)	Address bus signal
	13	VCC	0	0/3.3 V DC	Control signal
	14	A6	0	0/3.3 V DC (pulse)	Address bus signal
	15	A5	0	0/3.3 V DC (pulse)	Address bus signal
	16	A4	0	0/3.3 V DC (pulse)	Address bus signal
	17	A3	0	0/3.3 V DC (pulse)	Address bus signal
	18	A2	0	0/3.3 V DC (pulse)	Address bus signal
	19	A1	0	0/3.3 V DC (pulse)	Address bus signal
	20	A0	0	0/3.3 V DC (pulse)	Address bus signal
	21	D0	I/O	0/3.3 V DC (pulse)	Data bus signal
	22	D1	I/O	0/3.3 V DC (pulse)	Data bus signal
	23	D2	I/O	0/3.3 V DC (pulse)	Data bus signal
	24	WP	0	0/3.3 V DC	Control signal
	25	/CD2	0	0/3.3 V DC	Control signal
	26	/CD1	0	0/3.3 V DC	Control signal
	27	D11	I/O	0/3.3 V DC (pulse)	Data bus signal
	28	D12	I/O	0/3.3 V DC (pulse)	Data bus signal
	29	D13	I/O	0/3.3 V DC (pulse)	Data bus signal
	30	D14	I/O	0/3.3 V DC (pulse)	Data bus signal
	31	D15	I/O	0/3.3 V DC (pulse)	Data bus signal
	32	/CE2	0	0/3.3 V DC	Control signal
	33	/VS1	0	0/3.3 V DC	Control signal
	34	/IORD	0	0/3.3 V DC	Control signal
	35	/IOWD	0	0/3.3 V DC	Control signal
	36	/WE	0	0/3.3 V DC	Control signal

Pin	Signal	I/O	Voltage	Description
37	RDY/BSY	I	0/3.3 V DC	Control signal
38	VCC	0	0/3.3 V DC	Control signal
39	CSEL	0	0/3.3 V DC	Control signal
40	VS2	0	0/3.3 V DC	Control signal
41	RESET	I	0/3.3 V DC	Reset signal
42	/WAIT	0	0/3.3 V DC	Control signal
43	INPACK	0	0/3.3 V DC	Control signal
44	/REG	Ι	0/3.3 V DC	REG signal
45	BVD2	0	0/3.3 V DC	Control signal
46	BVD1	0	0/3.3 V DC	Control signal
47	D8	I/O	0/3.3 V DC (pulse)	Data bus signal
48	D9	I/O	0/3.3 V DC (pulse)	Data bus signal
49	D10	I/O	0/3.3 V DC (pulse)	Data bus signal
50	GND	-	-	Ground
1	VBUS	0	5 V DC	5 V DC power output
2	DATA -	I/O	-	USB data signal
3	DATA +	I/O	-	USB data signal
4	NC	-	-	Not used
5	GND	-	-	Ground
1	VBUS	0	5 V DC	5 V DC power output
2	DATA-	I/O	-	USB data signal
3	DATA+	I/O	-	USB data signal
4	GND	-	-	Ground
1	VBUS	0	5 V DC	5 V DC power output
2	DATA -	I/O	-	USB data signal
3	DATA +	I/O	-	USB data signal
4	NC	-	-	Not used
5	GND	-	-	Ground
1	+12V	0	12 V DC	CONFM: On/Off
2	GND	_	-	Ground
	37 38 39 40 41 42 43 44 45 46 47 48 49 50 1 2 3 4 50 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 5 1 5 1 1 5 1 5 1 1 1 1 1 1 2 1 1 1 1	37 RDY/BSY 38 VCC 39 CSEL 40 VS2 41 RESET 42 /WAIT 43 INPACK 44 /REG 45 BVD2 46 BVD1 47 D8 48 D9 49 D10 50 GND 1 VBUS 2 DATA - 3 DATA + 4 NC 5 GND 1 VBUS 2 DATA - 3 DATA + 4 NC 5 GND 1 VBUS 2 DATA- 3 DATA + 4 GND 1 VBUS 2 DATA - 3 DATA + 4 GND 1 VBUS <tr t=""> 2<</tr>	37 RDY/BSY I 38 VCC O 39 CSEL O 40 VS2 O 41 RESET I 42 /WAIT O 43 INPACK O 44 /REG I 45 BVD2 O 46 BVD1 O 47 D8 I/O 48 D9 I/O 49 D10 I/O 50 GND - 1 VBUS O 2 DATA - I/O 3 DATA + I/O 4 NC - 5 GND - 1 VBUS O 2 DATA - I/O 3 DATA + I/O 4 GND - 1 VBUS O 2 DATA - I/O 3	37 RDY/BSY I 0/3.3 V DC 38 VCC 0 0/3.3 V DC 39 CSEL 0 0/3.3 V DC 40 VS2 0 0/3.3 V DC 41 RESET I 0/3.3 V DC 42 /WAIT 0 0/3.3 V DC 43 INPACK 0 0/3.3 V DC 44 /REG I 0/3.3 V DC 45 BVD2 0 0/3.3 V DC 46 BVD1 0 0/3.3 V DC (pulse) 48 D9 I/O 0/3.3 V DC (pulse) 49 D10 I/O 0/3.3 V DC (pulse) 49 D10 I/O 0/3.3 V DC (pulse) 49 D10 I/O 0/3.3 V DC (pulse) 50 GND - - 1 VBUS O 5 V DC 2 DATA + I/O - 3 DATA+ I/O - 4 GND -

Connector	Pin	Signal	I/O	Voltage	Description
YC24	1	+12V	0	12 V DC	12 V DC power from PSPWB
Connected to	2	+12V	0	12 V DC	12 V DC power from PSPWB
power source PWB	3	+12V	0	12 V DC	12 V DC power from PSPWB
	4	+12V	0	12 V DC	12 V DC power from PSPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
YC25	1	GND	-	-	Ground
Connected to ISC PWB	2	HTPDN	Ι	0/3.3 V DC	Control signal
	3	LOCKN	Ι	0/3.3 V DC	Lock signal
	4	GND	-	-	Ground
	5	RX0N	Ι	0/3.3 V DC (pulse)	Received data signal
	6	RX0P	Т	0/3.3 V DC (pulse)	Received data signal
	7	GND	-	-	Ground
YC27	1	GND	-	-	Ground
Connected to	2	+5V_HDD	0	5 V DC	5 V DC power to HDD
hard disk	3	GND	-	-	Ground
YC30	1	+5V	0	5 V DC	5 V DC power from OPWB1
Connected to	2	+5V	0	5 V DC	5 V DC power from OPWB1
operation PWB 1	3	+5V	0	5 V DC	5 V DC power from OPWB1
	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	GND	-	-	Ground

2-3-2 Engine PWB

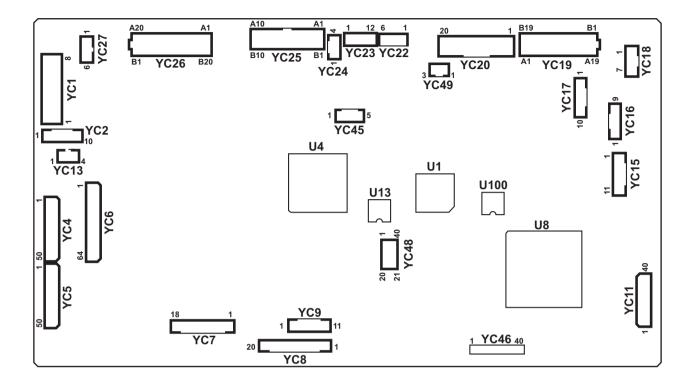


Figure 2-3-2 Engine PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to feed PWB 1	2	+5V	Ι	5 V DC	5 V DC power from FPWB1
	3	GND	-	-	Ground
	4	+12V	Ι	12 V DC	12 V DC power from FPWB1
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	+24V1	Ι	24 V DC	24 V DC power from FPWB1
	8	+24V1	Ι	24 V DC	24 V DC power from FPWB1
YC2	1	GND	-	-	Ground
Connected to front PWB	2	GND	-	-	Ground
	3	GND	-	-	Ground
	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	+24V	0	24 V DC	24 V DC power to FRPWB
	7	+24V	0	24 V DC	24 V DC power to FRPWB
	8	+5V	0	5 V DC	5 V DC power to FRPWB
	9	+3.3V2	0	3.3 V DC	3.3 V DC power to FRPWB
	10	+3.3V1	0	3.3 V DC	3.3 V DC power to FRPWB
YC4	1	GND	-	-	Ground
Connected to	2	FEED_MOT_REM	0	0/3.3 V DC	PFM: On/Off
feed PWB 2	3	FEED_MOT_CLK	0	0/3.3 V DC (pulse)	PFM clock signal
	4	FEED_MOT_RDY	Ι	0/3.3 V DC	PFM ready signal
	5	FEED_MOT_DIR	0	0/3.3 V DC	PFM drive switch signal
	6	FEED_CL1_REM	0	0/24 V DC	PFCL1: On/Off
	7	FEED_CL2_REM	0	0/24 V DC	PFCL2: On/Off
	8	ASIST_CL2	0	0/24 V DC	ASCL2: On/Off
	9	LIFT_MOT2_REM	0	0/24 V DC	LM2: On/Off
	10	GND	-	-	Ground
	11	LIFT_MOT1_REM1	0	0/24 V DC	LM1: On/Off
	12	CAS2_WID	Ι	0/3.3 V DC	PWSW2: On/Off
	13	CAS2_LNG3	Ι	0/3.3 V DC	PLSW2: On/Off
	14	CAS2_LNG2	Ι	0/3.3 V DC	PLSW2: On/Off
	15	CAS2_LNG1	Ι	0/3.3 V DC	PLSW2: On/Off
	16	CAS1_WID	Ι	0/3.3 V DC	PWSW1: On/Off
	17	CAS1_LNG3	Ι	0/3.3 V DC	PLSW1: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC4	18	CAS1_LNG2	I	0/3.3 V DC	PLSW1: On/Off
Connected to	19	CAS1_LNG1	I	0/3.3 V DC	PLSW1: On/Off
feed PWB 2	20	GND	-	-	Ground
	21	CAS2_QUANT2	I	0/3.3 V DC	PGS2(L): On/Off
	22	CAS2_QUANT1	Т	0/3.3 V DC	PGS2(U): On/Off
	23	CAS1_QUANT2	I	0/3.3 V DC	PGS1(L): On/Off
	24	CAS1_QUANT1	Т	0/3.3 V DC	PGS1(U): On/Off
	25	LIFT_MOT1_LOCK	I	0/3.3 V DC	LM1 lock signal
	26	LIFT_MOT2_LOCK	I	0/3.3 V DC	LM2 lock signal
	27	CURRENT_SIG	I	0/3.3 V DC	Current signal
	28	V-FEED_CL	0	0/24 V DC	PCCL: On/Off
	29	COVER_OPEN	I	0/3.3 V DC	PCCSW: On/Off
	30	FEED2_SENS	I	0/3.3 V DC	PFPCS1: On/Off
	31	CAS1_P0	I	0/3.3 V DC	FS1: On/Off
	32	CAS1_LIFT_UP	Т	0/3.3 V DC	LS1: On/Off
	33	GND	-	-	Ground
	34	CAS1_EMPTY	Т	0/3.3 V DC	PS1: On/Off
	35	PICK_SOL1_RET	0	0/24 V DC	PUSOL1: On/Off (RET)
	36	PICK_SOL1_REM	0	0/24 V DC	PUSOL1: On/Off (ACT)
	37	CAS2_P0	I	0/3.3 V DC	FS2: On/Off
	38	CAS2_LIFT_UP	Ι	0/3.3 V DC	LS2: On/Off
	39	CAS2_EMPTY	Т	0/3.3 V DC	PS2: On/Off
	40	PICK_SOL2_RET	0	0/24 V DC	PUSOL2: On/Off (RET)
	41	PICK_SOL2_REM	0	0/24 V DC	PUSOL2: On/Off (ACT)
	42	GND	-	-	Ground
	43	REG_SENS	I	0/3.3 V DC	RS: On/Off
	44	FEED1_SENS	Ι	0/3.3 V DC	PCS: On/Off
	45	BEND_SENS	I	0/3.3 V DC	RDS: On/Off
	46	MID_MOT_PH	0	0/3.3 V DC	MM control signal
	47	MID_MOT_REM(R OL_CL)	0	0/3.3 V DC	MM/MCL: On/Off
	48	MID_MOT_CLK	0	0/3.3 V DC (pulse)	MM clock signal
	49	MID_MOT_PD	0	0/3.3 V DC	MM control signal
	50	ASIST_CL1	0	0/24 V DC	ASCL1: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC5	1	GND	-	-	Ground
Connected to	2	DU_MOT_REM	0	0/3.3 V DC	DUM1/DUCL1: On/Off
feed PWB 1	3	EXIT_FAN	0	0/24 V DC	EFM: On/Off
	4	DU_ENTER_SENS	I	0/3.3 V DC	DUS1: On/Off
	5	TCON_SET	-	-	Not used
	6	TRANS_MOT_RE M	0	0/3.3 V DC	TCM: On/Off
	7	TRANS_MOT_CLK	0	0/3.3 V DC (pulse)	TCM clock signal
	8	TRANS_MOT_RDY	Т	0/3.3 V DC	TCM ready signal
	9	TRANS_MOT_DIR	0	0/3.3 V DC	TCM drive switch signal
	10	TRANS_MOT_BRK	0	0/3.3 V DC	TCM break signal
	11	GND	-	-	Ground
	12	DRM_MOT_BK_R EM	0	0/3.3 V DC	DRM: On/Off
	13	DRM_MOT_BK_CL K	0	0/3.3 V DC (pulse)	DRM clock signal
	14	DRM_MOT_BK_R DY	Ι	0/3.3 V DC	DRM ready signal
	15	DRM_MOT_BK_DI R	0	0/3.3 V DC	DRM drive switch signal
	16	DRM_MOT_BK_B RK	0	0/3.3 V DC	DRM break signal
	17	DLP_MOT_BK_RE M	0	0/3.3 V DC	DEVM: On/Off
	18	DLP_MOT_BK_CL K	0	0/3.3 V DC (pulse)	DEVM clock signal
	19	DLP_MOT_BK_RD Y	Ι	0/3.3 V DC	DEVM ready signal
	20	DLP_MOT_BK_DI R	0	0/3.3 V DC	DEVM drive switch signal
	21	DRM_MOT_CLR_ REM	-	-	Not used
	22	DRM_MOT_CLR_ CLK	-	-	Not used
	23	DRM_MOT_CLR_ RDY	-	-	Not used
	24	DRM_MOT_CLR_ DIR	-	-	Not used
	25	GND	-	-	Ground
	26	DLP_MOT_CLR_R EM	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC5	27	DLP_MOT_CLR_C LK	-	-	Not used
Connected to feed PWB 1	28	DLP_MOT_CLR_R DY	-	-	Not used
	29	DLP_MOT_CLR_DI R	-	-	Not used
	30	IH_PWB_FAN_L	0	0/24 V DC	HFM: On/Off
	31	IH_PWB_FAN_H	0	0/24 V DC	HFM: On/Off
	32	IH_PWB_FAN_AL M	I	0/3.3 V DC	HFM alarm signal
	33	REG_MOT_PD	0	0/3.3 V DC	RM control signal
	34	REG_MOT_CLK	0	0/3.3 V DC (pulse)	RM clock signal
	35	REG_MOT_REM(C L)	0	0/3.3 V DC	RM/RCL: On/Off
	36	GND	-	-	Ground
	37	CLN_SOL_RET	0	0/24 V DC	CLSOL: On/Off (RET)
	38	CLN_SOL_REM	0	0/24 V DC	CLSOL: On/Off (ACT)
	39	REG_SENS_R_S	-	-	Not used
	40	REG_SENS_R_P	-	-	Not used
	41	REG_R_LED	-	-	Not used
	42	REG_SENS_F_S	-	-	Not used
	43	GND	-	-	Ground
	44	REG_SENS_F_P	-	-	Not used
	45	REG_F_LED	-	-	Not used
	46	M_TEMP	-	-	Not used
	47	POWER_OFF	0	0/3.3 V DC	Power off signal
	48	DRM_HEAT	-	-	Not used
	49	FSR_RELAY	0	0/3.3 V DC	Fuser relay signal
	50	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC6	1	GND	-	-	Ground
Connected to	2	JOB_SET	Ι	0/3.3 V DC	Job separator set signal
feed PWB 1	3	JOB_MOT_REM	0	0/3.3 V DC	JSEM: On/Off
	4	JOB_MOT_CLK	0	0/3.3 V DC (pulse)	JSEM clock signal
	5	JOB_MOT_DIR	0	0/3.3 V DC	JSEM drive switch signal
	6	JOB_OPEN_SENS	Ι	0/3.3 V DC	JSOCS: On/Off
	7	JOB_SOL_REM	0	0/24 V DC	JSFSSOL: On/Off
	8	GND	-	-	Ground
	9	EXIT_REAR_FAN_ L	0	0/24 V DC	ERFM: On/Off
	10	EXIT_REAR_FAN_ H	0	0/24 V DC	ERFM: On/Off
	11	ZEROC	0	0/3.3 V DC (pulse)	Zero-cross signal
	12	SUB_HEAT	0	0/3.3 V DC	FH2: On/Off
	13	MAIN_HEAT	0	0/3.3 V DC	FH1: On/Off
	14	FSR_CL	-	-	Not used
	15	FSR_MOT_REM	0	0/3.3 V DC	FUM: On/Off
	16	FSR_MOT_CLK	0	0/3.3 V DC (pulse)	FUM clock signal
	17	FSR_MOT_RDY	0	0/3.3 V DC	FUM ready signal
	18	GND	-	-	Ground
	19	FSR_MOT_DIR	0	0/3.3 V DC	FUM drive switch signal
	20	FSR_MOT_BRK	0	0/3.3 V DC	FUM break signal
	21	MPF_TABLE	Ι	0/3.3 V DC	MPTSW: On/Off
	22	MPF_WID1	I	0/3.3 V DC	MPPWSW: On/Off
	23	MPF_WID2	Ι	0/3.3 V DC	MPPWSW: On/Off
	24	MPF_WID3	Ι	0/3.3 V DC	MPPWSW: On/Off
	25	MPF_LNG	Ι	0/3.3 V DC	MPPLSW: On/Off
	26	3.3V3	0	3.3 V DC	3.3 V DC power to FPWB1
	27	MPF_PPR_SET	Ι	0/3.3 V DC	MPPS: On/Off
	28	MPF_LIFT_UP	Ι	0/3.3 V DC	MPLS1: On/Off
	29	MPF_LIFT_DOWN	Ι	0/3.3 V DC	MPLS2: On/Off
	30	MPF_JAM	Ι	0/3.3 V DC	MPFS: On/Off
	31	MPF_CL_REM	0	0/24 V DC	MPPFCL: On/Off
	32	MPF_LIF2	0	0/24 V DC	MPLM: On/Off
	33	MPF_LIFT1	0	0/24 V DC	MPLM: On/Off
	34	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC6	35	TC_MOT_REM	-	-	Not used
Connected to	36	TC_MOT_LOCK	-	-	Not used
feed PWB 1	37	TC_TONER_LED	-	-	Not used
	38	TC_TONER_FULL	-	-	Not used
	39	TC_TONER_VCON T	-	-	Not used
	40	INTER_LOCK	-	-	Not used
	41	DU2_PD	0	0/3.3 V DC	DUM2 control signal
	42	DU2_CLK	0	0/3.3 V DC (pulse)	DUM2 clock signal
	43	DU2_REM_CL_LO W	0	0/3.3 V DC	DUM2/DUCL2: On/Off
	44	DU_OPEN	Ι	0/3.3 V DC	DUCSW: On/Off
	45	DU_FAN	-	-	Not used
	46	PRESS_MOT_RE M1	-	-	Not used
	47	PRESS_MOT_RE M2	-	-	Not used
	48	PRESS_RLS_SEN S	-	-	Not used
	49	DU_SENS	I	0/3.3 V DC	DUS2: On/Off
	50	BELT_JAM_SENS	-	-	Not used
	51	GND	-	-	Ground
	52	REG_BK_SENS1_ S	Ι	Analog	IDS detection signal
	53	REG_BK_SENS1_ P	Ι	Analog	IDS detection signal
	54	REG_BK_LED	0	Analog	IDS control signal
	55	LOOP_SENS	T	0/3.3 V DC	LPS: On/Off
	56	EDGE_FAN_L	0	0/24 V DC	EFM1,2: On/Off
	57	EDGE_FAN_H	0	0/24 V DC	EFM1,2: On/Off
	58	DU1_MOT_PD	0	0/3.3 V DC	DUM1 control signal
	59	DU1_MOT_CLK	0	0/3.3 V DC (pulse)	DUM1 clock signal
	60	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC7	1	INTER_LOCK	-	-	Not used
Connected to	2	ROT_HP_SENS	Ι	0/3.3 V DC	DEVSS: On/Off
front PWB	3	DLP_FAN_L	0	0/24 V DC	DEVFM: On/Off
	4	DLP_FAN_H	0	0/24 V DC	DEVFM: On/Off
	5	THOP_MOT_DIR	0	0/3.3 V DC	THM drive switch signal
	6	THOP_MOT_REM	0	0/3.3 V DC	THM: On/Off
	7	THOP_Bk	T	0/3.3 V DC	THS: On/Off
	8	ENCODE_ Bk	Ι	0/3.3 V DC	SRS: On/Off
	9	SB_MOT_PH	0	0/3.3 V DC	EM control signal
	10	SB_MOT_CLK	0	0/3.3 V DC (pulse)	EM clock signal
	11	SB_MOT_PD	0	0/3.3 V DC	EM control signal
	12	SB_MOT_DIR	0	0/3.3 V DC	EM drive switch signal
	13	SB_MOT_REM	0	0/3.3 V DC	EM: On/Off
	14	EXIT_FEED_SENS	I	0/3.3 V DC	SBS: On/Off
	15	EXIT_PAPER_SEN S	I	0/3.3 V DC	EFS: On/Off
	16	GND	-	-	Ground
	17	JUNC_SOL_REM	0	0/24 V DC	FSSOL: On/Off (ACT)
	18	JUNC_SOL_RET	0	0/24 V DC	FSSOL: On/Off (RET)
YC8	1	WTNR_SET	I	Analog	WTS2 detection signal
Connected to front PWB	2	WTNR_FULL_VCO NT	0	0/3.3 V DC	WTS1 control signal
	3	WTNR_FULL	Ι	Analog	WTS1 detection signal
	4	WTNR_NEAR_VC ONT	0	0/3.3 V DC	WTS2 control signal
	5	WTNR_NEAR	Ι	Analog	WTS2 detection signal
	6	WTNR_LED	0	0/3.3 V DC (pulse)	WTS1 LED emitter signal
	7	I2C_SDA	0	0/3.3 V DC (pulse)	EEPROM clock signal
	8	I2C_SCL	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	9	FRONT_OPEN	Ι	0/3.3 V DC	FRCSW: On/Off
	10	LSU_FAN	0	0/24 V DC	LSUFM: On/Off
	11	TPD_TEMP_Bk	Ι	Analog	Developer thermistor detection sig- nal
	12	DLP_VCONT_Bk_1	0	0/3.3 V DC	DEVPWB control signal
	13	TPD_Bk_1	Ι	Analog	DEVPWB detection signal
	14	TN_CLK	0	0/3.3 V DC (pulse)	Clock signal
	15	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC8	16	EEP_SCL1	0	0/3.3 V DC (pulse)	EEPROM clock signal
Connected to	17	EEP_SDA1	I/O	0/3.3 V DC (pulse)	EEPROM data signal
front PWB	18	ERS_Bk_REM	0	0/24 V DC	CL: On/Off
	19	CONTAIN_FAN_R EM	0	0/24 V DC	FUFFM: On/Off
	20	EXIT_FAN_REM	0	0/24 V DC	EFFM: On/Off
YC9	1	IH_CORE_MOT_R EM	-	-	Not used
Connected to front PWB	2	IH_CORE_MOT_C LK	-	-	Not used
	3	IH_CORE_SENS	-	-	Not used
	4	IH_COIL_FAN_AL M	-	-	Not used
	5	IH_COIL_FAN_L	-	-	Not used
	6	IH_COIL_FAN_H	-	-	Not used
	7	GND	-	-	Ground
	8	ROT_MOT_PD	-	-	Not used
	9	ROT_MOT_DIR	-	-	Not used
	10	ROT_MOT_CLK	-	-	Not used
	11	ROT_MOT_REM	-	-	Not used
YC11	1	GND	-	-	Ground
Connected to	2	DATA_2PBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (P)
LSU relay PWB	3	DATA_2NBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (N)
1 110	4	GND	-	-	Ground
	5	DATA_1PBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (P)
	6	DATA_1NBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (N)
	7	GND	-	-	Ground
	8	GAIN_FIX_Bk	0	0/3.3 V DC	APCPWB control signal
	9	GND	-	-	Ground
	10	SDCLK_Bk	0	0/3.3 V DC (pulse)	APCPWB clock signal
	11	GND	-	-	Ground
	12	PARA_SIG_P4_Bk	0	0/3.3 V DC	APCPWB control signal
	13	PARA_SIG_P3_Bk	0	0/3.3 V DC	APCPWB control signal
	14	PARA_SIG_P2_Bk	0	0/3.3 V DC	APCPWB control signal
	15	PARA_SIG_P1_Bk	0	0/3.3 V DC	APCPWB control signal
	16	PARA_SIG_P0_Bk	0	0/3.3 V DC	APCPWB control signal
	17	INT_ST_1_Bk	0	0/3.3 V DC	APCPWB control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC11	18	INT_ST_2_Bk	0	0/3.3 V DC	APCPWB control signal
Connected to	19	CUALM_BK	I	0/3.3 V DC	APCPWB alarm signal
LSU relay PWB	20	MSET_N	0	0/3.3 V DC	Control signal
FVVD	21	LDD_CS 1 Bk	0	0/3.3 V DC	APCPWB control signal
	22	LDD_CS 2 Bk	0	0/3.3 V DC	APCPWB control signal
	23	PARA_SIG_P3_2B k	0	0/3.3 V DC	APCPWB control signal
	24	LSU_TH_Bk	I	Analog	LSU thermistor detection signal
	25	BD_Bk	I	0/3.3 V DC (pulse)	Horizontal synchronization signal
	26	GND	-	-	Ground
	27	DATA_4P_Bk(LVD S)	0	0/3.3 V DC (pulse)	Video data signal (P)
	28	DATA_4N_Bk(LVD S)	0	0/3.3 V DC (pulse)	Video data signal (N)
	29	GND	-	-	Ground
	30	DATA_3P_Bk(LVD S)	0	0/3.3 V DC (pulse)	Video data signal (P)
	31	DATA_3N_Bk(LVD S)	0	0/3.3 V DC (pulse)	Video data signal (N)
	32	GND	-	-	Ground
	33	EEPROM_CS_1_B k	I/O	0/3.3 V DC (pulse)	APCPWB EEPROM data signal
	34	EEPROM_CS_2_B k	I/O	0/3.3 V DC (pulse)	APCPWB EEPROM data signal
	35	GND	-	-	Ground
	36	SCLK	0	0/3.3 V DC (pulse)	Clock signal
	37	GND	-	-	Ground
	38	SDO	0	0/3.3 V DC (pulse)	Serial communication data signal
	39	GND	-	-	Ground
	40	SDI	0	0/3.3 V DC (pulse)	Serial communication data signal
YC13	1	GND	-	-	Ground
Connected to feed PWB 1	2	GND	-	-	Ground
	3	3.3V3	I	3.3 V DC	3.3 V DC power from FPWB1
	4	3.3V2	I	3.3 V DC	3.3 V DC power from FPWB1
YC15	1	+5V_AN	0	5 V DC	5 V DC power to LSURPWB
Connected to LSU relay	2	+5V_AN	0	5 V DC	5 V DC power to LSURPWB
PWB and	3	GND	-	-	Ground
polygon	4	GND	-	-	Ground
motor	5	+3.3V2	0	3.3 V DC	3.3 V DC power to LSURPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC15	6	GND	-	-	Ground
Connected to	7	+24V	0	24 V DC	24 V DC power to LSURPWB
LSU relay PWB and	8	GND	-	-	Ground
polygon	9	START/STOP	0	0/24 V DC	PM: On/Off
motor	10	LOCK	I	0/3.3 V DC	Lock signal
	11	CLK	0	0/3.3 V DC (pulse)	Clock signal
YC16	1	SGND	-	-	Ground
Connected to	2	SP_BELT_CNT	0	Analog	Separation bias control voltage
high voltage PWB	3	T2_CNT	0	Analog	Transfer bias control voltage
FVVD	4	T2_REM	0	0/3.3 V DC	Transfer bias: On/Off
	5	MAIN_IDC	0	PWM	DC charger roller control signal
	6	DC_MAIN_CNT	0	PWM	DC charger roller control signal
	7	AC_MAIN_CNT	0	PWM	AC charger roller control signal
	8	AC_MAIN_CLK	0	0/3.3 V DC (pulse)	AC charger roller clock signal
	9	DC_MAIN_REM	0	0/3.3 V DC	DC main charger: On/Off
YC17	1	SGND	-	0/3.3 V DC (pulse)	PM-K clock signal
Connected to	2	DC_MAG_REM	0	0/3.3 V DC	DC main charger: On/Off
high voltage PWB	3	DC_MAG_CNT	0	0/3.3 V DC (pulse)	DC magnet bias control voltage
	4	DC_SLV_CNT	0	PWM	DC sleeve bias control voltage
	5	AC_SLV_CLK	0	0/3.3 V DC (pulse)	AC sleeve bias clock signal
	6	AC_SLV_CNT	0	PWM	AC sleeve bias control voltage
	7	DISCHARGE	Ι	PWM	Main charger control signal
	8	AC_MAG_CLK	0	0/3.3 V DC (pulse)	ACC magnet bias clock signal
	9	AC_MAG_CNT	0	0/3.3 V DC (pulse)	AC magnet bias control voltage
	10	DC_REC_CNT	0	PWM	DC bias control voltage
YC18	1	DF_CLK	0	0/3.3 V DC (pulse)	DFMPWB clock signal
Connected to 1000-sheet/	2	DF_SDO	0	0/3.3 V DC (pulse)	DFMPWB serial communication data signal
4000-sheet finisher	3	DF_SEL	0	0/3.3 V DC	DFMPWB select signal
	4	DF_SDI	0	0/3.3 V DC (pulse)	DFMPWB serial communication data signal
	5	DF_RDY	I	0/3.3 V DC	DFMPWB ready signal
	6	DF_DET	0	0/3.3 V DC	DFMPWB detection signal
	7	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC19	A1	PF_CLK	0	0/3.3 V DC (pulse)	PFMPWB clock signal
Connected to paper feeder/	A2	PF_SDO	0	0/3.3 V DC (pulse)	PFMPWB serial communication data signal
large capac- ity feeder,	A3	PF_SEL	0	0/3.3 V DC	PFMPWB select signal
toner fan motor and	A4	PF_SDI	I	0/3.3 V DC (pulse)	PFMPWB serial communication data signal
exhaust fan	A5	PF_RDY	I	0/3.3 V DC	PFMPWB ready signal
motor	A6	PF_PAUSE	0	0/3.3 V DC	PFMPWB pause signal
	A7	PF_CAS1_OPEN	Ι	0/3.3 V DC	PFMPWB control signal
	A8	PF_CAS2_OPEN	I	0/3.3 V DC	PFMPWB control signal
	A9	+3.3V4	0	3.3 V DC	3.3 V DC power to PFMPWB
	A10	GND	-	-	Ground
	A11	GND	-	-	Ground
	A12	TN_FAN1	0	0/24 V DC	TFM: On/Off
	A13	+24V1	0	24 V DC	24 V DC power to TFM
	A14	TN_FAN2	-	-	Not used
	A15	+24V1	-	-	Not used
	A16	LVU_FAN1	-	-	Not used
	A17	+24V1	-	-	Not used
	A18	LVU_FAN2	-	-	Not used
	A19	+24V1	-	-	Not used
	B1	SIDE_CLK	0	0/3.3 V DC (pulse)	PFMPWB clock signal (side)
	B2	SIDE_SDO	0	0/3.3 V DC (pulse)	PFMPWB serial communication data signal (side)
	B3	SIDE_SEL	0	0/3.3 V DC	PFMPWB select signal (side)
	B4	SIDE_SDI	I	0/3.3 V DC (pulse)	PFMPWB serial communication data signal (side)
	B5	SIDE_RDY	Т	0/3.3 V DC	PFMPWB ready signal (side)
	B6	SIDE_PAUSE	0	0/3.3 V DC	PFMPWB pause signal (side)
	B7	TANDEM_CAS1OP EN	Ι	0/3.3 V DC	PFMPWB control signal (side)
	B8	TANDEM_CAS2OP EN	Ι	0/3.3 V DC	PFMPWB control signal (side)
	B9	SIDE_MULTI_OPE N	0	0/3.3 V DC	PFMPWB control signal (side)
	B10	+3.3V4	0	3.3 V DC	3.3 V DC power to PFMPWB (side)
	B11	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC19	B12	+24V1	-	-	Not used
Connected to	B13	BELT_FAN1	-	-	Not used
paper feeder/ large capac-	B14	+24V1	-	-	Not used
ity feeder,	B15	BELT_FAN2	-	-	Not used
toner fan	B16	DLP_FAN1	-	-	Not used
motor and exhaust fan	B17	+24V1	-	-	Not used
motor	B18	DLP_FAN2	0	0/24 V DC	EXFM: On/Off
	B19	+24V1	0	24 V DC	24 V DC power to EXFM
YC20	1	DECAL_HP_SENS	-	-	Not used
Connected to	2	GUIDE_REM	-	-	Not used
bridge unit	3	GUIDE_CLK	-	-	Not used
	4	GUIDE_PD	-	-	Not used
	5	GUIDE_DIR	-	-	Not used
	6	DECAL_REM	-	-	Not used
	7	DECAL_PH	-	-	Not used
	8	DECAL_CLK	-	-	Not used
	9	DECAL_PD	-	-	Not used
	10	DECAL_DIR	-	-	Not used
	11	+24V1	0	24 V DC	24 V DC power to BRSOL
	12	EXIT_SOL_REM	0	0/24 V DC	BRSOL: On/Off (ACT)
	13	EXIT_SOL_RET	0	0/24 V DC	BRSOL: On/Off (RET)
	14	GND	-	-	Ground
	15	EXIT_COV_OPEN	Ι	0/3.3 V DC	BRECSW: On/Off
	16	GND	-	-	Ground
	17	EXIT_SENS	Ι	0/3.3 V DC	BRES: On/Off
	18	+5V	0	5 V DC	5 V DC power to BRES
	19	N.C	-	-	Not used
	20	BRIDGE2 REM	0	0/3.3 V DC	BRCM2: On/Off
	21	BRIDGE2 PH	0	0/3.3 V DC	BRCM2 control signal
	22	BRIDGE2 CLK	0	0/3.3 V DC (pulse)	BRCM2 clock signal
	23	BRIDGE2 PD	0	0/3.3 V DC	BRCM2 control signal
	24	BRIDGE2 DIR	0	0/3.3 V DC	BRCM2 drive switch signal
	25	BRIDGE1 REM	0	0/3.3 V DC	BRCM2: On/Off
	26	BRIDGE1 PH	0	0/3.3 V DC	BRCM1 control signal
	27	BRIDGE1 CLK	0	0/3.3 V DC (pulse)	BRCM1 clock signal

Connector	Pin	Signal	I/O	Voltage	Description
YC20	28	BRIDGE1 PD	0	0/3.3 V DC	BRCM1 control signal
Connected to	29	BRIDGE1 DIR	0	0/3.3 V DC	BRCM1 drive switch signal
bridge unit	30	BRIDGE_SENS 2	I	0/3.3 V DC	BRCS2: On/Off
	31	BRIDGE_OPEN	I	0/3.3 V DC	BRCSW: On/Off
	32	BRIDGE_SENS 1	I	0/3.3 V DC	BRCS1: On/Off
	33	GND	-	-	Ground
	34	5V	0	5 V DC	5 V DC power to BRPWB
	35	GND	-	-	Ground
	36	GND	-	-	Ground
	37	+24V1	0	24 V DC	24 V DC power to BRPWB
	38	+24V1	0	24 V DC	24 V DC power to BRPWB
YC22	1	LVU_FAN	0	0/24 V DC	PSFM: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power to PSFM
power source fan motor					
YC23	1	+24V	0	24 V DC	24 V DC power to coin vender
Connected to	2	GND	-	-	Ground
coin vender	3	GND	-	-	Ground
	4	COIN_EN	Ι	0/3.3 V DC	Coin vender enable signal
	5	FGND	-	-	Ground
	6	FEED_COUNT	0	0/3.3 V DC	Coin vender control signal
	7	EJECT_COUNT	0	0/3.3 V DC	Coin vender control signal
	8	COPYING_SIG	0	0/3.3 V DC	Coin vender control signal
	9	TXD_COIN	0	0/3.3 V DC (pulse)	Serial communication data signal
	10	GND	-	-	Serial communication data signal
	11	RXD_COIN	I	0/3.3 V DC (pulse)	MCL: On/Off
	12	GND	-	-	Ground
YC24	1	GND	-	-	Ground
Connected to	2	DC1_SET	I	0/3.3 V DC	Key counter set signal
key counter	3	DC1_COUNT	0	0/3.3 V DC	Key counter count signal
	4	+24V 1	0	24 V DC	24 V DC power to key card

Connector	Pin	Signal	I/O	Voltage	Description
YC25	A1	+5V	0	5 V DC	5 V DC power to key card
Connected to	A2	+5V	0	5 V DC	5 V DC power to key card
key card	A3	+5V	0	5 V DC	5 V DC power to key card
	A4	+5V	0	5 V DC	5 V DC power to key card
	A5	+5V	0	5 V DC	5 V DC power to key card
	A6	+5V	0	5 V DC	5 V DC power to key card
	A7	+5V	0	5 V DC	5 V DC power to key card
	A8	+5V	0	5 V DC	5 V DC power to key card
	A9	COPY_ENABLE	I	0/3.3 V DC	Key card enable signal
	A10	+24V	0	24 V DC	24 V DC power to key card
	B1	KEY7	0	0/3.3 V DC	Key card control signal
	B2	KEY6	0	0/3.3 V DC	Key card control signal
	В3	KEY5	0	0/3.3 V DC	Key card control signal
	B4	KEY4	0	0/3.3 V DC	Key card control signal
	B5	KEY3	0	0/3.3 V DC	Key card control signal
	B6	KEY2	0	0/3.3 V DC	Key card control signal
	B7	KEY1	0	0/3.3 V DC	Key card control signal
	B8	KEY0	0	0/3.3 V DC	Key card control signal
	В9	GND	-	-	Ground
	B10	COUNT	0	0/3.3 V DC	Key card count signal
YC26	A1	EDGE_FAN_ALM	-	-	Not used
Connected to	A2	EDGE_FAN	-	-	Not used
fuser unit	A3	+24V1	-	-	Not used
	A4	EDGE_FAN_ALM	-	-	Not used
	A5	EDGE_FAN	-	-	Not used
	A6	+24V1	-	-	Not used
	A7	FSR_FAN_ALM	Ι	0/3.3 V DC	FURFM alarm signal
	A8	FSR_FAN	0	0/24 V DC	FURFM: On/Off
	A9	+24V1	0	24 V DC	24 V DC power to FURFM
	A10	FSR_RLS_DR_CC W	-	-	Not used
	A11	FSR_RLS_DR_CW	-	-	Not used
	A12	GND	-	-	Ground
	A13	FSR_SIZE_SENS	Ι	0/3.3 V DC	FUES: On/Off
	A14	+5V	0	5 V DC	5 V DC power to FUES
	A15	GND	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC26	A16	FSR_RLS_SENS	-	-	Not used
Connected to	A17	+5V	-	-	Not used
fuser unit	A18	GND	-	-	Not used
	A19	FSR_BLT_PLS	-	-	Not used
	A20	+5V	-	-	Not used
	B1	PRESS_HEART_R EM	-	-	Not used
	B2	IH_RXD	-	-	Not used
	B3	IH_TXD	-	-	Not used
	B4	ROTATION	-	-	Not used
	B5	IH_HEAT_REM	-	-	Not used
	B6	+3.3V2	-	-	Not used
	B7	GND	-	-	Not used
	B8	GND	-	-	Not used
	B9	PRESS_TH	-	-	Not used
	B10	GND	-	-	Ground
	B11	EDGE_TH	I	Analog	FTH2 detection signal
	B12	GND	-	-	Not used
	B13	GUIDE_TH1	-	-	Not used
	B14	GND	-	-	Ground
	B15	GUIDE_TH2	I	Analog	FTH1 detection signal
	B16	MAIN_TH2	-	-	Not used
	B17	MAIN_TH1	-	-	Not used
	B18	GND	-	-	Not used
	B19	+24V1	-	-	Not used
	B20	BRIDGE_FAN	-	-	Not used
YC27	1	GND	-	-	Ground
Connected to	2	EEP_SDA2	I/O	0/3.3 V DC (pulse)	EEPROM data signal
RFID PWB and toner	3	EEP_SCL2	I	0/3.3 V DC (pulse)	EEPROM clock signal
motor	4	3.3V2	0	3.3 V DC	3.3 V DC power to RFPWB
	5	+24V1	0	24 V DC	24 V DC power to TM-Y
	6	TMOT_Bk_DR	0	0/24 V DC	TM: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC46	1	HSYNC_AN	Ι	0/3.3 V DC (pulse)	Image control signal
Connected to	2	HSYNC_AP	I	0/3.3 V DC (pulse)	Image control signal
main PWB	3	HSYNC_BN	I	0/3.3 V DC (pulse)	Image control signal
	4	HSYNC_BP	I	0/3.3 V DC (pulse)	Image control signal
	5	HSYNC_CN	Ι	0/3.3 V DC (pulse)	Image control signal
	6	HSYNC_CP	Ι	0/3.3 V DC (pulse)	Image control signal
	7	HSYNC_DN	I	0/3.3 V DC (pulse)	Image control signal
	8	HSYNC_DP	Ι	0/3.3 V DC (pulse)	Image control signal
	9	VSYNC_AN	Ι	0/3.3 V DC (pulse)	Image control signal
	10	VSYNC_AP	I	0/3.3 V DC (pulse)	Image control signal
	11	VSYNC_BN	I	0/3.3 V DC (pulse)	Image control signal
	12	VSYNC_BP	I	0/3.3 V DC (pulse)	Image control signal
	13	VSYNC_CN	I	0/3.3 V DC (pulse)	Image control signal
	14	VSYNC_CP	I	0/3.3 V DC (pulse)	Image control signal
	15	VSYNC_DN	I	0/3.3 V DC (pulse)	Image control signal
	16	VSYNC_DP	I	0/3.3 V DC (pulse)	Image control signal
	17	SGND	-	-	Ground
	18	TCLKP	I	0/3.3 V DC (pulse)	Clock signal
	19	TCLKN	I	0/3.3 V DC (pulse)	Clock signal
	20	SGND	-	-	Ground
	21	ТСР	I	0/3.3 V DC (pulse)	Image control signal
	22	TCN	Ι	0/3.3 V DC (pulse)	Image control signal
	23	SGND	-	-	Ground
	24	ТВР	Ι	0/3.3 V DC (pulse)	Image control signal
	25	TBN	Ι	0/3.3 V DC (pulse)	Image control signal
	26	SGND	-	-	Ground
	27	TAP	I	0/3.3 V DC (pulse)	Image control signal
	28	TAN	Ι	0/3.3 V DC (pulse)	Image control signal
	29	SGND	-	-	Ground
	30	SLEEP	I	0/3.3 V DC	Sleep signal
	31	HLD_ENG	I	0/3.3 V DC	Engine hold signal
	32	NC	-	-	Not used
	33	SGND	-	-	Ground
	34	EG IRN	I	0/3.3 V DC	Engine interrupt signal
	35	EG SO	0	0/3.3 V DC (pulse)	Serial communication data signal

Connector	Pin	Signal	I/O	Voltage	Description
YC46	36	EG SBSY	Ι	0/3.3 V DC	Engine busy signal
Connected to main PWB	37	EG SDIR	Ι	0/3.3 V DC	Engine communication direction sig- nal
	38	EG_SI	I	0/3.3 V DC (pulse)	Serial communication data signal
	39	EG_SCLK	I	0/3.3 V DC (pulse)	Engine lock signal
	40	SGND	-	-	Ground
l					

2-3-3 Power source PWB

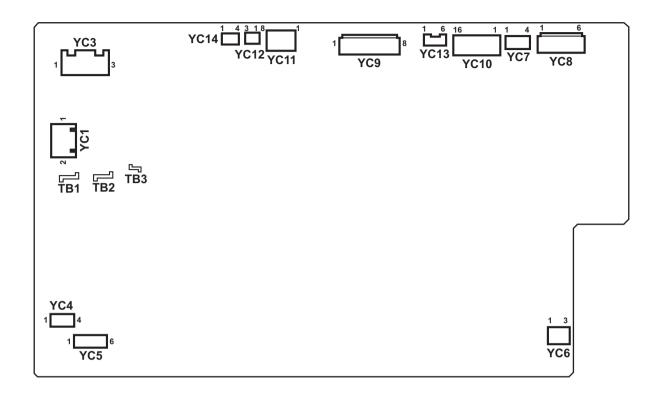


Figure 2-3-3 Power source PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
ТВ	1	LIVE	I	120 V AC 220-240 V AC	AC power input
Connected to AC inlet and	2	NEUTRAL	Ι	120 V AC 220-240 V AC	AC power input
main power switch	3	DH_LIVE	Ι	120 V AC 220-240 V AC	AC power input
YC1	1	MSW_OUT	0	120 V AC 220-240 V AC	AC power output to MSW
Connected to main power switch	2	MSW_IN	I	120 V AC 220-240 V AC	AC power output from MSW
YC3	1	IH_NEUTRAL	0	120 V AC 220-240 V AC	AC power output to FHPWB
Connected to	2	NC	-	-	Not used
fuser heater PWB	3	IH_LIVE	0	120 V AC 220-240 V AC	AC power output to FHPWB
YC5	1	DH_LIVE	0	120 V AC 220-240 V AC	AC power output to CH
Connected to	2	DH_LIVE	-	-	Not used
cassette heater	3	NC	-	-	Not used
nedlei	4	NC	-	-	Not used
	5	DH_NEUTRAL	0	120 V AC 220-240 V AC	AC power output to CH
	6	DH_NEUTRAL	-	-	Not used
YC6	1	DH_LIVE	0	120 V AC 220-240 V AC	AC power output to PFCH
Connected to paper feeder /large capac- ity feeder	2	DH_NEUTRAL	Ο	120 V AC 220-240 V AC	AC power output to PFCH
YC9	1	+24V1	0	24 V DC	24 V DC power to FPWB1
Connected to	2	+24V1	0	24 V DC	24 V DC power to FPWB1
feed PWB	3	+24V1	0	24 V DC	24 V DC power to FPWB1
	4	+12V	0	12 V DC	12 V DC power to FPWB1
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC10	1	+24V1	0	24 V DC	24 V DC power to paper feeder/large capacity feeder
Connected to paper feeder/	2	+24V1	0	24 V DC	24 V DC power to paper feeder/large capacity feeder
large capac- ity feeder,	3	+24V1	0	24 V DC	24 V DC power to 1000-sheet/4000- sheet finisher
1000-sheet/ 4000-sheet finisher and	4	+24V1	0	24 V DC	24 V DC power to 1000-sheet/4000- sheet finisher
ISC PWB	5	+24V1	0	24 V DC	24 V DC power to 1000-sheet/4000- sheet finisher
	6	+24V1	0	24 V DC	24 V DC power to ISCPWB
	7	+24V1	0	24 V DC	24 V DC power to ISCPWB
	8	+24V1	0	24 V DC	24 V DC power to ISCPWB
	9	GND	-	-	Ground
	10	GND	-	-	Ground
	11	GND	-	-	Ground
	12	GND	-	-	Ground
	13	GND	-	-	Ground
	14	GND	-	-	Ground
	15	GND	-	-	Ground
	16	GND	-	-	Ground
YC11	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
main PWB	3	GND	-	-	Ground
	4	GND	-	-	Ground
	5	+12V1	0	12 V DC	12 V DC power to MPWB
	6	+12V1	0	12 V DC	12 V DC power to MPWB
	7	+12V1	0	12 V DC	12 V DC power to MPWB
	8	+12V1	0	12 V DC	12 V DC power to MPWB
YC13	1	+24V1	0	24 V DC	24 V DC power to HVPWB1
Connected to	2	+24V1	-	-	Not used
high voltage PWB	3	+24V1	0	24 V DC	24 V DC power to HVPWB1
	4	PGND	-	-	Ground
	5	PGND	-	-	Not used
	6	PGND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC14	1	POWER_OFF	I	0/3.3 V DC	Sleep mode signal: On/Off
Connected to feed PWB 1	2	DRUM_HEAT_RE M	Ι	0/3.3 V DC	FH: On/Off
	3	GND	-	-	Ground
	4	FSR_RELAY_RE M	Ι	0/3.3 V DC	Power relay signal: On/Off

2-3-4 ISC PWB

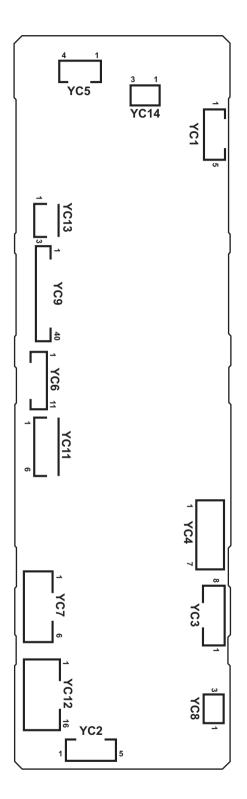


Figure 2-3-4 ISC PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	SC_CLK	Ι	0/3.3 V DC (pulse)	Scanner clock signal
Connected to	2	SC_SO	0	0/3.3 V DC (pulse)	Serial communication data signal
main PWB	3	SC_SI	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	4	SC_BSY	Ι	0/3.3 V DC	Scanner busy signal
	5	SC_HLDN	Ι	0/3.3 V DC	Scanner hold signal
	6	SC_DIR	Ι	0/3.3 V DC	Scanner communication direction sig- nal
	7	SC_IRN	Ι	0/3.3 V DC	Scanner interrupt signal
	8	GND(SPARE)	-	-	Ground
YC4	1	GND	-	-	Ground
Connected to	2	HTPDN	0	0/3.3 V DC	Control signal
main PWB	3	LOCKN	0	0/3.3 V DC	Lock signal
	4	GND	-	-	Ground
	5	TX0N	0	0/3.3 V DC (pulse)	Transmission data signal
	6	TX0P	0	0/3.3 V DC (pulse)	Transmission data signal
	7	GND	-	-	Ground
YC5	1	SMOT AP	0	0/24 V DC (pulse)	SM drive control signal
Connected to	2	SMOT BP	0	0/24 V DC (pulse)	SM drive control signal
scanner	3	SMOT AN	0	0/24 V DC (pulse)	SM drive control signal
motor	4	SMOT BN	0	0/24 V DC (pulse)	SM drive control signal
YC6	1	+5V	0	5 V DC	5 V DC power to LLPWB
Connected to	2	FAIL	Ι	0/3.3 V DC	Error signal
LED lamp	3	SDA	I/O	0/3.3 V DC	Data signal
PWB	4	SCL	0	0/3.3 V DC (pulse)	Clock signal
	5	VSET	0	Analog	Analog voltage
	6	SGND	-	-	Ground
	7	PGND	-	-	Ground
	8	PWM	0	0/3.3 V DC	PWM signal
	9	POW	0	0/3.3 V DC	LED driver: On/Off
	10	+24V1	0	24 V DC	24 V DC power to LLPWB
	11	+24V1	0	24 V DC	24 V DC power to LLPWB
YC7	1	+24V1	I	24 V DC	24 V DC power from PSPWB
Connected to	2	GND	-	-	Ground
power source	3	GND	-	-	Ground
PWB	4	GND	-	-	Ground
	5	+24V2	I	24 V DC	24 V DC power from PSPWB
	6	+24V2	I	24 V DC	24 V DC power from PSPWB

13AFE_ENO0/3.3 V DC (pulse)Enable signal14AFE_SOO0/3.3 V DC (pulse)Serial communication data signal15AFECLKO0/3.3 V DC (pulse)Clock signal16GNDGround17DIS_CIS_1PI0/3.3 V DC (pulse)Image data signal18DIS_CIS_1NI0/3.3 V DC (pulse)Image data signal19GNDGround20DIS_CIS_2PI0/3.3 V DC (pulse)Image data signal21DIS_CIS_2NI0/3.3 V DC (pulse)Image data signal22GNDGround23DIS_CIS_3PI0/3.3 V DC (pulse)Image data signal24DIS_CIS_3NI0/3.3 V DC (pulse)Image data signal25GNDGround26DIS_CIS_4PI0/3.3 V DC (pulse)Image data signal27DIS_CIS_4NI0/3.3 V DC (pulse)Image data signal28GNDGround29DIS_CIS_5PI0/3.3 V DC (pulse)Image data signal30DIS_CIS_5NI0/3.3 V DC (pulse)Image data signal31GNDGround	Connector	Pin	Signal	I/O	Voltage	Description
home posi- tion sensor 3 HP_SW I 0/3.3 V DC HPS: On/Off YG 1 GND - - Ground Connectedto CCDPWMB 2 CCDCLK1 O 0/3.3 V DC (pulse) Clock signal S GND - - Ground 4 CCDCLK2 O 0/3.3 V DC (pulse) Clock signal 5 GND - Ground 6 CP O 0/3.3 V DC Clamp signal 7 GND - - Ground 8 RS O 0/3.3 V DC Reset signal 9 VSG O 0/3.3 V DC Strift gate signal 10 TG O 0/3.3 V DC Strift gate signal 11 SH O 0/3.3 V DC Strift gate signal 12 AFE_SN O 0/3.3 V DC (pulse) Strift gate signal 14 AFE_SN O 0/3.3 V DC (pulse) Image data signal 14 AFE_S	YC8	1	+3.3V	0	3.3 V DC	3.3 V DC power to HPS
tion sensor 1 0.3.3 V DC IPS. On On I YC9 1 GND - - Ground Connected to CCD PWB 2 CCDCLK1 0 0/3.3 V DC (pulse) Clock signal 4 CCDCLK2 0 0/3.3 V DC (pulse) Clock signal 5 GND - - Ground 6 CP 0 0/3.3 V DC (pulse) Clock signal 7 GND - - Ground 8 RS 0 0/3.3 V DC Clamp signal 11 SH 0 0/3.3 V DC Control signal 11 SH 0 0/3.3 V DC Control signal 12 AFE_SI 1 0/3.3 V DC Shift gate signal 14 AFE_SO 0 0/3.3 V DC (pulse) Serial communication data signal 14 AFE_SO 0 0/3.3 V DC (pulse) Image data signal 15 AFECLK 0 0/3.3 V DC (pulse) Image data signal 16	Connected to	2	GND	-	-	Ground
Connected to CCD PWB2CCDCLK100/3.3 V DC (pulse)Clock signal3GNDGround4CCDCLK200/3.3 V DC (pulse)Clock signal5GNDGround6CP00/3.3 V DCClamp signal7GNDGround8RS00/3.3 V DCControl signal9VSG00/3.3 V DCControl signal10TG00/3.3 V DCControl signal11SH00/3.3 V DCShift gate signal12AFE_SII0/3.3 V DCShift gate signal13AFE_EN00/3.3 V DC (pulse)Serial communication data sig14AFE_SO00/3.3 V DC (pulse)Serial communication data sig15AFECLK00/3.3 V DC (pulse)Image data signal16GNDGround17DIS_CIS_IPI0/3.3 V DC (pulse)Image data signal18DIS_CIS_PI0/3.3 V DC (pulse)Image data signal20DIS_CIS_PI0/3.3 V DC (pulse)Image data signal21DIS_CIS_SPI0/3.3 V DC (pulse)Image data signal22GND-GroundGround23DIS_CIS_SPI0/3.3 V DC (pulse)Image data signal24DIS_CIS_SPI0/3.3 V DC (pulse)Image data signal25GND-Ground <td></td> <td>3</td> <td>HP_SW</td> <td>I</td> <td>0/3.3 V DC</td> <td>HPS: On/Off</td>		3	HP_SW	I	0/3.3 V DC	HPS: On/Off
CCD PWB3GNDGround4CCDCLK200/3.3 V DC (pulse)Clock signal5GNDGround6CP00/3.3 V DCClamp signal7GNDGround8RS00/3.3 V DCReset signal9VSG00/3.3 V DCControl signal10TG00/3.3 V DCControl signal11SH00/3.3 V DCShift gate signal12AFE_SI10/3.3 V DC (pulse)Serial communication data signal13AFE_EN00/3.3 V DC (pulse)Enable signal14AFE_SO00/3.3 V DC (pulse)Enable signal15AFECLK00/3.3 V DC (pulse)Image data signal16GNDGround17DIS_CIS_1P10/3.3 V DC (pulse)Image data signal18DIS_CIS_2P10/3.3 V DC (pulse)Image data signal19GNDGround20DIS_CIS_2P10/3.3 V DC (pulse)Image data signal21DIS_CIS_3P10/3.3 V DC (pulse)Image data signal22GNDGround23DIS_CIS_3P10/3.3 V DC (pulse)Image data signal24DIS_CIS_3P10/3.3 V DC (pulse)Image data signal25GNDGround26DIS_CIS_4P1<	YC9	1	GND	-	-	Ground
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6CPO0/3.3 V DCClamp signal7GND-Ground8RSO0/3.3 V DCReset signal9VSGO0/3.3 V DCControl signal10TGO0/3.3 V DCShift gate signal11SHO0/3.3 V DC (pulse)Serial communication data signal12AFE_SII0/3.3 V DC (pulse)Serial communication data signal13AFE_ENO0/3.3 V DC (pulse)Serial communication data signal14AFE_SOO0/3.3 V DC (pulse)Serial communication data signal15AFECLKO0/3.3 V DC (pulse)Serial communication data signal16GNDGround17DIS_CIS_1PI0/3.3 V DC (pulse)Image data signal18DIS_CIS_1NI0/3.3 V DC (pulse)Image data signal19GNDGround20DIS_CIS_2PI0/3.3 V DC (pulse)Image data signal21DIS_CIS_2NI0/3.3 V DC (pulse)Image data signal22GNDGround23DIS_CIS_3NI0/3.3 V DC (pulse)Image data signal24DIS_CIS_4NI0/3.3 V DC (pulse)Image data signal25GNDGround26DIS_CIS_4NI0/3.3 V DC (pulse)Image data signal27DIS_CIS_5PI0/3.3 V DC (pulse)Image data signal		4	CCDCLK2	0	0/3.3 V DC (pulse)	Clock signal
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Image		11	SH	0	0/3.3 V DC	Shift gate signal
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30DIS_CIS_5NI0/3.3 V DC (pulse)Image data signal31GNDGround		28	GND	-	-	Ground
30DIS_CIS_5NI0/3.3 V DC (pulse)Image data signal31GNDGround		29	DIS_CIS_5P	I	0/3.3 V DC (pulse)	Image data signal
31 GND Ground		30		I		
		31		-	-	
ן אין אין אין אין אין אין אין אין אין אי		32	DIS_CISCKP	ο	0/3.3 V DC (pulse)	Clock signal
33 DIS_CISCKN O 0/3.3 V DC (pulse) Clock signal						-
						_

Connector	Pin	Signal	I/O	Voltage	Description
YC9	34	GND	-	-	Ground
Connected to	35	CCDSEL	0	0/3.3 V DC	Select signal
CCD PWB	36	GND	-	-	Ground
	37	AFE_MCLK	0	0/3.3 V DC (pulse)	Clock signal
	38	GND(AFE_SHD)	-	-	Ground
	39	CLPIN	0	0/3.3 V DC	Clamp signal
	40	GND(AFE_SHP)	-	-	Ground
YC11	1	+5.1V	0	5 V DC	5 V DC power to CCDPWB
Connected to	2	GND	-	-	Ground
CCD PWB	3	+10V	0	DC10V	10 V DC power to CCDPWB
	4	GND	-	-	Ground
	5	+3.3V	0	3.3 V DC	3.3 V DC power to CCDPWB
	6	GND	-	-	Ground
YC12	1	GND(SPARE)	-	-	Ground
Connected to	2	DP_TMG	I	0/3.3 V DC	DPTS: On/Off
DP main PWB	3	DP_RDY	Ι	0/3.3 V DC	ready signal
	4	DP_SEL	0	0/3.3 V DC	Select signal
	5	DP_CLK	0	0/3.3 V DC (pulse)	Clock signal
	6	DP_SO	0	0/3.3 V DC (pulse)	Serial communication data signal
	7	DP_SI	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	8	DP_OPEN	Ι	0/3.3 V DC	DPOCSW: On/Off
	9	Reserve	-	-	Not used
	10	GND	-	-	Ground
	11	GND	-	-	Ground
	12	GND	-	-	Ground
	13	Reserve	-	-	Not used
	14	24V2	0	24 V DC	24 V DC power to DPMPWB
	15	24V2	0	24 V DC	24 V DC power to DPMPWB
	16	24V2	0	24 V DC	24 V DC power to DPMPWB
YC13	1	GND	-	-	Ground
Connected to	2	ORG_SW	Ι	0/3.3 V DC	OSS: On/Off
original size sensor	3	+5.1V	0	5 V DC	5 V DC power to OSS

Connector	Pin	Signal	I/O	Voltage	Description
YC14	1	+3.3V	0	3.3 V DC	3.3 V DC power to ODSW
Connected to	2	GND	-	-	Ground

2-3-5 Operation PWB 1

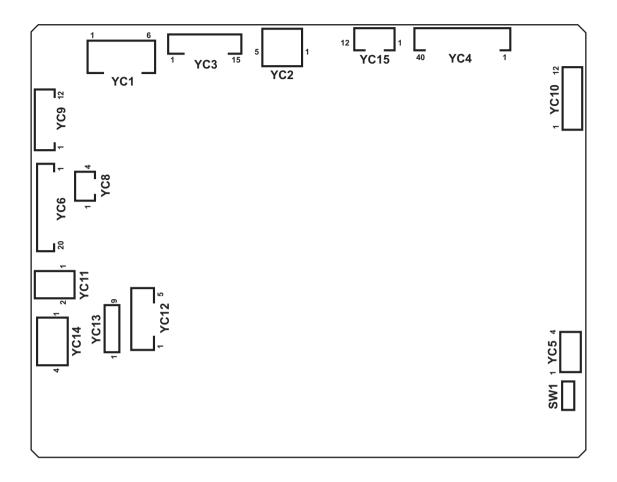


Figure 2-3-5 Operation PWB 1 silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
main PWB	3	GND	-	-	Ground
	4	+5V	I	5 V DC	5 V DC power from MPWB
	5	+5V	I	5 V DC	5 V DC power from MPWB
	6	+5V	I	5 V DC	5 V DC power from MPWB
YC2	1	VBUS	I	5 V DC	5 V DC power input
Connected to	2	DN	I/O	-	USB data signal
main PWB	3	DP	I/O	-	USB data signal
	4	ID	-	-	Not used
	5	GND	-	-	Ground
YC3	1	SGND	-	-	Ground
Connected to	2	PANEL_STATUS	0	0/3.3 V DC	Operation panel status signal
main PWB	3	INT_POWERKEY _N	0	0/3.3 V DC	Power key: On/Off
	4	PANEL RESET	I	0/3.3 V DC	Reset signal
	5	AUDIO	I	Analog	Audio output signal
	6	LIGHTOFF_POW ERON	Ι	0/3.3 V DC	Sleep return signal
	7	SHUT_DOWN	Ι	0/3.3 V DC	24 V down signal
	8	LED_PROCESSI NG_N	Ι	0/3.3 V DC	Processing LED control signal
	9	LED_ATTENTION _N	Ι	0/3.3 V DC	Attention LED control signal
	10	LED_MEMORY_N	I	0/3.3 V DC	Memory LED control signal
	11	SUPND_POWER	I	3.3 V DC	3.3 V DC power from MPWB
	12	ENERGY_SAVE	I	0/3.3 V DC	Energy save signal
	13	DEEP_POWERO N	Ι	0/3.3 V DC	Sleep return signal
	14	SECOND_TRAY_ SW	-	-	Not used
	15	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC4	1	SGND	-	-	Ground
Connected to	2	SGND	-	-	Ground
LCD	3	СК	0	0/3.3 V DC (pulse)	LCD clock signal
	4	SGND	-	-	Ground
	5	SGND	-	-	Ground
	6	SC	0	0/3.3 V DC	LCD Control signal
	7	R0(LSB)	0	0/3.3 V DC	LCD Control signal
	8	R1	0	0/3.3 V DC	LCD Control signal
	9	R2	0	0/3.3 V DC	LCD Control signal
	10	SGND	-	-	Ground
	11	R3	0	0/3.3 V DC	LCD Control signal
	12	R4	0	0/3.3 V DC	LCD Control signal
	13	R5(MSB)	0	0/3.3 V DC	LCD Control signal
	14	SGND	-	-	Ground
	15	G0(LSB)	0	0/3.3 V DC	LCD Control signal
	16	G1	0	0/3.3 V DC	LCD Control signal
	17	G2	0	0/3.3 V DC	LCD Control signal
	18	SGND	-	-	Ground
	19	G3	0	0/3.3 V DC	LCD Control signal
	20	G4	0	0/3.3 V DC	LCD Control signal
	21	G5(MSB)	0	0/3.3 V DC	LCD Control signal
	22	SGND	-	-	Ground
	23	B0(LSB)	0	0/3.3 V DC	LCD Control signal
	24	B1	0	0/3.3 V DC	LCD Control signal
	25	B2	0	0/3.3 V DC	LCD Control signal
	26	SGND	-	-	Ground
	27	B3	0	0/3.3 V DC	LCD Control signal
	28	B4	0	0/3.3 V DC	LCD Control signal
	29	B5(MSB)	0	0/3.3 V DC	LCD Control signal
	30	SGND	-	-	Ground
	31	H_SYNC	0	0/3.3 V DC (pulse)	LCD horizontal synchronization signal
	32	SGND	-	-	Ground
	33	V_SYNC	0	0/3.3 V DC (pulse)	LCD vertical synchronization signal
	34	SGND	-	-	Ground
	35	ENB	0	0/3.3 V DC	LCD enable signal
	36	СМ	0	0/3.3 V DC	LCD mode switch signal

Connector	Pin	Signal	I/O	Voltage	Description
YC4	37	3.3V	0	3.3 V DC	3.3 V DC power to LCD
Connected to	38	3.3V	0	3.3 V DC	3.3 V DC power to LCD
LCD	39	3.3V	0	3.3 V DC	3.3 V DC power to LCD
	40	3.3V	0	3.3 V DC	3.3 V DC power to LCD
YC5	1	TOP Y+	Ι	Analog	Touch panel Y+ position signal
Connected to	2	LEFT X+	Ι	Analog	Touch panel X+ position signal
touch panel	3	BOT Y-	Ι	Analog	Touch panel Y- position signal
	4	RIGHT X-	I	Analog	Touch panel X- position signal
YC6	1	KEY4	Ι	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 4
Connected to	2	SCAN2	0	0/3.3 V DC (pulse)	Scan signal 2
operation PWB 2	3	INT_POWERKEY _N	Ι	0/3.3 V DC	Power key: On/Off
	4	SCAN1	0	0/3.3 V DC (pulse)	Scan signal 1
	5	LED1	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 1
	6	SUPND_POWER	0	3.3 V DC	3.3 V DC power to OPWB2
	7	KEY3	Ι	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 3
	8	KEY2	Ι	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 2
	9	KEY1	I	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 1
	10	LED0	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 0
	11	KEY0	Ι	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 0
	12	SCAN4	0	0/3.3 V DC (pulse)	Scan signal 4
	13	SCAN3	0	0/3.3 V DC (pulse)	Scan signal 3
	14	SCAN0	0	0/3.3 V DC (pulse)	Scan signal 0
	15	GND	-	-	Ground
	16	GND	-	-	Ground
	17	GND	-	-	Ground
	18	GND	-	-	Ground
	19	GND	-	-	Ground
	20	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC7	1	SCAN4	0	0/3.3 V DC (pulse)	Scan signal 4
Connected to operation	2	KEY5	Ι	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 5
PWB 2	3	KEY6	I	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 6
	4	KEY7	I	0/3.3 V DC (pulse)	Operation panel key scan return sig- nal 7
	5	SCAN0	0	0/3.3 V DC (pulse)	Scan signal 0
	6	SCAN1	0	0/3.3 V DC (pulse)	Scan signal 1
	7	SCAN2	0	0/3.3 V DC (pulse)	Scan signal 2
	8	SCAN3	0	0/3.3 V DC (pulse)	Scan signal 3
	9	LED2	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 2
	10	LED3	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 3
	11	LED4	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 4
	12	GND	-	-	Ground
YC8	1	PROCESSING_L ED	0	0/3.3 V DC	Processing LED control signal
Connected to	2	MEMORY LED	0	0/3.3 V DC	Memory LED control signal
operation PWB 3	3	ATTENTION_LED	0	0/3.3 V DC	Attention LED control signal
	4	GND	-	-	Ground
YC11	1	VO2	0	Analog	Speaker sound signal (+)
Connected to speaker	2	VO1	0	Analog	Speaker sound signal (-)
YC14	1	LED_A	0	0/3.3 V DC	LED control signal
Connected to	2	NC	-	-	Not used
LCD	3	LED_C	I	0/3.3 V DC	LED control signal
	4	NC	-	-	Not used
		1		I.	

2-3-6 Front PWB

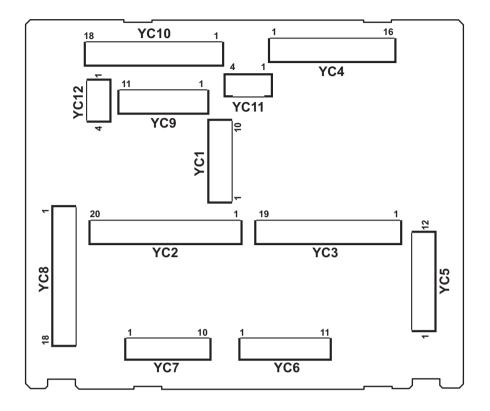


Figure 2-3-6 Front PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	+3.3V1	I	3.3 V DC	3.3 V DC power from EPWB
Connected to	2	+3.3V2	Т	3.3 V DC	3.3 V DC power from EPWB
engine PWB	3	+5V	Т	5 V DC	5 V DC power from EPWB
	4	+24V	Ι	24 V DC	24 V DC power from EPWB
	5	+24V	Ι	24 V DC	24 V DC power from EPWB
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	GND	-	-	Ground
	10	GND	-	-	Ground
YC2	1	EXIT_FAN_REM	I	0/24 V DC	EFFM: On/Off
Connected to engine PWB	2	CONTAIN_FAN_R EM	I	0/24 V DC	FUFFM: On/Off
	3	ERS_Bk_REM	I	0/24 V DC	CL: On/Off
	4	EEP_SDA1	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	5	EEP_SCL1	I	0/3.3 V DC (pulse)	EEPROM clock signal
	6	GND	-	-	Ground
	7	TN_CLK	Ι	0/3.3 V DC (pulse)	Clock signal
	8	TPD_Bk_1	0	Analog	DEVPWB detection signal
	9	DLP_VCONT_Bk_1	I	0/3.3 V DC	DEVPWB control signal
	10	TPD_TEMP_Bk	0	Analog	Developer thermistor detection sig- nal
	11	LSU_FAN	I	0/24 V DC	LSUFM: On/Off
	12	FRONT_OPEN	0	0/3.3 V DC	FRCSW: On/Off
	13	I2C_SCL	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	14	I2C_SDA	Ι	0/3.3 V DC (pulse)	EEPROM clock signal
	15	WTNR_LED	I	0/3.3 V DC (pulse)	WTS1 LED emitter signal
	16	WTNR_NEAR	0	Analog	WTS2 detection signal
	17	WTNR_NEAR_VC ONT	I	0/3.3 V DC	WTS2 control signal
	18	WTNR_FULL	0	Analog	WTS1 detection signal
	19	WTNR_FULL_VCO NT	I	0/3.3 V DC	WTS1 control signal
	20	WTNR_SET	0	Analog	WTS2 detection signal

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	JUNC_SOL_RET	I	0/24 V DC	FSSOL: On/Off (RET)
Connected to	2	JUNC_SOL_REM	Ι	0/24 V DC	FSSOL: On/Off (ACT)
engine PWB	3	GND	-	-	Ground
	4	EXIT_PAPER_SEN S	0	0/3.3 V DC	EFS: On/Off
	5	EXIT_FEED_SENS	0	0/3.3 V DC	SBS: On/Off
	6	SB_MOT_REM	Ι	0/3.3 V DC	EM: On/Off
	7	SB_MOT_DIR	Ι	0/3.3 V DC	EM drive switch signal
	8	SB_MOT_PD	Ι	0/3.3 V DC	EM control signal
	9	SB_MOT_CLK	Ι	0/3.3 V DC (pulse)	EM clock signal
	10	SB_MOT_PH	Ι	0/3.3 V DC	EM control signal
	11	ENCODE_ Bk	0	0/3.3 V DC	SRS: On/Off
	12	THOP_Bk	0	0/3.3 V DC	THS: On/Off
	13	THOP_MOT_REM	I	0/3.3 V DC	THM: On/Off
	14	THOP_MOT_DIR	I	0/3.3 V DC	THM drive switch signal
	15	DLP_FAN_H	Ι	0/24 V DC	DEVFM: On/Off
	16	DLP_FAN_L	Ι	0/24 V DC	DEVFM: On/Off
	17	ROT_HP_SENS	0	0/3.3 V DC	DEVSS: On/Off
	18	INTER_LOCK	-	-	Not used
	19	NC	-	-	Not used
YC4	1	GND	-	-	Ground
Connected to	2	ROT_HP_SENS	Ι	0/3.3 V DC	DEVSS: On/Off
eject unit	3	+5V	0	5 V DC	5 V DC power to DEVSS
	4	SB_CORE B/	0	0/24 V DC (pulse)	EM drive control signal
	5	SB_CORE A/	0	0/24 V DC (pulse)	EM drive control signal
	6	SB_CORE B	0	0/24 V DC (pulse)	EM drive control signal
	7	SB_CORE A	0	0/24 V DC (pulse)	EM drive control signal
	8	GND	-	-	Ground
	9	EXIT_FEED_SENS	I	0/3.3 V DC	SBS: On/Off
	10	5V	0	5 V DC	5 V DC power to SBS
	11	GND	-	-	Ground
	12	EXIT_PAPER_SEN S	Ι	0/3.3 V DC	EFS: On/Off
	13	5V	0	5 V DC	5 V DC power to EFS
	14	+24V1	0	24 V DC	24 V DC power to FSSOL
	15	JUNC_SOL_REM	0	0/24 V DC	FSSOL: On/Off (REM)
	16	JUNC_SOL_RET	0	0/24 V DC	FSSOL: On/Off (RET)

Connector	Pin	Signal	I/O	Voltage	Description
YC5	1	+24V1	0	24 V DC	24 V DC power to DEVFM1
Connected to	2	DRUM_AIR_FAN	0	0/24 V DC	DEVFM1: On/Off
inner unit	3	+24V1	0	24 V DC	24 V DC power to DEVFM2
	4	DRUM_DLP_FAN	0	0/24 V DC	DEVFM2: On/Off
	5	THOP_MOT_BK	0	0/24 V DC	THM: On/Off
	6	+24V	0	24 V DC	24 V DC power to THM
	7	GND	-	-	Ground
	8	THOP_Bk	I	0/3.3 V DC	THS: On/Off
	9	+5V	0	5 V DC	5 V DC power to THS
	10	GND	-	-	Ground
	11	ENCODE_Bk	Ι	0/3.3 V DC	SRS: On/Off
	12	+5V	0	5 V DC	5 V DC power to SRS
YC6	1	3.3V2	0	3.3 V DC	3.3 V DC power to DRPWB
Connected to	2	EEP_SCL1	0	0/3.3 V DC (pulse)	EEPROM clock signal
drum unit	3	EEP_SDA1	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	4	GND	-	-	Ground
	5	DRM_ADR0_Bk	-	-	Not used
	6	DRM_ADR1_Bk	-	-	Not used
	7	24V	0	24 V DC	24 V DC power to CL
	8	ERS_Bk_REM	0	0/24 V DC	CL: On/Off
		24V	-	-	Not used
		ERS_REM_PRE	-	-	Not used
	8	NC	-	-	Not used
YC7	1	TPD_TEMP_BK	I	Analog	Developer thermistor detection sig- nal
Connected to developer	2	DLP_VCONT_BK_ 1	0	0/3.3 V DC	DEVPWB control signal
unit	3	TPD_BK_1	I	Analog	DEVPWB detection signal
	4	TN_CLK_BK	0	0/3.3 V DC (pulse)	Clock signal
	5	GND	-	-	Ground
	6	DLP_ADR1_BK	-	-	Not used
	7	DLP_ADR0_BK	-	-	Not used
	8	EEP_SDA1	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	9	EEP_SCL1	0	0/3.3 V DC (pulse)	EEPROM clock signal
	10	3.3V2	0	3.3 V DC	3.3 V DC power to DEVPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	WTNR_SET	I	Analog	WTS2 detection signal
Connected to outer temper-	2	GND	-	-	Ground
	3	5V	0	5 V DC	5 V DC power to WTS1
ature sensor, front cover	4	WTNR_FULL	I	Analog	WTS1 detection signal
switch, LSU	5	WTNR_LED	0	0/3.3 V DC (pulse)	WTS1 LED emitter signal
fan motor and waste	6	5V_LED	0	5 V DC	5 V DC power to WTS1
toner sensor	7	5V	0	5 V DC	5 V DC power to WTS2
	8	WTNR_NEAR	-	-	Not used
	9	WTNR_LED	-	-	Not used
	10	5V_LED	-	-	Not used
	11	3.3V1	0	3.3 V DC	3.3 V DC power to OTEM
	12	I2C_SDA	I	0/3.3 V DC (pulse)	EEPROM data signal
	13	GND	-	-	Ground
	14	I2C_SCL	0	0/3.3 V DC (pulse)	EEPROM clock signal
	15	FRONT_OPEN	0	0/3.3 V DC	FRCSW: On/Off
	16	GND	-	-	Ground
	17	24V	0	24 V DC	24 V DC power to LSUFM
	18	LSU_FAN	0	0V/24 V DC	LSUFM: On/Off
YC9	1	ROT_MOT_REM	-	-	Not used
Connected to	2	ROT_MOT_CLK	-	-	Not used
engine PWB	3	ROT_MOT_DIR	-	-	Not used
	4	ROT_MOT_PD	-	-	Not used
	5	GND	-	-	Ground
	6	IH_COIL_FAN_H	-	-	Not used
	7	IH_COIL_FAN_L	-	-	Not used
	8	IH_COIL_FAN_AL M	-	-	Not used
	9	IH_CORE_SENS	-	-	Not used
	10	IH_CORE_MOT_C LK	-	-	Not used
	11	IH_CORE_MOT_R EM	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC11	1	EXIT FAN	0	0/24 V DC	EFFM: On/Off
Connected to	2	24V	0	24 V DC	24 V DC power to EFFM
eject front fan	3	24V	0	24 V DC	24 V DC power to FUFFM
motor and fuser front	4	CONTAINER_FAN	0	0/24 V DC	FUFFM: On/Off
fan motor					
YC12	1	5V	0	5 V DC	5 V DC power to LEDPWB1
Connected to	2	LED	0	0/5 V DC	LED: On/Off
LED PWB 1/ 2	3	5V	0	5 V DC	5 V DC power to LEDPWB2
2	4	LED	0	0/5 V DC	LED: On/Off
YC13	1	INNER_MOT_A	0	0/24 V DC	INM: On/Off
Connected to	2	INNER_MOT_B	0	0/24 V DC	INM: On/Off
inner motor					

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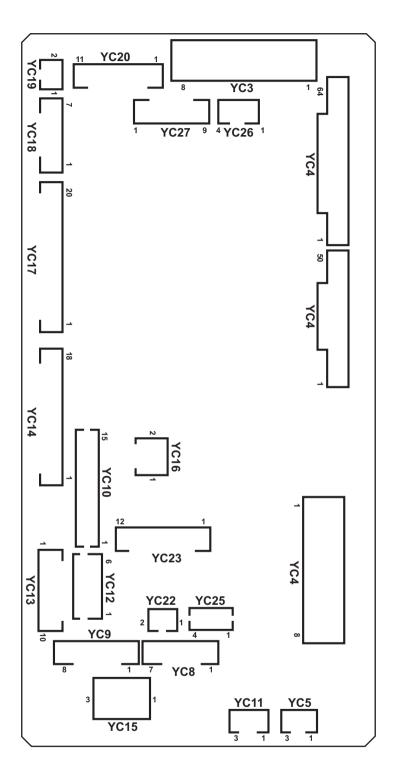


Figure 2-3-7 Feed PWB 1 silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	DU1_MOT_CLK	Ι	0/3.3 V DC (pulse)	DUM1 clock signal
engine PWB	3	DU1_MOT_PD	I	0/3.3 V DC	DUM1 control signal
	4	EDGE_FAN_H	I	0/24 V DC	EFM1,2: On/Off
	5	EDGE_FAN_L	I	0/24 V DC	EFM1,2: On/Off
	6	LOOP_SENS	0	0/3.3 V DC	LPS: On/Off
	7	REG_BK_LED	Т	Analog	IDS control signal
	8	REG_BK_SENS1_ P	0	Analog	IDS detection signal
	9	REG_BK_SENS1_ S	0	Analog	IDS detection signal
	10	GND	-	-	Ground
	11	BELT_JAM_SENS	-	-	Not used
	12	DU_SENS	0	0/3.3 V DC	DUS2: On/Off
	13	PRESS_RLS_SEN S	-	-	Not used
	14	PRESS_MOT_RE M2	-	-	Not used
	15	PRESS_MOT_RE M1	-	-	Not used
	16	DU_FAN	-	-	Not used
	17	DU_OPEN	0	0/3.3 V DC	DUCSW: On/Off
	18	DU2_REM_CL_LO W	Ι	0/3.3 V DC	DUM2/DUCL2: On/Off
	19	DU2_CLK	Ι	0/3.3 V DC (pulse)	DUM2 clock signal
	20	DU2_PD	I	0/3.3 V DC	DUM2 control signal
	21	INTER_LOCK	-	-	Not used
	22	TC_TONER_VCON T	-	-	Not used
	23	TC_TONER_FULL	-	-	Not used
	24	TC_TONER_LED	-	-	Not used
	25	TC_MOT_LOCK	-	-	Not used
	26	TC_MOT_REM	-	-	Not used
	27	GND	-	-	Ground
	28	MPF_LIFT1	Ι	0/24 V DC	MPLM: On/Off
	29	MPF_LIF2	Ι	0/24 V DC	MPLM: On/Off
	30	MPF_CL_REM	Ι	0/24 V DC	MPPFCL: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC1	31	MPF_JAM	0	0/3.3 V DC	MPFS: On/Off
Connected to	32	MPF_LIFT_DOWN	0	0/3.3 V DC	MPLS2: On/Off
engine PWB	33	MPF_LIFT_UP	0	0/3.3 V DC	MPLS1: On/Off
	34	MPF_PPR_SET	0	0/3.3 V DC	MPPS: On/Off
	35	3.3V3	Ι	3.3 V DC	3.3 V DC power from EPWB
	36	MPF_LNG	0	0/3.3 V DC	MPPLSW: On/Off
	37	MPF_WID3	0	0/3.3 V DC	MPPWSW: On/Off
	38	MPF_WID2	0	0/3.3 V DC	MPPWSW: On/Off
	39	MPF_WID1	0	0/3.3 V DC	MPPWSW: On/Off
	40	MPF_TABLE	0	0/3.3 V DC	MPTSW: On/Off
	41	FSR_MOT_BRK	I	0/3.3 V DC	FUM break signal
	42	FSR_MOT_DIR	I	0/3.3 V DC	FUM drive switch signal
	43	GND	-	-	Ground
	44	FSR_MOT_RDY	I	0/3.3 V DC	FUM ready signal
	45	FSR_MOT_CLK	Ι	0/3.3 V DC (pulse)	FUM clock signal
	46	FSR_MOT_REM	I	0/3.3 V DC	FUM: On/Off
	47	FSR_CL	-	-	Not used
	48	MAIN_HEAT	I	0/3.3 V DC	FH1: On/Off
	49	SUB_HEAT	T	0/3.3 V DC	FH2: On/Off
	50	ZEROC	Ι	0/3.3 V DC (pulse)	Zero-cross signal
	51	EXIT_REAR_FAN_ H	Ι	0/24 V DC	ERFM: On/Off
	52	EXIT_REAR_FAN_ L	Ι	0/24 V DC	ERFM: On/Off
	53	GND	-	-	Ground
	54	JOB_SOL_REM	Ι	0/24 V DC	JSFSSOL: On/Off
	55	JOB_OPEN_SENS	0	0/3.3 V DC	JSOCS: On/Off
	56	JOB_MOT_DIR	Ι	0/3.3 V DC	JSEM drive switch signal
	57	JOB_MOT_CLK	I	0/3.3 V DC (pulse)	JSEM clock signal
	58	JOB_MOT_REM	I	0/3.3 V DC	JSEM: On/Off
	59	JOB_SET	0	0/3.3 V DC	Job separator set signal
	60	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC2	1	GND	-	-	Ground
Connected to	2	FSR_RELAY	Ι	0/3.3 V DC	Fuser relay signal
engine PWB	3	DRM_HEAT	-	-	Not used
	4	POWER_OFF	Ι	0/3.3 V DC	Power off signal
	5	M_TEMP	-	-	Not used
	6	REG_F_LED	-	-	Not used
	7	REG_SENS_F_P	-	-	Not used
	8	GND	-	-	Ground
	9	REG_SENS_F_S	-	-	Not used
	10	REG_R_LED	-	-	Not used
	11	REG_SENS_R_P	-	-	Not used
	12	REG_SENS_R_S	-	-	Not used
	13	CLN_SOL_REM	I	0/24 V DC	CLSOL: On/Off (ACT)
	14	CLN_SOL_RET	Ι	0/24 V DC	CLSOL: On/Off (RET)
	15	GND	-	-	Ground
	16	REG_MOT_REM(C L)	Ι	0/3.3 V DC	RM/RCL: On/Off
	17	REG_MOT_CLK	I	0/3.3 V DC (pulse)	RM clock signal
	18	REG_MOT_PD	I	0/3.3 V DC	RM control signal
	19	IH_PWB_FAN_AL M	0	0/3.3 V DC	HFM alarm signal
	20	IH_PWB_FAN_H	I	0/24 V DC	HFM: On/Off
	21	IH_PWB_FAN_L	I	0/24 V DC	HFM: On/Off
	22	DLP_MOT_CLR_DI R	-	-	Not used
	23	DLP_MOT_CLR_R DY	-	-	Not used
	24	DLP_MOT_CLR_C LK	-	-	Not used
	25	DLP_MOT_CLR_R EM	-	-	Not used
	26	GND	-	-	Ground
	27	DRM_MOT_CLR_ DIR	-	-	Not used
	28	DRM_MOT_CLR_ RDY	-	-	Not used
	29	DRM_MOT_CLR_ CLK	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC2	30	DRM_MOT_CLR_ REM	-	-	Not used
Connected to engine PWB	31	DLP_MOT_BK_DI R	I	0/3.3 V DC	DEVM drive switch signal
	32	DLP_MOT_BK_RD Y	0	0/3.3 V DC	DEVM ready signal
	33	DLP_MOT_BK_CL K	Ι	0/3.3 V DC (pulse)	DEVM clock signal
	34	DLP_MOT_BK_RE M	I	0/3.3 V DC	DEVM: On/Off
	35	DRM_MOT_BK_B RK	I	0/3.3 V DC	DRM break signal
	36	DRM_MOT_BK_DI R	Ι	0/3.3 V DC	DRM drive switch signal
	37	DRM_MOT_BK_R DY	0	0/3.3 V DC	DRM ready signal
	38	DRM_MOT_BK_CL K	Ι	0/3.3 V DC (pulse)	DRM clock signal
	39	DRM_MOT_BK_R EM	Ι	0/3.3 V DC	DRM: On/Off
	40	GND	-	-	Ground
	41	TRANS_MOT_BRK	Ι	0/3.3 V DC	TCM break signal
	42	TRANS_MOT_DIR	Ι	0/3.3 V DC	TCM drive switch signal
	43	TRANS_MOT_RDY	0	0/3.3 V DC	TCM ready signal
	44	TRANS_MOT_CLK	Ι	0/3.3 V DC (pulse)	TCM clock signal
	45	TRANS_MOT_RE M	Ι	0/3.3 V DC	TCM: On/Off
	46	TCON_SET	-	-	Not used
	47	DU_ENTER_SENS	0	0/3.3 V DC	DUS1: On/Off
	48	EXIT_FAN	Ι	0/24 V DC	EFM: On/Off
	49	DU_MOT_REM	T	0/3.3 V DC	DUM1/DUCL1: On/Off
	50	GND	-	-	Ground
YC3	1	+24V1	0	24 V DC	24 V DC power to EPWB
Connected to	2	+24V1	0	24 V DC	24 V DC power to EPWB
engine PWB	3	GND	-	-	Ground
	4	GND	-	-	Ground
	5	+12V	0	12 V DC	12 V DC power to EPWB
	6	GND	-	-	Ground
	7	+5V	0	5 V DC	5 V DC power to EPWB
	8	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC4	1	+24V1	Ι	24 V DC	24 V DC power from PSPWB
Connected to	2	+24V1	Ι	24 V DC	24 V DC power from PSPWB
power source	3	+24V1	Ι	24 V DC	24 V DC power from PSPWB
PWB	4	+12V	Ι	12 V DC	12 V DC power from PSPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
YC5	1	GND	-	-	Ground
Connected to	2	DRM_HEAT_REM	0	0/3.3 V DC	FH: On/Off
power source PWB	3	POWER_OFF	0	0/3.3 V DC	Sleep mode signal: On/Off
YC8	1	NC	-	-	Not used
Connected to	2	DLP_MOT_Bk_DIR	0	0/3.3 V DC	DEVM drive switch signal
developer motor	3	DLP_MOT_Bk_RD Y	I	0/3.3 V DC	DEVM ready signal
	4	DLP_MOT_Bk_CL K	0	0/3.3 V DC (pulse)	DEVM clock signal
	5	DLP_MOT_Bk_RE M	0	0/24 V DC	DEVM: On/Off
	6	GND	-	-	Ground
	7	24V2	0	24 V DC	24 V DC power to DEVM
YC9	1	NC	-	-	Not used
Connected to drum motor	2	DRM_MOT_Bk_BR K	0	0/3.3 V DC	DRM break signal
	3	DRM_MOT_Bk_DI R	0	0/3.3 V DC	DRM drive switch signal
	4	DRM_MOT_Bk_RD Y	Ι	0/3.3 V DC	DRM ready signal
	5	DRM_MOT_Bk_CL K	0	0/3.3 V DC (pulse)	DRM clock signal
	6	DRM_MOT_Bk_RE M	0	0/24 V DC	DRM: On/Off
	7	GND	-	-	Ground
	8	24V2	0	24 V DC	24 V DC power to DRM

Connector	Pin	Signal	I/O	Voltage	Description
YC11	1	+24V1	0	24 V DC	24 V DC power to HFM
Connected to	2	IH_PWB_FAN	0	0/24 V DC	HFM: On/Off
heater fan motor	3	IH_PWB_FAN_AL M	Ι	0/3.3 V DC	HFM alarm signal
	4	+12V	-	-	Not used
	5	IH_PWB_FAN2	-	-	Not used
	6	IH_PWB_FAN2_AL M	-	-	Not used
YC12	1	+24V2	0	24 V DC	24 V DC power to FPWB2
Connected to	2	+24V2	0	24 V DC	24 V DC power to FPWB2
feed PWB 2	3	+5V	0	5 V DC	5 V DC power to FPWB2
	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	GND	-	-	Ground
YC13	1	TRANS_MOT_BRK	0	0/3.3 V DC	TRM break signal
Connected to	2	TRANS_MOT_DIR	0	0/3.3 V DC	TRM drive switch signal
relay PWB	3	TRANS_MOT_RDY	Ι	0/3.3 V DC	TRM ready signal
	4	TRANS_MOT_CLK	0	0/3.3 V DC (pulse)	TRM clock signal
	5	TRANS_MOT_RE M	0	0/24 V DC	TRM: On/Off
	6	GND	-	-	Ground
	7	24V2	0	24 V DC	24 V DC power to TRM
	8	GND	-	-	Not used
	9	24V2	-	-	Not used
	10	TANK_SET	-	-	Not used
YC14	1	REG_BK_LED	0	Analog	IDS control signal
Connected to relay PWB	2	REG_BK_SENS1_ P	Ι	Analog	IDS detection signal
	3	REG_BK_SENS1_ S	I	Analog	IDS detection signal
	4	BELT_JAM_SENS	-	-	Not used
	5	DU_SENS	Ι	0/3.3 V DC	DUS2: On/Off
	6	PRESS_RLS_SEN S	-	-	Not used
	7	5V	0	5 V DC	5 V DC power to RYPWB
	8	PRESS_RLSMOT2 1	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC14	9	PRESS_RLSMOT2	-	-	Not used
Connected to	10	24V2	0	24 V DC	24 V DC power to RYPWB
relay PWB	11	DU_FAN	-	-	Not used
	12	DU_CL_LOWER_R EM	0	0/24 V DC	DUCL2: On/Off
	13	DU_OPEN_SW	Ι	0/3.3 V DC	DUCSW: On/Off
	14	DU2_B/	0	0/24 V DC (pulse)	DUM2 drive control signal
	15	DU2_A/	0	0/24 V DC (pulse)	DUM2 drive control signal
	16	DU2_B	0	0/24 V DC (pulse)	DUM2 drive control signal
	17	DU2_A	0	0/24 V DC (pulse)	DUM2 drive control signal
	18	GND	-	-	Ground
YC15	1	+24V1	0	24 V DC	24 V DC power to PCUSW
Connected to	2	N.C	-	-	Not used
paper con- veying unit switch	3	+24V2	Ι	24 V DC	24 V DC power from PCUSW
YC16	1	+24V2	0	24 V DC	24 V DC power to HVPWB
Connected to high voltage PWB	2	GND	-	-	Ground
YC17	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
relay PWB	3	CL_SOL_REM	0	0/24 V DC	CLSOL: On/Off
	4	24V2	0	24 V DC	24 V dc power to CLSOL
	5	MPF_LIFT_MOT_B	0	0/24 V DC	MPLM: On/Off
	6	MPF_LIFT_MOT_A	0	0/24 V DC	MPLM: On/Off
	7	24V2	0	24 V DC	24 V dc power to RYPWB
	8	MPF_CL_REM	0	0/24 V DC	MPPFCL: On/Off
	9	MPF_JAM_SENS	Ι	0/3.3 V DC	MPFS: On/Off
	10	MPF_LIFT_DOWN _SENS	Ι	0/3.3 V DC	MPLS2: On/Off
	11	MPF_LIFT_UP_SE NS	Ι	0/3.3 V DC	MPLS1: On/Off
	12	MPF_PPR_SET	Ι	0/3.3 V DC	MPPS: On/Off
	13	LED_3.3V3	0	3.3 V DC	3.3 V DC power to RYPWB
	14	MPF_LNG	Ι	0/3.3 V DC	MPPLSW: On/Off
	15	MPF_WID3	Ι	0/3.3 V DC	MPPWSW: On/Off
	16	MPF_WID2	Ι	0/3.3 V DC	MPPWSW: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC17	17	MPF_WID1	I	0/3.3 V DC	MPPWSW: On/Off
Connected to	18	MPF_TABLE	Ι	0/3.3 V DC	MPTSW: On/Off
relay PWB	19	GND	-	-	Ground
	20	GND	-	-	Ground
YC18	1	FSR_MOT_BRK	0	0/3.3 V DC	FUM break signal
Connected to	2	FSR_MOT_DIR	0	0/3.3 V DC	FUM drive switch signal
fuser motor	3	FSR_MOT_RDY	Ι	0/3.3 V DC	FUM ready signal
	4	FSR_MOT_CLK	0	0/3.3 V DC (pulse)	FUM clock signal
	5	FSR_MOT_REM	0	0/24 V DC	FUM: On/Off
	6	GND	-	-	Ground
	7	24V2	0	24 V DC	24 V DC power to FUM
YC19	1	EXIT_REAR_FAN	0	0/24 V DC	ERFM: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power to ERFM
eject rear fan motor					
YC20	1	JOB_SET		0/3.3 V DC	Job separator set signal
Connected to	2	GND	-	-	Ground
job separator	3	GND	_		Ground
	4	JOB_MOT_REM	0	0/24 V DC	JSEM: On/Off
	5	24V1	0	24 V DC	24 V DC power to JSMPWB
	6	JOB_MOT_CLK	0	0/3.3 V DC (pulse)	JSEM clock signal
	7	5V	0	5 V DC	5 V DC power to JSMPWB
	8	JOB_MOT_DIR	0	0/3.3 V DC	JSEM drive switch signal
	9	JOB_OPEN_SENS	I	0/3.3 V DC	JSOCS: On/Off
	10	JOB_SOL_REM	0	0/24 V DC	JSFSSOL: On/Off
	11	NC	_	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC22	1	24V2	0	24 V DC	24 V DC power to RCL
Connected to registration clutch	2	REG_CL_REM	0	0/24 V DC	RCL: On/Off
YC23	1	DU_ENTER_SENS	Ι	0/3.3 V DC	DUS1: On/Off
Connected to	2	EXIT_FAN	0	0/24 V DC	EFM: On/Off
relay PWB	3	24V2	0	24 V DC	24 V DC power to RYPWB
	4	DU_CL_UPPER_R EM	0	0/24 V DC	DUCL1: On/Off
	5	GND	-	-	Ground
	6	DU1_B/	0	0/24 V DC (pulse)	DUM1 drive control signal
	7	DU1_A/	0	0/24 V DC (pulse)	DUM1 drive control signal
	8	DU1_B	0	0/24 V DC (pulse)	DUM1 drive control signal
	9	DU1_A	0	0/24 V DC (pulse)	DUM1 drive control signal
	10	EDGE_FAN_REM	-	-	Not used
	11	EDGE_FAN_REM	-	-	Not used
	12	LOOP_SENS	Ι	0/3.3 V DC	LPS: On/Off
YC25	1	REG_MOT_B/	0	0/24 V DC (pulse)	RM drive control signal
Connected to	2	REG_MOT_A/	0	0/24 V DC (pulse)	RM drive control signal
registration motor	3	REG_MOT_B	0	0/24 V DC (pulse)	RM drive control signal
	4	REG_MOT_A	0	0/24 V DC (pulse)	RM drive control signal
YC26	1	3.3V2	0	3.3 V DC	3.3 V DC power to EPWB
Connected to	2	3.3V3	0	3.3 V DC	3.3 V DC power to EPWB
engine PWB	3	GND	-	-	Ground
	4	GND	-	-	Ground
YC27	1	MAIN_HEAT_REM	0	0/3.3 V DC	FH1: On/Off
Connected to	2	SUB_HEAT_REM	0	0/3.3 V DC	FH2: On/Off
fuser heater PWB	3	+24V2	0	24 V DC	24 V DC power to FHPWB
	4	ZEROC	0	0/3.3 V DC (pulse)	Zero-cross signal
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	FSR_RELAY	0	0/3.3 V DC	Fuser relay signal
	8	+24V1	0	24 V DC	24 V DC power to FHPWB
	9	PRESS_REM	-	-	Not used

2-3-8 Feed PWB 2

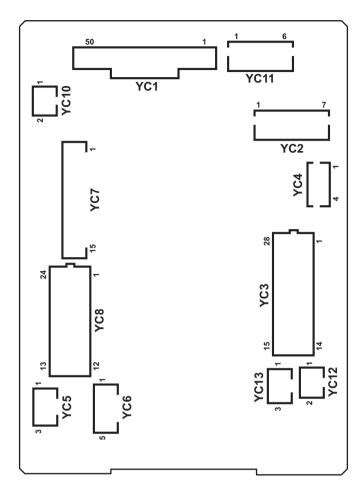


Figure 2-3-8 Feed PWB 2 silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	FEED_MOT_REM	T	0/3.3 V DC	PFM: On/Off
engine PWB	3	FEED_MOT_CLK	T	0/3.3 V DC (pulse)	PFM clock signal
	4	FEED_MOT_RDY	0	0/3.3 V DC	PFM ready signal
	5	FEED_MOT_DIR	T	0/3.3 V DC	PFM drive switch signal
	6	FEED_CL1_REM	I	0/24 V DC	PFCL1: On/Off
	7	FEED_CL2_REM	Ι	0/24 V DC	PFCL2: On/Off
	8	ASIST_CL2	I	0/24 V DC	ASCL2: On/Off
	9	LIFT_MOT2_REM	Ι	0/24 V DC	LM2: On/Off
	10	GND	-	-	Ground
	11	LIFT_MOT1_REM 1	I	0/24 V DC	LM1: On/Off
	12	CAS2_WID	0	0/3.3 V DC	PWSW2: On/Off
	13	CAS2_LNG3	0	0/3.3 V DC	PLSW2: On/Off
	14	CAS2_LNG2	0	0/3.3 V DC	PLSW2: On/Off
	15	CAS2_LNG1	0	0/3.3 V DC	PLSW2: On/Off
	16	CAS1_WID	0	0/3.3 V DC	PWSW1: On/Off
	17	CAS1_LNG3	0	0/3.3 V DC	PLSW1: On/Off
	18	CAS1_LNG2	0	0/3.3 V DC	PLSW1: On/Off
	19	CAS1_LNG1	0	0/3.3 V DC	PLSW1: On/Off
	20	GND	-	-	Ground
	21	CAS2_QUANT2	0	0/3.3 V DC	PGS2(L): On/Off
	22	CAS2_QUANT1	0	0/3.3 V DC	PGS2(U): On/Off
	23	CAS1_QUANT2	0	0/3.3 V DC	PGS1(L): On/Off
	24	CAS1_QUANT1	0	0/3.3 V DC	PGS1(U): On/Off
	25	LIFT_MOT1_LOC K	0	0/3.3 V DC	LM1 lock signal
	26	LIFT_MOT2_LOC K	0	0/3.3 V DC	LM2 lock signal
	27	CURRENT_SIG	0	0/3.3 V DC	Current signal
	28	V-FEED_CL	I	0/24 V DC	PCCL: On/Off
	29	COVER_OPEN	0	0/3.3 V DC	RLCSW: On/Off
	30	FEED2_SENS	0	0/3.3 V DC	PFPCS1: On/Off
	31	CAS1_P0	0	0/3.3 V DC	FS1: On/Off
	32	CAS1_LIFT_UP	0	0/3.3 V DC	LS1: On/Off
	33	GND	-	-	Ground
	34	CAS1_EMPTY	0	0/3.3 V DC	PS1: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC1	35	PICK_SOL1_RET	Ι	0/24 V DC	PUSOL1: On/Off (RET)
Connected to	36	PICK_SOL1_REM	I	0/24 V DC	PUSOL1: On/Off (ACT)
engine PWB	37	CAS2_P0	0	0/3.3 V DC	FS2: On/Off
	38	CAS2_LIFT_UP	0	0/3.3 V DC	LS2: On/Off
	39	CAS2_EMPTY	0	0/3.3 V DC	PS2: On/Off
	40	PICK_SOL2_RET	I	0/24 V DC	PUSOL2: On/Off (RET)
	41	PICK_SOL2_REM	Ι	0/24 V DC	PUSOL2: On/Off (ACT)
	42	GND	-	-	Ground
	43	REG_SENS	0	0/3.3 V DC	RS: On/Off
	44	FEED1_SENS	0	0/3.3 V DC	PCS: On/Off
	45	BEND_SENS	0	0/3.3 V DC	RDS: On/Off
	46	MID_MOT_PH	Ι	0/3.3 V DC	MM control signal
	47	MID_MOT_REM(ROL_CL)	I	0/3.3 V DC	MM/MCL: On/Off
	48	MID_MOT_CLK	T	0/3.3 V DC (pulse)	MM clock signal
	49	MID_MOT_PD	I	0/3.3 V DC	MM control signal
	50	ASIST_CL1	T	0/24 V DC	ASCL1: On/Off
YC2	1	FEED_MOT_GAI N	-	-	Not used
Connected to	2	FEED_MOT_DIR	0	0/3.3 V DC	PFM drive switch signal
paper feed	3	FEED_MOT_RDY	T	0/3.3 V DC	PFM ready signal
motor	4	FEED_MOT_CLK	0	0/3.3 V DC (pulse)	PFM clock signal
	5	FEED_MOT_REM	0	0/24 V DC	PFM: On/Off
	6	GND	-	-	Ground
	7	24V2	0	24 V DC	24 V DC power to PFM
YC3	1	CAS1_LNG1	I	0/3.3 V DC	PLSW1: On/Off
Connected to	2	CAS1_LNG2	I	0/3.3 V DC	PLSW1: On/Off
paper length switch 1/2,	3	GND	-	-	Ground
paper width	4	CAS1_LNG3	I	0/3.3 V DC	PLSW1: On/Off
switch 1/2, lift	5	CAS1_WID	I	0/3.3 V DC	PWSW1: On/Off
motor 1/2, paper gauge	6	GND	-	-	Ground
sensor 1(U)/	7	CAS2_LNG1	I	0/3.3 V DC	PLSW2: On/Off
(L) and paper	8	CAS2_LNG2	I	0/3.3 V DC	PLSW2: On/Off
gauge sen- sor 2(U)/(L)	9	GND	-	-	Ground
	10	CAS2_LNG3	Ι	0/3.3 V DC	PLSW2: On/Off
	11	CAS2_WID	Ι	0/3.3 V DC	PWSW2: On/Off
	12	GND	-	-	Ground

13 14	LIFT_MOT1_RET	~		
14		0	0/24 V DC	LM1: On/Off
	LIFT_MOT1_DR	0	0/24 V DC	LM1: On/Off
15	LIFT_MOT2_RET	0	0/24 V DC	LM2: On/Off
16	LIFT_MOT2_DR	0	0/24 V DC	LM2: On/Off
17	LED_5V	0	5 V DC	5 V DC power to PGS1(U)
18	GND	-	-	Ground
19	CAS1_QUANT1	I	0/3.3 V DC	PGS1(U): On/Off
20	LED_5V	0	5 V DC	5 V DC power to PGS1(L)
21	GND	-	-	Ground
22	CAS1_QUANT2	Ι	0/3.3 V DC	PGS1(L): On/Off
23	LED_5V	0	5 V DC	5 V DC power to PGS2(U)
24	GND	-	-	Ground
25	CAS2_QUANT1	Ι	0/3.3 V DC	PGS2(U): On/Off
26	LED_5V	0	5 V DC	5 V DC power to PGS2(L)
27	GND	-	-	Ground
28	CAS2_QUANT2	Ι	0/3.3 V DC	PGS2(L): On/Off
1	FEED_CL1_REM	0	0/24 V DC	PFCL1: On/Off
2	24V2	0	24 V DC	PFCL124 V DC power to PFCL1
3	FEED_CL2_REM	0	0/24 V DC	PFCL2: On/Off
4	24V2	0	24 V DC	24 V DC power to PFCL2
1	NC	-	-	Not used
2	24V2	0	24 V DC	24 V DC power to PCCL
3	V-FEED_CL_REM	0	0/24 V DC	PCCL: On/Off
1	LED_5V	0	5 V DC	5 V DC power to PCS
2	GND	-	-	Ground
3	FEED2_SENS	T	0/3.3 V DC	PCS: On/Off
4	COVER_OPEN	T	0/3.3 V DC	PCCSW: On/Off
5	GND	-	-	Ground
	17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	17 LED_5V 18 GND 19 CAS1_QUANT1 20 LED_5V 21 GND 22 CAS1_QUANT2 23 LED_5V 24 GND 25 CAS2_QUANT1 26 LED_5V 27 GND 28 CAS2_QUANT2 1 FEED_CL1_REM 2 24V2 3 FEED_CL2_REM 4 24V2 1 NC 2 24V2 3 V-FEED_CL_REM 1 LED_5V 2 GND 3 FEED_CL_REM 4 24V2 3 V-FEED_CL_REM 4 ED_5V 2 GND 3 FEED2_SENS 4 COVER_OPEN	17 LED_5V O 18 GND - 19 CAS1_QUANT1 I 20 LED_5V O 21 GND - 22 CAS1_QUANT2 I 23 LED_5V O 24 GND - 25 CAS2_QUANT1 I 26 LED_5V O 27 GND - 28 CAS2_QUANT2 I 1 FEED_CL1_REM O 2 24V2 O 3 FEED_CL2_REM O 4 24V2 O 3 V-FEED_CL_REM O 2 24V2 O 3 V-FEED_CL_REM O 2 GND - 2 24V2 O 3 V-FEED_CL_REM O 2 GND - 3 FEED_SV O 3 FEED2_SENS I 4 COVER_OPEN I	17 LED_5V O 5 V DC 18 GND - - 19 CAS1_QUANT1 I 0/3.3 V DC 20 LED_5V O 5 V DC 21 GND - - 22 CAS1_QUANT2 I 0/3.3 V DC 23 LED_5V O 5 V DC 24 GND - - 25 CAS2_QUANT1 I 0/3.3 V DC 26 LED_5V O 5 V DC 26 LED_5V O 5 V DC 27 GND - - 28 CAS2_QUANT2 I 0/3.3 V DC 21 FEED_CL1_REM O 0/24 V DC 2 24V2 O 24 V DC 3 FEED_CL2_REM O 0/24 V DC 4 24V2 O 24 V DC 3 V-FEED_CL_REM O 0/24 V DC 1 NC - - 2 QND 5 V DC - 3 V-FEED_CL_REM <

YC7				Voltage	Description
1	1	MID_B/	0	0/24 V DC (pulse)	MM drive control signal
Connected to	2	MID_A/	0	0/24 V DC (pulse)	MM drive control signal
middle motor, middle sen-	3	MID_B	0	0/24 V DC (pulse)	MM drive control signal
sor, registra-	4	MID_A	0	0/24 V DC (pulse)	MM drive control signal
tion sensor	5	BEND_SENS	-	-	Not used
and middle clutch	6	GND	-	-	Not used
oluton	7	5V	-	-	Not used
	8	GND	-	-	Ground
	9	FEED1_SENS	I	0/3.3 V DC	MS: On/Off
	10	5V	0	5 V DC	5 V DC power to MS
	11	GND	-	-	Ground
	12	REG_SENS	Ι	0/3.3 V DC	RS: On/Off
	13	5V	0	5 V DC	5 V DC power to RS
	14	MID_CL_REM	0	0/24 V DC	MCL: On/Off
	15	24V2	0	24 V DC	24 V DC power to MCL
YC8	1	24V2	0	24 V DC	24 V DC power to PUSOL1
Connected to	2	PICK_SOL1_REM	0	0/24 V DC	PUSOL1: On/Off (ACT)
primary paper feed	3	PICK_SOL1_RET	0	0/24 V DC	PUSOL1: On/Off (RET)
unit	4	LED_5V	0	5 V DC	5 V DC power to PS1
	5	GND	-	-	Ground
	6	CAS1_EMPTY_S ENS	Ι	0/3.3 V DC	PS1: On/Off
	7	LED_5V	0	5 V DC	5 V DC power to LS1
	8	GND	-	-	Ground
	9	CAS1_LIFT_UP_ SENS	I	0/3.3 V DC	LS1: On/Off
	10	5V	0	5 V DC	5 V DC power to FS1
	11	CAS1_P0_SENS	I	0/3.3 V DC	FS1: On/Off
	12	GND	-	-	Ground
	13	24V2	0	24 V DC	24 V DC power to PUSOL2
	14	PICK_SOL2_REM	0	0/24 V DC	PUSOL2: On/Off (ACT)
	15	PICK_SOL2_RET	0	0/24 V DC	PUSOL2: On/Off (RET)
	16	LED_5V	0	5 V DC	5 V DC power to PS2
	17	GND	-	-	Ground
	18	CAS2_EMPTY_S ENS	I	0/3.3 V DC	PS2: On/Off
	19	LED_5V	0	5 V DC	5 V DC power to LS2

Connector	Pin	Signal	I/O	Voltage	Description
YC8	20	GND	-	-	Ground
Connected to primary	21	CAS2_LIFT_UP_ SENS	Ι	0/3.3 V DC	LS2: On/Off
paper feed unit	22	5V	0	5 V DC	5 V DC power to FS2
unit	23	CAS2_P0_SENS	Ι	0/3.3 V DC	FS2: On/Off
	24	GND	-	-	Ground
YC10	1	ASIST_CL1	0	0/24 V DC	ASCL1: On/Off
Connected to assist clutch 1	2	24V2	0	24 V DC	24 V DC power to ASCL1
YC11	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
feed PWB 1	3	GND	-	-	Ground
	4	+5V	0	5 V DC	5 V DC power to FPWB1
	5	+24V2	0	24 V DC	24 V DC power to FPWB1
	6	+24V2	0	24 V DC	24 V DC power to FPWB1
YC12	1	ASIST_CL2	0	0/24 V DC	ASCL2: On/Off
Connected to assist clutch 2	2	24V2	0	24 V DC	24 V DC power to ASCL2
YC13	1	CURRENT_SIG	I	0/3.3 V DC	Current signal
Connected to	2	GND	-	-	Ground
current PWB	3	5V1		5 V DC	5 V DC power from CRPWB

2-3-9 Relay PWB

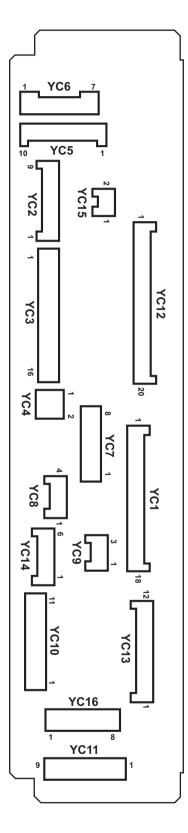


Figure 2-3-9 Relay PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	DU2_A	Ι	0/24 V DC (pulse)	DUM2 drive control signal
feed PWB 1	3	DU2_B	Ι	0/24 V DC (pulse)	DUM2 drive control signal
	4	DU2_A/	Ι	0/24 V DC (pulse)	DUM2 drive control signal
	5	DU2_B/	Ι	0/24 V DC (pulse)	DUM2 drive control signal
	6	DU_OPEN_SW	0	0/3.3 V DC	DUCSW: On/Off
	7	DU_CL_LOWER_R EM	Ι	0/24 V DC	DUCL2: On/Off
	8	DU_FAN	-	-	Not used
	9	24V2	Ι	24 V DC	24 V DC power from FPWB1
	10	PRESS_RLS_REM 2	-	-	Not used
	11	PRESS_RLS_REM 1	-	-	Not used
	12	5V	Ι	5 V DC	5 V DC power from FPWB1
	13	PRESS_RLS_SEN S	-	-	Not used
	14	DU_SENS	0	0/3.3 V DC	DUS2: On/Off
	15	BELT_JAM_SENS	-	-	Not used
	16	REG_BK_SENS1_ S	0	Analog	IDS detection signal
	17	REG_BK_SENS1_ P	0	Analog	IDS detection signal
	18	REG_BK_LED	Ι	Analog	IDS control signal
YC2	1	GND	-	-	Ground
Connected to	2	MPF_LNG	Ι	0/3.3 V DC	MPPLSW: On/Off
MP tray unit	3	5V	0	5 V DC	5 V DC power to MPPLSW
	4	MPF_WID3	I	0/3.3 V DC	MPPWSW: On/Off
	5	MPF_WID2	I	0/3.3 V DC	MPPWSW: On/Off
	6	GND	-	-	Ground
	7	MPF_WID1	I	0/3.3 V DC	MPPWSW: On/Off
	8	GND	-	-	Ground
	9	MPF_TABLE	Ι	0/3.3 V DC	MPTSW: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	LED_3.3V3	0	3.3 V DC	3.3 V DC power to MPPLSW
Connected to	2	GND	-	-	Ground
MP tray unit	3	MPF_PPR_SET	I	0/3.3 V DC	MPPS: On/Off
	4	GND	-	-	Ground
	5	MPF_LIFT_UP_SE NS	Ι	0/3.3 V DC	MPLS1: On/Off
	6	5V	0	5 V DC	5 V DC power to MPLS1
	7	GND	-	-	Ground
	8	MPF_LIFT_DOWN _SENS	Ι	0/3.3 V DC	MPLS2: On/Off
	9	5V	0	5 V DC	5 V DC power to MPLS1
	10	GND	-	-	Ground
	11	MPF_JAM_SENS	I	0/3.3 V DC	MPFS: On/Off
	12	5V	0	5 V DC	5 V DC power to MPFS
	13	MPF_CL_REM	0	0/24 V DC	MPPFCL: On/Off
	14	24V2	0	24 V DC	24 V DC power to MPPFCL
	15	MPF_LIFT_DR_A	0	0/24 V DC	MPLM: On/Off
	16	MPF_LIFT_DR_B	0	0/24 V DC	MPLM: On/Off
YC4	1	24V2	0	24 V DC	24 V DC power to CLSOL
Connected to cleaning solenoid	2	ID_SOL_REM	0	0/24 V DC	CLSOL: On/Off
YC5	1	TANK_SET	-	-	Not used
Connected to	2	24V2	-	-	Not used
feed PWB 1	3	GND	-	-	Not used
	4	24V2	Ι	24 V DC	24 V DC power from FPWB1
	5	GND	-	-	Ground
	6	TRANS_MOT_RE M	I	0/24 V DC	TRM: On/Off
	7	TRANS_MOT_CLK	Ι	0/3.3 V DC (pulse)	TRM clock signal
	8	TRANS_MOT_RDY	0	0/3.3 V DC	TRM ready signal
	9	TRANS_MOT_DIR	Ι	0/3.3 V DC	TRM drive switch signal
	10	TRANS_MOT_BRK	Ι	0/3.3 V DC	TRM break signal

Connector	Pin	Signal	I/O	Voltage	Description
YC6	1	24V2	0	24 V DC	24 V DC power to TRM
Connected to	2	GND	-	-	Ground
transfer motor	3	TRANS_MOT_RE M	0	0/24 V DC	TRM: On/Off
	4	TRANS_MOT_CLK	0	0/3.3 V DC (pulse)	TRM clock signal
	5	TRANS_MOT_RDY	Ι	0/3.3 V DC	TRM ready signal
	6	TRANS_MOT_DIR	0	0/3.3 V DC	TRM drive switch signal
	7	TRANS_MOT_BRK	0	0/3.3 V DC	TRM break signal
YC7	1	24V2	0	24 V DC	24 V DC power to DUCL2
Connected to	2	DU_CL2_REM	0	0/24 V DC	DUCL2: On/Off
duplex clutch 2, duplex	3	DU_OPEN	Ι	0/3.3 V DC	DUCSW: On/Off
cover switch	4	GND	-	-	Ground
and duplex	5	DU2_B/	0	0/24 V DC (pulse)	DUM2 drive control signal
motor 2	6	DU2_A/	0	0/24 V DC (pulse)	DUM2 drive control signal
	7	DU2_B	0	0/24 V DC (pulse)	DUM2 drive control signal
	8	DU2_A	0	0/24 V DC (pulse)	DUM2 drive control signal
YC9	1	GND	-	-	Ground
Connected to	2	DU_SENS	I	0/3.3 V DC	DUS2: On/Off
duplex sen- sor 2	3	5V	0	5 V DC	5 V DC power to DUS2
YC10	1	LOOP_SENS	I	0/3.3 V DC	LPS: On/Off
Connected to	2	GND	-	-	Ground
loop sensor ant ID sensor	3	5V	0	5 V DC	5 V DC power to LPS
	4	3.3V	0	3.3 V DC	3.3 V DC power to IDS
	5	REG_BK_LED	0	Analog	IDS control signal
	6	GND	-	-	Ground
	7	REG_BK_SENS1_ P	I	Analog	IDS detection signal
	8	REG_BK_SENS1_ S	I	Analog	IDS detection signal
	9	GND	-	-	Not used
	10	BELT_JAM_SENS	-	-	Not used
	11	5V	-	-	Not used

Connector	Pin	Signal	I/O	Voltage	Description
YC11	1	GND	-	-	Ground
Connected to	2	DU_ENTER_SENS	Т	0/3.3 V DC	DUS1: On/Off
duplex sen- sor 1, eject	3	5V	0	5 V DC	5 V DC power to DUS1
fan motor	4	EXIT_FAN_REM	0	0/24 V DC	EFM1: On/Off
and duplex	5	24V2	0	24 V DC	24 V DC power to EFM1
clutch 1	6	EXIT_FAN_REM	0	0/24 V DC	EFM2: On/Off
	7	24V2	0	24 V DC	24 V DC power to EFM2
	8	24V2	0	24 V DC	24 V DC power to DUCL1
	9	DU_CL_UPPER_R EM	0	0/24 V DC	DUCL1: On/Off
YC12	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
feed PWB 1	3	MPF_TABLE	0	0/3.3 V DC	MPTSW: On/Off
	4	MPF_WID1	0	0/3.3 V DC	MPPWSW: On/Off
	5	MPF_WID2	0	0/3.3 V DC	MPPWSW: On/Off
	6	MPF_WID3	0	0/3.3 V DC	MPPWSW: On/Off
	7	MPF_LNG	0	0/3.3 V DC	MPPLSW: On/Off
	8	LED_3.3V3	Ι	3.3 V DC	3.3 V DC power from FPWB1
	9	MPF_PPR_SET	0	0/3.3 V DC	MPPS: On/Off
	10	MPF_LIFT_UP_SE NS	0	0/3.3 V DC	MPLS1: On/Off
	11	MPF_LIFT_DOWN _SENS	0	0/3.3 V DC	MPLS2: On/Off
	12	MPF_JAM_SENS	0	0/3.3 V DC	MPFS: On/Off
	13	MPF_CL_REM	Ι	0/24 V DC	MPPFCL: On/Off
	14	24V2	Ι	24 V DC	24 V DC power from FPWB1
	15	MPF_LIFT_MOT_A	Ι	0/24 V DC	MPLM: On/Off
	16	MPF_LIFT_MOT_B	Ι	0/24 V DC	MPLM: On/Off
	17	24V2	0	24 V DC	24 V DC power from FPWB1
	18	CLN_SOL_REM	Ι	0/24 V DC	CLSOL: On/Off
	19	GND	-	-	Ground
	20	GND	-	-	Ground

Connector	Pin	Signal	I/O	Voltage	Description
YC13	1	LOOP_SENS	0	0/3.3 V DC	LPS: On/Off
Connected to	2	EDGE_FAN_REM	-	-	Not used
feed PWB 1	3	EDGE_FAN_REM	-	-	Not used
	4	DU1_A	Ι	0/24 V DC (pulse)	DUM1 drive control signal
	5	DU1_B	Ι	0/24 V DC (pulse)	DUM1 drive control signal
	6	DU1_A/	Ι	0/24 V DC (pulse)	DUM1 drive control signal
	7	DU1_B/	Ι	0/24 V DC (pulse)	DUM1 drive control signal
	8	GND	-	-	Ground
	9	DU_CL_UPPER_R EM	Ι	0/24 V DC	DUCL1: On/Off
	10	24V2	Ι	24 V DC	24 V DC power from FPWB1
	11	EXIT_FAN	Ι	0/24 V DC	EFM: On/Off
	12	DU_ENTER_SENS	0	0/3.3 V DC	DUS1: On/Off
YC16	1	DU1_B/	0	0/24 V DC (pulse)	DUM1 drive control signal
Connected to	2	DU1_A/	0	0/24 V DC (pulse)	DUM1 drive control signal
duplex motor 1	3	DU1_B	0	0/24 V DC (pulse)	DUM1 drive control signal
	4	DU1_A	0	0/24 V DC (pulse)	DUM1 drive control signal
	5	EDGE_FAN_REM	-	-	Not used
	6	24V2	-	-	Not used
	7	EDGE_FAN_REM	-	-	Not used
	8	24V2	-	-	Not used

2-3-10 LSU relay PWB

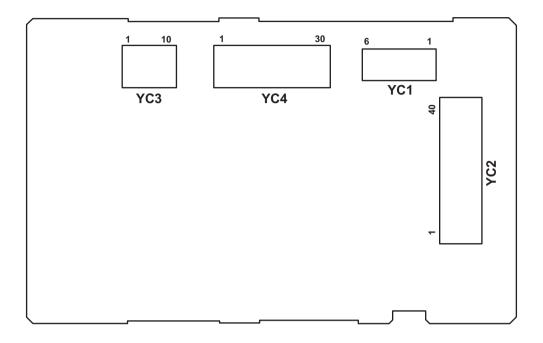


Figure 2-3-10 LSU relay PWB silk-screen diagram

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	+3.3V2	0	3.3 V DC	3.3 V DC power from EPWB
engine PWB	3	GND	-	-	Ground
	4	GND	-	-	Ground
	5	+5V AN	0	5 V DC	5 V DC power from EPWB
	6	+5V AN	0	5 V DC	5 V DC power from EPWB
YC2	1	SDI	0	0/3.3 V DC (pulse)	Serial communication data signal
Connected to	2	GND	-	-	Ground
engine PWB	3	SDO	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	4	GND	-	-	Ground
	5	SCLK	Ι	0/3.3 V DC (pulse)	Clock signal
	6	GND	-	-	Ground
	7	EEPROM_CS_2_B k	I/O	0/3.3 V DC (pulse)	APCPWB EEPROM data signal
	8	EEPROM_CS_1_B k	I/O	0/3.3 V DC (pulse)	APCPWB EEPROM data signal
	9	GND	-	-	Ground
	10	DATA_3N_Bk(LVD S)	Ι	0/3.3 V DC (pulse)	Video data signal (N)
	11	DATA_3P_Bk(LVD S)	Ι	0/3.3 V DC (pulse)	Video data signal (P)
	12	GND	-	-	Ground
	13	DATA_4N_Bk(LVD S)	Ι	0/3.3 V DC (pulse)	Video data signal (N)
	14	DATA_4P_Bk(LVD S)	Ι	0/3.3 V DC (pulse)	Video data signal (P)
	15	GND	-	-	Ground
	16	BD_Bk	0	0/3.3 V DC (pulse)	Horizontal synchronization signal
	17	LSU_TH_Bk	0	Analog	LSU thermistor detection signal
	18	PARA_SIG_P3_2B k	Ι	0/3.3 V DC	APCPWB control signal
	19	LDD_CS 2 Bk	Ι	0/3.3 V DC	APCPWB control signal
	20	LDD_CS 1 Bk	Ι	0/3.3 V DC	APCPWB control signal
	21	MSET_N	Ι	0/3.3 V DC	Control signal
	22	CUALM_BK	0	0/3.3 V DC	APCPWB alarm signal
	23	INT_ST_2_Bk	Ι	0/3.3 V DC	APCPWB control signal
	24	INT_ST_1_Bk	Ι	0/3.3 V DC	APCPWB control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC2	25	PARA_SIG_P0_Bk	I	0/3.3 V DC	APCPWB control signal
Connected to	26	PARA_SIG_P1_Bk	Ι	0/3.3 V DC	APCPWB control signal
engine PWB	27	PARA_SIG_P2_Bk	I	0/3.3 V DC	APCPWB control signal
	28	PARA_SIG_P3_Bk	Ι	0/3.3 V DC	APCPWB control signal
	29	PARA_SIG_P4_Bk	I	0/3.3 V DC	APCPWB control signal
	30	GND	-	-	Ground
	31	SDCLK_Bk	Ι	0/3.3 V DC (pulse)	APCPWB clock signal
	32	GND	-	-	Ground
	33	GAIN_FIX_Bk	Ι	0/3.3 V DC	APCPWB control signal
	34	GND	-	-	Ground
	35	DATA_1NBk(LVDS)	Ι	0/3.3 V DC (pulse)	Video data signal (N)
	36	DATA_1PBk(LVDS)	Ι	0/3.3 V DC (pulse)	Video data signal (P)
	37	GND	-	-	Ground
	38	DATA_2NBk(LVDS)	Ι	0/3.3 V DC (pulse)	Video data signal (N)
	39	DATA_2PBk(LVDS)	Ι	0/3.3 V DC (pulse)	Video data signal (P)
	40	GND	-	-	Ground
YC3	1	GND	-	-	Ground
Connected to	2	BD Bk	I	0/3.3 V DC (pulse)	Horizontal synchronization signal
APC PWB	3	LSU_TH Bk	Ι	Analog	LSU thermistor detection signal
	4	PALA_SIG P3_2Bk	-	-	Not used
	5	LDD_CS 2 Bk	-	-	Not used
	6	5V	0	5 V DC	5 V DC power to APCPWB
	7	5V	0	5 V DC	5 V DC power to APCPWB
	8	5V	0	5 V DC	5 V DC power to APCPWB
	9	LDD_CS 1 Bk	0	0/3.3 V DC	APCPWB control signal
	10	SDI1	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	11	SDO1	0	0/3.3 V DC (pulse)	Serial communication data signal
	12	CLK1	0	0/3.3 V DC (pulse)	APCPWB clock signal
	13	EEPROM CS 1 Bk	I/O	0/3.3 V DC (pulse)	APCPWB EEPROM data signal
	14	MSET_N	0	0/3.3 V DC	APCPWB control signal
	15	CUALM Bk	Ι	0/3.3 V DC	APCPWB alarm signal
	16	INT_ST 2 Bk	0	0/3.3 V DC	APCPWB control signal
	17	INT_ST 1 Bk	0	0/3.3 V DC	APCPWB control signal
	18	PALA_SIG P0 Bk	0	0/3.3 V DC	APCPWB control signal
	19	PALA_SIG P1 Bk	0	0/3.3 V DC	APCPWB control signal
	20	PALA_SIG P2 Bk	0	0/3.3 V DC	APCPWB control signal
	21	PALA_SIG P3 Bk	0	0/3.3 V DC	APCPWB control signal

Connector	Pin	Signal	I/O	Voltage	Description
YC3	22	PALA_SIG P4 Bk	0	0/3.3 V DC	APCPWB control signal
Connected to	23	SDCLK Bk	0	0/3.3 V DC (pulse)	APCPWB clock signal
APC PWB	24	GAIN FIX Bk	0	0/3.3 V DC	APCPWB control signal
	25	DATA_1NBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (N)
	26	DATA_1PBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (P)
	27	GND	-	-	Ground
	28	DATA_2NBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (N)
	29	DATA_2PBk(LVDS)	0	0/3.3 V DC (pulse)	Video data signal (P)
	30	GND	-	-	Ground

2-4-1 Appendixes

(1) List of maintenance parts

Maintenar	nce part name	Part No.	Alternative
Name used in service manual	Name used in parts list	Part NO.	part No.
Paper feed pulley			
45/55 ppm model	PULLEY FEED	302K906350	2K906350
35 ppm model	PULLEY FEED ASSY	302F906230	2F906230
Separation pulley			
45/55 ppm model	PULLEY RETARD	302K906360	2K906360
35 ppm model	RETARD ROLLER ASSY	302F909171	2F909171
Forwarding pulley			
45/55 ppm model	PULLEY PICKUP	302K906370	2K906370
35 ppm model	PULLEY PICKUP ASSY	302HN06080	2HN06080
Left registration roller	PARTS ROLLER REGIST L SP	302K994450	2K994450
Regist cleaner L	PARTS CLEANER REGIST ASSY	302LF94160	2LF94160
	SP		
Right registration roller	ROLLER REGIST R	302LF24150	2LF24150
Regist cleaner R	UNDER CLEANER REGIST	2BL07950	-
Middle roller	PARTS ROLLER MIDDLE L SP	302LC94550	2LC94550
Paper conveying roller	PARTS ROLLER FEED LOW SP	302K994430	2K994430
Assist roller			
45/55 ppm model	PARTS ROLLER ASSIST SP	302K994420	2K994420
			
Transfer belt unit	PARTS BELT ASSY SP	302LF94060	2LF94060
MP paper feed pulley	PULLEY PAPER FEED	2AR07220	-
MP forwarding pulley	PULLEY SEPARATION	2AR07230	

Maintenar	nce part name	Part No.	Alternative
Name used in service manual	Name used in parts list	Part No.	part No.
Contact glass for Metric	PARTS CONTACT-GLASS ASSY(C) SP	302K994040	2K994040
for Inch	PARTS CONTACT-GLASS ASSY(I) SP	302K994030	2K994030
LED mount	PARTS MOUNT LED ASSY SP	302K993040	2K993040
Original size sensor	SENSOR ORIGINAL	302H044110	2H044110
ISU	PARTS IMAGE SCANNER L SP	302K993083	2K993083
Lower duplex roller			
45/55 ppm model	PARTS ROLLER DU LOW SP	302K994470	2K994470
35 ppm model	PARTS ROLLER DU LOW SP	302LK94060	2LK94060
Middle duplex roller	PARTS ROLLER DU MID SP	302K994480	2K994480
Upper duplex roller			
45/55 ppm model	PARTS ROLLER DU UP SP	302K994491	2K994491
35 ppm model	PARTS ROLLER DU UP SP	302LK94070	2LK94070
Eject roller B	PARTS ROLLER EXIT SP	302LC94350	2LC94350
Eject roller	PARTS ROLLER EXIT SP	302LH94290	2LH94290
Belt filter	PARTS FILTER BELT UNIT(V) SP	302LC94130	2LC94130
LSU filter	PARTS FILTER FAN ASSY(Z) SP	302LF94300	2LF94300
Toner filter	FILTER LEFT SIDE	302LC33370	2LC33370
Left filter	FILTER LEFT SIDE	302LC33370	2LC33370
Eject filter	FILTER TOP	302LF33660	2LF33660

(2) Maintenance kits

Mainte	Maintenance part name					
Name used in service	Name used in parts list	 Parts No. 	part No.			
120 V specifications		-				
MK-6305A/Maintenance kit (600,000 pages)	MK-6305A/MAINTENANCE KIT	1702LH7US1	072LH7U1			
Drum unit	DK-6305	-	-			
Developer unit	DV-6305	-	-			
Fuser unit	FK-6306	-	-			
Transfer belt unit	PARTS BELT ASSY SP	-	-			
Eject filter	FILTER TOP	-	-			
Toner/Left filter	FILTER LEFT SIDE	-	-			
220 - 240 V specifications	-					
MK-6305A/Maintenance kit (600,000 pages)	MK-6305A/MAINTENANCE KIT	1702LH8KL0	072LH8KL			
Drum unit	DK-6305	-	-			
Developer unit	DV-6305	-	-			
Fuser unit	FK-6307	-	-			
Transfer belt unit	PARTS BELT ASSY SP	-	-			
Eject filter	FILTER TOP	-	-			
Toner/Left filter	FILTER LEFT SIDE	-	-			

(3) Periodic maintenance procedures

Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Test copy	Perform at the maxi-	Test	Test		
and test print	mum copy size	сору	сору		



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Paper feed ,conveying- section	Paper feed pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. CH:performing U901 and check feeding count: Target to replace at 150K.	P.1-5-7
	Separation pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. CH:performing U901 and check feeding count: Target to replace at 150K.	P.1-5-7
	Forwarding pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. CH:performing U901 and check feeding count: Target to replace at 150K.	P.1-5-7
	Left registration roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Regist cleaner L	Clean	Clean	Vacuum.	P.1-5-44
	Right registration roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Regist cleaner R	Clean	Clean	Vacuum.	P.1-5-44
	Middle roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Paper conveying roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Assist roller	Clean	Clean	Clean with alcohol or a dry cloth. 45/55 ppm model	
	Transfer belt unit	-	Replace	Every 600k Replace.(MK KIT)	
	MP paper feed pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. CH:performing U901 and check feeding count: Target to replace at 150K.	P.1-5-14
	MP forwarding pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. CH:performing U901 and check feeding count: Target to replace at 150K.	
	Guides	Clean	Clean	Clean with alcohol or a dry cloth.	P.1-5-43



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
· · · · ·	Contact glass	-	Clean	DP slit glass: CL dry cloth or alco- hol wet cloth is strictly prohibited. When installing DP, CL with dry cloth.Contact glass for original: CL alcohol or dry cloth.(Face side) Only when unusual image (line or stain) appear,wipe the back side with dry cloth after cleaning with alcohol only. (Back side)	
	Mirror A	Clean	-	Clean:airblow after dry cloth only when unusual image(line) arises.	
	Mirror B	Clean	-	Clean:airblow after dry cloth only when unusual image(line) arises. 2pcs	
	ISU lens	Clean	-	Clean:airblow after dry cloth only when unusual image(line) arises.	
	LED mount	Check Replace	-	Replace if there are image prob- lems.	
	RAIL ISU R/F	Lubricat ion	-	Apply grease if abnormal sound and jitter image appears Optical rail grease PG-671(P/ N:60170000)	
	Original size sensor	Check Clean	-	Alcohol or dry cloth if there is problem.(lighting part and light reception part.)	
	ISU	Check Replace	-	Replace if there are image prob- lems.	P.1-5-26

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Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Transfer section	Transfer belt unit	-	Replace	Every 600k Replace. (MK KIT)	P.1-5-41

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Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Developer section	Developer unit	Clean	Replace	Vacuum. Every 600k Replace. (MK KIT)	P.1-5-35
	Developer duct	Clean	Clean	Vacuum.	P.2-4-10



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Drum sec- tion	Drum unit	Clean	Replace	Vacuum. Every 600k Replace. (MK KIT)	P.1-5-36



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Fuser sec- tion	Fuser unit	-	Replace	Every 600k Replace.(MK KIT)	P.1-5-45



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Eject,Duple	Lower duplex roller	-	Clean	Clean with alcohol or a dry cloth.	
x section	Middle duplex roller	-	Clean	Clean with alcohol or a dry cloth.	
	Upper duplex roller	-	Clean	Clean with alcohol or a dry cloth.	
	Eject roller B	-	Clean	Clean with alcohol or a dry cloth.	
	Eject roller	-	Clean	Clean with alcohol or a dry cloth.	



Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Outer, Cover	Outer Covers	-	Clean	Clean with alcohol or a dry cloth.	

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Section	Maintenance part/location	User call	600K/1200K	Points and cautions	Page
Driving,	Drum filter	Clean	Clean	Vacuum.	P.1-5-82
Other	Developer filter	Clean	Clean	Vacuum.	P.1-5-82
	Belt filter	Clean	Clean	Vacuum.	P.1-5-80
	LSU filter	-	Clean	Vacuum.	P.1-5-81
	Toner filter Left filter	Replace	Replace	Every 600k Replace. (MK KIT) 2pcs	P.1-5-78 P.1-5-79
	Eject filter	Replace	Replace	Every 600k Replace. (MK KIT) 2pcs	P.1-5-77
	Cleaning the toner collection duct	Clean	Clean	Vacuum.	P.2-4-8
	Cleaning the inner air duct	Clean	Clean	Vacuum.	P.2-4-10
	Cleaning the duct at the back of the devel- oper unit	Clean	Clean	Vacuum.	P.2-4-10
	Each Clutches	Check Replace	Check	Check the image registration and paper feed conveying condition on paper feed conveying (regis- tration) part.	
	Sensors	Check	Check	Clean with alcohol or a dry cloth. (lighting part and light reception part.)	
	Image quality	Check Adjust	Check Adjust		

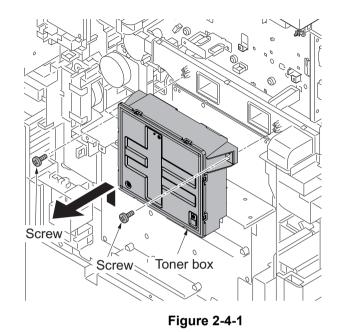
* : Please do not use spray containing flamable gas for air-blow or air-brush purposes.

(4) Inner Cleaning

1. Cleaning the toner collection duct 1

Procedure

- 1. Remove the rear upper cover and the rear lower cover(see page P.1-5-62).
- 2. Remove two screws.
- 3. Remove the toner box.



- 4. Insert the vacuum cleaner inlet from the opening at the toner duct, vacuum toner for 1 minutes.
 - * : In order to fully vacuum toner, fill in the openings between the cleaner tip and the duct with a cloth.

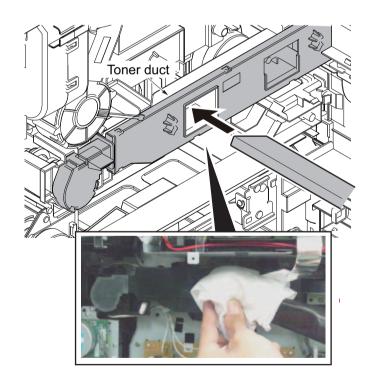


Figure 2-4-2

- 2. Cleaning the toner collection duct 2 **Procedure**
 - 1. Unhook three hooks and then remove the duct lid.

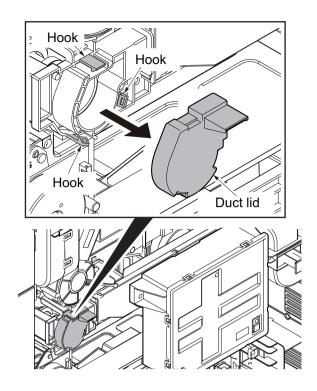


Figure 2-4-3

2. Vacuum the main unit duct at its toner duct unit outtakes, using a vacuum cleaner.

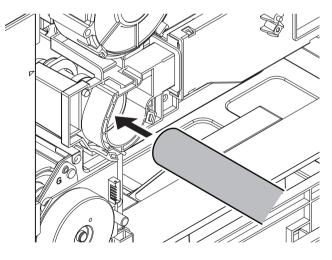


Figure 2-4-4

3. Cleaning the inner air duct

Procedure

- 1. Remove the developer unit and the drum unit (see page P.1-5-35,P.1-5-36).
- 2. Pull out the paper conveying unit.
- 3. Remove the two screws holding the feed guide plate.
- 4. Clean the back of the paper conveying plate.
- 5. Check that the toner outlet, to which the cooling duct is joined in the developer unit, is not clogged with toner.
- 6. Remove toner accumulated in the duct by a vacuum cleaner via the toner outlet.
- 7. Refit all the removed parts.

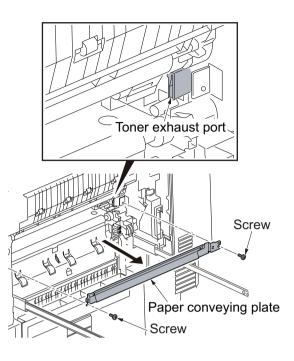


Figure 2-4-5

4. Cleaning the duct at the back of the developer unit

Procedure

- 1. Remove the developer unit (see page P.1-5-35).
- 2. Remove toner inside the cooling ducts using a vacuum cleaner.

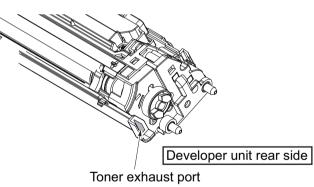


Figure 2-4-6

*: To be performed at 300kpm maintenance:

Clean the conveying guide (see page P.1-5-43) and clean both sides of the developer unit.



Cleaning Developer unit

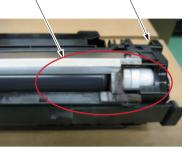


Figure 2-4-7

(5) Repetitive defects gauge

 -	First occurrence o	f defect
	38 mm/1 1/2" 39 mm/1 9/16" 44 mm/1 3/4" 57 mm/2 1/4" 63 mm/2 1/2"	Charger roller Magnet roller Sleeve roller Transfer roller Right registration roller Left registration roller
 •	109.9 mm/4 5/16"	Press roller Heat roller
 ◄	125.7 mm/4 15/16"	Drum
 •	164 mm/6 7/16"	Transfer belt

(6) Firmware environment commands

The printer maintains a number of printing parameters in its memory. There parameters may be changed permanently with the FRPO (Firmware RePrOgram) commands.

This section provides information on how to use the FRPO command and its parameters using examples.

Using FRPO commands for reprogramming firmware

The current settings of the FRPO parameters are listed as optional values on the service status page.

Note: Before changing any FRPO parameter, print out a service status page, so you will know the parameter values before the changes are made. To return FRPO parameters to their factory default values, send the FRPO INIT (FRPO-INITialize) command.(IR! FRPO INIT; EXIT;)

The FRPO command is sent to the printer in the following sequence: !R! FRPO parameter, value; EXIT; Example: Changing emulation mode to PCL6 !R! FRPO P1, 6; EXIT;

FRPO parameters

Item	FRPO	Setting values	Factory setting
Top margin	A1	Integer value in inches	0
	A2	Fraction value in 1/100 inches	0
Left margin	A3	Integer value in inches	0
	A4	Fraction value in 1/100 inches	0
Page length	A5	Integer value in inches	17
	A6	Fraction value in 1/100 inches	30
Page width	A7	Integer value in inches	17
	A8	Fraction value in 1/100 inches	30
Default pattern resolution	B8	0: 300 dpi 1: 600 dpi	0
Page orientation	C1	0: Portrait 1: Landscape	0
Default font No. *	C2	Middle two digits of power-up font	0
	C3	Last two digits of power-up font	0
	C5	First two digits of power-up font	0
PCL font switch	C8	0: HP compatibility mode 32: Conventional compatibility mode	0
Print density control parameter	D4	1: Pale 2: Relatively pale 3: Normal 4: Relevantly dark 6: Dark	4
Total host buffer size	H8	0 to 99 in units of the size defined by FRPO S5	5
Form feed time-out value	H9	Value in units of 5 seconds (1 to 99)	6 (30 s)

Item	FRPO	Setting values	Factory setting
Duplex mode	N4	0: Off 1: Long edge binding 2: Short edge binding	0
Sleep timer time-out time	N5	Value in units of 1 minute (1 to 240)	35 ppm: 45 45/55 ppm: 60
Ecoprint level	N6	0: Off 2: On	0
Default emulation mode	P1	6: PCL 6 9: KPDL	120V: 9 220-240V: 6
Carriage-return action	P2	0: Ignores 1: Carriage-return 2: Carriage-return + linefeed	1
Linefeed action	P3	0: Ignores 1: Linefeed 2: Linefeed + carriage-return	1
Automatic emulation switching	P4	0: AES disabled 1: AES enabled	120V: 1 220-240V: 0
Alternative emulation	P5	Same as the P1 values except that 9 is ignored.	6
Automatic emulation switching trigger	P7	 0: Page eject commands 1: None 2: Page eject and prescribe EXIT commands 3: Prescribe EXIT commands 4: Formfeed (^AL) commands 6: Pescribe EXIT and formfeed commands 10: Page eject commands; if AES fails, resolves to KPDL 	120V: 11 220-240V: 10
Command recognition character	P9	ASCII code of 33 to 126	82 (R)
Default stacker	R0	1 (inner tray)	1

ltem	FRPO	Setting values	Factory setting
Default paper size	R2	0: Size of the default paper cassette (See R4.) 1: Monarch ($3-7/8 \times 7-1/2$ inches) 2: Business ($4-1/8 \times 9-1/2$ inches) 3: International DL (11×22 cm) 4: International C5 (16.2×22.9 cm) 5: Executive ($7-1/4 \times 10-1/2$ inches) 6: US Letter ($8-1/2 \times 11$ inches) 7: US Legal ($8-1/2 \times 14$ inches) 8: A4 (21.0×29.7 cm) 9: JIS B5 (18.2×25.7 cm) 10: A3 ($29.7 \cdot 42$ cm) 11: B4 ($25.7 \cdot 36.4$ cm) 12: US Ledger ($11 \cdot 17$ inches) 13: ISO A5 14: A6 (10.5×14.8 cm) 15: JIS B6 (12.8×18.2 cm) 16: Commercial #9 ($3-7/8 \times 8-7/8$ inches) 17: Commercial #9 ($3-7/8 \times 8-7/8$ inches) 17: Commercial #6 ($3-5/8 \times 6-1/2$ inches) 18: ISO B5 (17.6×25 cm) 19: Custom (11.7×17.7 inches) 20:B4toA4 21:A3toA4 22:A4toA4[98%] 23:STKtoB4 30: C4 ($22.9 \cdot 32.4$ cm) 31: Hagaki (10×14.8 cm) 32: Ofuku-hagaki (14.8×20 cm) 33: Officio II 38: 12×18 39: 8K 40: 16K 42: 8.5×13.5 inches 50: Statement 51: Folio 52: Youkei 2 53: Youkei 4	0
Default cassette	R4	0: MP tray 1: Cassette 1 2: Cassette 2 3: Cassette 3 4: Cassette 4 5: Cassette 5	1
Sorter full action	S3	0: Stop operation with detecting tray-full 1: Switching to the eject-able destinations when bin becomes tray full	0
A4/letter equation	S4	0: Off 1: On	1

Item	FRPO	Setting values	Factory setting
Host buffer size	S5	0: 10 KB 1: 100 KB 2: 1024 KB	1
Wide A4	Т6	0: Off 1: On	0
Line spacing *	U0	Lines per inch (integer value)	6
	U1	Lines per inch (decimal value)	0
Character spacing *	U2	Characters per inch (integer value)	10
	U3	Characters per inch (decimal value)	0
Country code	U6	0: US-ASCII 1: France 2: Germany 3: UK 4: Denmark 5: Sweden 6: Italy 7: Spain 8: Japan 9: US Legal 10: IBM PC-850 (Multilingual) 11: IBM PC-860 (Portuguese) 12: IBM PC-863 (Canadian French) 13: IBM PC-865 (Norwegian) 14: Norway 15: Denmark 2 16: Spain 2 17: Latin America 50 - 99: HP PCL symbol set coding	41
Code set at power up in daisywheel emulation	U7	0: Same as the default emulation mode (P1) 1: IBM 6: PCL	53
Font pitch for fixedpitch scalable	U8	Default font pitch (integer value)	10
font *	U9	Default font pitch (decimal value)	0
Font height for the default scal-	V0	Integer value in 100 points: 0 to 9	0
able font *	V1	Integer value in points: 0 to 99	12
	V2	decimal value in 1/100 points: 0, 25, 50, 75	0

ltem	FRPO	Setting values	Factory setting
Default scalable font *	V3	Name of typeface of up to 32 characters, enclosed with single or double quotation marks	Courier
Default weight (courier and letter Gothic)	V9	0: Courier = darkness Letter Gothic = darkness 1: Courier = regular Letter Gothic = darkness 4: Courier = darkness Letter Gothic = regular 5: Courier = regular	5
Paper type for the MP tray	X0	Letter Gothic = regular 1: Plain 2: Transparency 3: Preprinted 4: Label 5: Bond 6: Recycle 7: Vellum 9: Letterhead 10: Color 11: Prepunched 12: Envelope 13: Cardstock 14: Coated 16: Thick	1
Paper type for cassettes 1 and 2	X1 X2	17: High quality 21 to 28: Custom1 to 8 1: Plain 3: Preprinted 5: Bond 6: Recycled 7: Vellum 9: Letterhead 10: Color	1
		11: Prepunched 16: Thick 17: High quality 21 to 28: Custom1 to 8	

Item	FRPO	Setting values	Factory setting
Paper type for optional cas- settes 3 to 7	X3 X4 X5	1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21 to 28: Custom1 to 8	1
PCL paper source	X9	 Paper selection depending on an escape sequence compatible with HP-LJ5Si. Paper selection depending on an escape sequence compatible with HP-LJ8000. 	0
Automatic continue for 'Press GO'	Y0	0: Off 1: On	0
Automatic continue timer	Y1	Value in units of 5 seconds (1 to 99)	6 (30 s)
Error message for device error	Y3	0: Not detect 127: Detect	127
Duplex operation for specified paper type (Prepunched, Preprintedand Letterhead)	Y4	0: Off 1: On	0
Default operation for PDF direct printing	Y5	 O: Enlarges or reduces the image to fit in the current paper size. Loads paper from the current paper cassette. Through the image. Loads paper which is the same size as the image. Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads paper from the current paper cassette. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. Through the image. Loads Letter, A4 size paper depending on the image size. 	0
e-MPS error	Y6	 0: Does not print the error report and display the error message. 1: Prints the error report. 2: Displays the error message. 3: Prints the error report and displays the error message. 	3

*: Ignored in some emulation modes.

(7) System Error (Fxxxx) Outline

The document is subscribed to describe the outline of the factors of the Fxxx errors that are not described in the

service manual. Please utilize it to refer to checking the factors.

Please utilize it as the measures when the system is not recovered after power off/on or it frequently occurs.

It may be from the hardware factor while the error (Fxxx) is indicated.

Please initially check the following.

Check the DDR2 memory and neighboring parts:

Check the contact of YS1 or YS2 with the memory. Replace the memory if the error repeats.

Check the HDD if the error repeats after replacing the main board.

Take care, however, of handling the data when formatting or replacing the HDD.

Check the HDD : Replace the HDD if the error repeats after formatting the HDD.

2LL/2LJ/2LH-3

No.	Content	Check procedure & check point	Remark 1	Remark 2
-	Lock-up at Welcome display (The display unchages after 3 minutes 30 seconds or more)	 Check proceeding a criteck point Check connection of the harness (Panel to Main board), (Main board to HDD) and connectors and check function. Check contact of the DDR memory by detaching and reattaching. and check function. Check contact of the DDR memory by detaching and reattaching. and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021Memory initializing to initialize the controller backup memory and check function. Replace the panel board and check function. Replace the main board and check function. Replace the USBLOG and contact the Service Administrative Division. 	*User data and installed software is deleted if executing the U024. Reinstallation is required.	[Main - Panel Interface] Main bord:YC12, YC1,YC30 Panel board:YC1,YC2,YC3 [Main - HDD] Main board:YC1,YC2
	CF000 appears in 3minutes 30 seconds after the Welcome display continues Panel—Main board communication error	 Check connection of the harness (Panel to Main board), (Main board to HDD) and connectors and check function. Check contact of the DDR memory by detaching and reattaching. and check function. replace if available and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the Panel board and check function. Replace the USBLOG and contact the Service Administrative Division. 		[Main-Panel Interface] Mainboard: YC12,YC17,YC30 Panel borad: YC1,YC2,YC3 If the LEDs are in the state belwo when the F000 appears, the DDR2 memory failure may be the cause. Check contact of theYS1 or YS2 with the memory. Memory LED turned on
F10X F11X	An error is detected at OS or some of device drivers.	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Replace the UDB and check function. 		
F12X	An error is detected at the Scan control section	 Check connection of the harness (Scan/DP - Main board) and connectors and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the Scan/DP board and check function. Replace the main board and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		[Main-Scan Interface] Main board:YC11,YC25 ISC board: [Main-DP relay Interface] (Check if the boards are firmly connected via the board-to- board connector.) Main board:YC10 DP relay board:YC4
F13X	An error is detected at the Panel control section	 Check connection of the harness (Panel - Main board) and connectors and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the panel board and check function. Replace the main board and check function. Replace the USBLOG and contact the Service Administrative Division. 		[Main-Panel Interface] Main board:YC12,YC17,YC30 Panel board:YC1,YC2,YC3
F14X	An error is detected at the FAX control section	 Check connection of the harness (FAX - Main board) and connectors and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Execute the U671 Clear FAX back up data (FAX DIMM clear) and check function. (Take cae of the received data since it is cleared) Replace the FAX_DIMM and check function. Replace the FAX board and check function. Replace the usin board and check function. Replace the USLOG and contact the Service Administrative Division. 		F14A,F14F: KUIO error Main board (USB hub) [Main-KUIO Interface] Main board:YC8,YC9 KUIO board:YC3,YC4
F15X	An error is detected at the authentication device control section	 J) Check connection of the harness (Authentication device - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the main board and check function. 5) Replace the HDD and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. 	Authentication device: Card Reader, etc.	
F17X	An error is detected at the print data control section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Replace the USBLOG and contact the Service Administrative Division. 		
F18X	An error is detected at the Video control secion	 Check connection of the harness (Engine - Main board) and connectors and check function. Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the engine board and check function. Replace the main board and check function. Replace the USBLOG and contact the Service Administrative Division. 		[Main⇔ENGINE Interface] Main board:YC3 Engine board:YC46 or YC50
F19X F1AX	An error is detected at the OS or some of device drivers	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F1BX	An error is detected at the Security management section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		

No.	Content	Check procedure & check point	Remark 1	Remark 2
	An error is detected at the	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 	*The F1C4 error appears	
F1CX	File System management	and check function. 3) Replace the main board and check function.	with the HDD security kit at	
	section	 4) Replace the HDD and check function. 5) Retrieve the USBLOG and contact the Service Administrative Division. 	work.	
		1) Format the HDD and check function. (U024 FULL formatting)	*The F1D4 error is RAM	
E1DV	An error is detected at the Image memory management	2) Execute the U021 Memory initializing to initialize the controller backup memory and check function.	allocation error. 1Check it with the U340	
	section	3) Replace the main board and check function.4) Replace the HDD and check function.	2Initialize the setting	
		5) Retrieve the USBLOG and contact the Service Administrative Division.	valued with the U021	
F1EX		 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 		
F1FX	An error is detected at the OS or some of device drivers	and check function. 3) Replace the main board and check function.		
F20X		 4) Replace the HDD and check function. 5) Retrieve the USBLOG and contact the Service Administrative Division. 		
F21X		1) Check contact of the DDR memory and check function.		[DDR2 memory contact check]
F22X		2) Format the HDD and check function. (U024 FULL formatting)		Main board:YS1 or YS2 A certain part of the memory be
FZZA	An error is detected at the Image processing section	3) Execute the U021 Memory initializing to initialize the controller backup memory and check function.		faulty. The frequency of faiure occurrence is dependent on the
F23X		 Replace the main board and check function. Replace the HDD and check function. 		frequency of access to the
1257		6) Retrieve the USBLOG and contact the Service Administrative Division.		faulty bit. The ASIC may be faulty if the memory is not
		1) Check contact of the DDR memory and check function.		[DDR2 memory contact check] Main board:YS1 or YS2
		2) Format the HDD and check function. (U024 FULL formatting) 3) Execute the U021 Memory initializing to initialize the controller backup memory	*The F248 eror is printer process error. if it repeats	A certain part of the memory be faulty. The frequency of failure
F24X	An error is detected at the System management section	and check function.	with a certain print data,	occurrence is dependent on the
	.,	4) Replace the main board and check function.5) Replace the HDD and check function.	retrieve the capture data and USBLOG.	frequency of access to the faulty bit. The ASIC may be
		6) Retrieve the USBLOG and contact the Service Administrative Division.		faulty if the memory is not sensitive.
		1) Format the HDD and check function. (U024 FULL formatting)		
FOFY	An error is detected at the	 Execute the U021 Memory initializing to initialize the controller backup memory and check function. 	*This may be owing to the	
F25X	Network management section	 Replace the main board and check function. Retrieve the USBLOG and contact the Service Administratuve Division. 	users network environment.	
		(or retrieve the packet capture data depending on the reult of analysis)		
F26X F27X		 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 		
F28X	An error is detected at the	and check function. 3) Replace the main board and check function.		
F29X	oystern management section	4) Replace the HDD and check function.		
F2AX F2BX		5) Retrieve the USBLOG and contact the Service Administrative Division.		
F2CX F2DX		 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 		
	An error is detected at the Network control section	and check function. 3) Replace the main board and check function.		
F30X F31X		4) Retrieve the USBLOG and contact the Service Administratuve Division. (or retrieve the packet capture data depending on the reult of analysis)		
F32X		 Check connection of the harness (Scan/DP board - main board) and connectors 		
		and check function.		
F33X	An error is detected at the	2) Format the HDD and check function. (U024 FULL formatting)3) Execute the U021 Memory initializing to initialize the controller backup memory		
1 357	Scan management section	and check function. 4) Replace the Scan/DP board and check function.		
		5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division.		
		1) Check connection of the harness (Panel board - main board) and connectors		
		and check function. 2) Format the HDD and check function. (U024 FULL formatting)		
F34X	An error is detected at the Panel management section	3) Execute the U021 Memory initializing to initialize the controller backup memory and check function.		
	r and management cooler	 4) Replace the panel board and check function 5) Replace the main board and check function. 		
		6) Retrieve the USBLOG and contact the Service Administrative Division.		
		 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 		
F35X	An error is detected at the	and check function.		
	Print control section	3) Replace the main board and check function.4) Replace the HDD and check function.		
		5) Retrieve the USBLOG and contact the Service Administrative Division. 1) Format the HDD and check function. (U024 FULL formatting)		
	An orror is detected at the	 Execute the U021 Memory initializing to initialize the controller backup memory and check function. 		
F36X	An error is detected at the Print management section	3) Replace the main board and check function.		
		 Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
		 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory 		
		and check function. 3) Execute the U671 Clear FAX back up data (FAX DIMM clear) and check		F14A,F14F:KUIO error Main board (USB hub)
F37X	An error is detected at the	function.		. ,
	FAX management section	(Take cae of the received data since it is cleared) 4) Replace the FAX_DIMM and check function.		[Main-KUIO Interface] Main board: YC8,YC9
		5) Replace the main board and check function. 6) Replace the HDD and check function.		KUIO board: YC3,YC4
		7) Retrieve the USBLOG and contact the Service Administrative Division.		

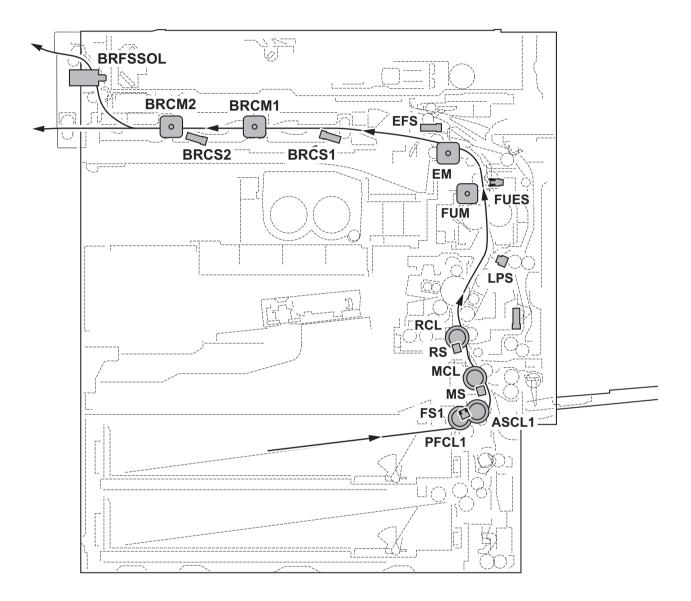
No.	Content	Check procedure & check point	Remark 1	Remark 2
190.	Content	Check procedure & check point 1) Format the HDD and check function. (U024 FULL formatting)	Remark 1	Remark 2
F38X	An error is detected at the Authentication/permit management section	 Execute the UO21 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. 		
		5) Retrieve the USBLOG and contact the Service Administrative Division.		
	An error is detected at the Entity management section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Replace the USBLOG and contact the Service Administrative Division. 		
F46X	An error is detected at the Print image process section	1) Replace the main board and check function. 2) Retrieve the USBLOG (or retrieve the print capture data by case)	*The F46F is printer process error. if it repeats with a certain print data, retrieve the capture data and USBLOG.	
F47X F48X F49X	An error is detected at the Image edit process control section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F4AX F4CX	An error is detected at the Print image process section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F4DX F4EX	An error is detected at the Entity control section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F4FX	An error is detected at the Job control section	 Format the HDD and check function. (U024 FULL formatting) Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Replace the USELOG and contact the Service Administrative Division. 		
F50X	An error is detected at the FAX control section	 1) Format the HDD and check function. (U024 FULL formatting) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. 5) Retrieve the USBLOG and contact the Service Administrative Division. 		
	An error is detected at the Job execution section	 1) Format the HDD and check function. (U024 FULL formatting) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. 5) Retrieve the USBLOG and contact the Service Administrative Division. 		
F58X F59X F59X F5AX F5BX F5CX F5DX F5EX	An error is detected at the Service management section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F5FX	An error is detected at the Service execution section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F60X	An error is detected at the Maintenance mode management section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F61X	An error is detected at the Report compiling section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F62X	An error is detected at the Service execution section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Replace the USBLOG and contact the Service Administrative Division. 		

No.	Content	Check procedure & check point	Remark 1	Remark 2
F63X	An error is detected at the Device control section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
	An error is detected at the Print image process section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. 		
	An error is detected at the Storage device control section	5) Retrieve the USBLOG and contact the Service Administrative Division. 1) Format the HDD and check function. (U024 FULL formatting) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. 5) Retrieve the USBLOG and contact the Service Administrative Division.	*F684 is Overwrite error with the HDD security kit	
F69X F6AX F6BX F6CX	An error is detected at the HyPAS control section	 Format the HDD and check function. (U024 FULL formatting) Execute the U021 Memory initializing to initialize the controller backup memory and check function. Replace the main board and check function. Replace the HDD and check function. Retrieve the USBLOG and contact the Service Administrative Division. 		
F71X	An error is detected at the External Server management section	 Check the external server and check function. Chekc the connection to the external server and check function. Check the network settings and check function. Replace the bridge board and check function. Replace the main board and check function. Replace the USBLOG and contact the Service Administrative Division. 	*FieryOption related	

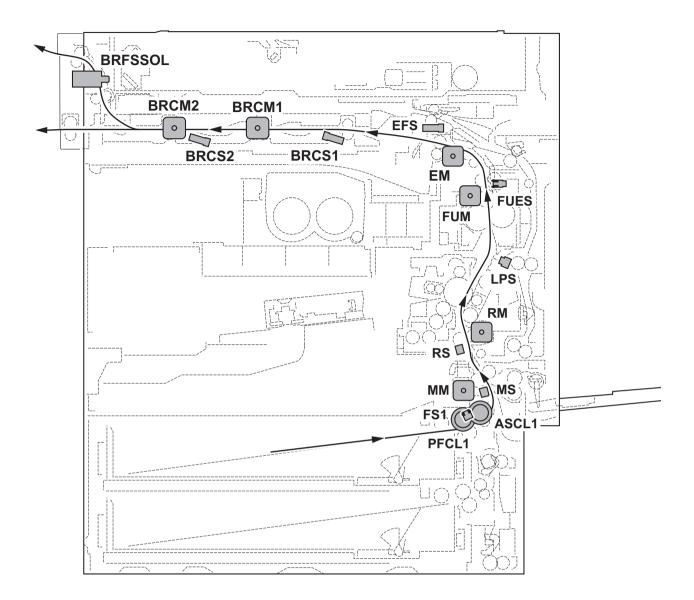
(8) Timing chart

- 1. Cassette1 paper feeding, Paper size A4, Simplex, Preset 1
- 2. Cassette1 paper feeding, Paper size A4, Simplex, Preset 3

35 ppm model



45/55 ppm model



	 	c	L
	NAME	1/0	2.35 2.25 2.25 2.25 2.25 2.25 2.25 2.25
	Paper feed clutch 1 (PFCL1)	OUT	
7	Assist clutch 1 (ASCL1)	OUT	
e	Feed sensor 1 (FS1)	NI	
4	Middle motor (MM)/Middle clutch (MCL)+1	OUT	
2	Middle sensor (MS)	NI	
9	Registration sensor (RS)	NI	
7	Registration motor (RM)/Registration clutch (RCL)*2	OUT	
8	Fuser motor (FUM)	OUT	
6	Loop sensor (LPS)	IN	
10	Fuser eject sensor (FUES)	IN	
11	BR conveying motor 1 (BRCM1)	OUT	
12	Eject motor (EM)	OUT	
13	Eject full sensor (EFS)	NI	
14	BR conveying sensor 1 (BRCS1)	NI	
15	BR conveying motor 2 (BRCM2)	OUT	
16	BR conveying sensor 2 (BRCS2)	I	
17	BR feedshift solenoid (BRFSSOL)	OUT	
		•	

(1) Simplex_Preset 1_cassette1_A4

*1 Middle clutch (MCL): 35 ppm model, Middle motor (MM): 45 / 55 ppm model *2 Registration clutch (RCL): 35 ppm model, Registration motor (RM): 45 / 55 ppm model

2LL/2LJ/2LH-3

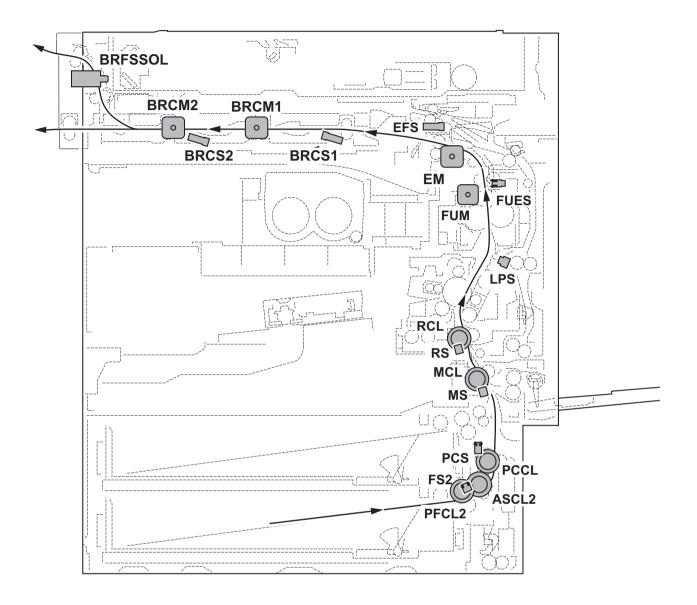
	NAME	0/1	0 2.5s 5s 7.5s 10s
-	Paper feed clutch 1 (PFCL1)	OUT	
2	Assist clutch 1 (ASCL1)	OUT	
ę	Feed sensor 1 (FS1)	N	
4	Middle motor (MM)/Middle clutch (MCL)*1	OUT	
5	Middle sensor (MS)	N	
9	Registration sensor (RS)	N	
٢	Registration motor (RM)/Registration clutch (RCL)*2	OUT	
ω	Fuser motor (FUM)	OUT	
6	Loop sensor (LPS)	N	
10) Fuser eject sensor (FUES)	N	
11	BR conveying motor 1 (BRCM1)	OUT	
12	Eject motor (EM)	OUT	
13	B Eject full sensor (EFS)	N	
14	BR conveying sensor 1 (BRCS1)	Z	
15	BR conveying motor 2 (BRCM2)	OUT	
16	BR conveying sensor 2 (BRCS2)	Z	
17	/ BR feedshift solenoid (BRFSSOL)	OUT	

(2) Simplex_Preset 3_cassette1_A4

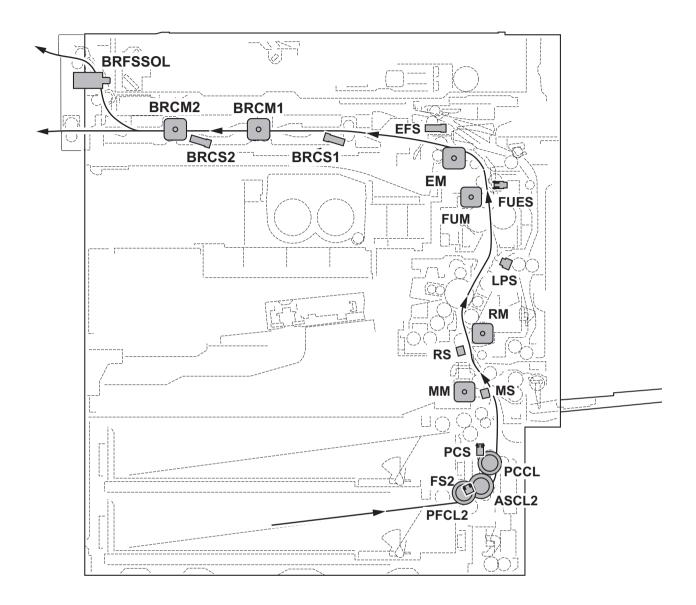
*1 Middle clutch (MCL): 35 ppm model, Middle motor (MM): 45 / 55 ppm model *2 Registration clutch (RCL): 35 ppm model, Registration motor (RM): 45 / 55 ppm model

3. Cassette2 paper feeding, Paper size A4, Simplex, Preset 3

35 ppm model



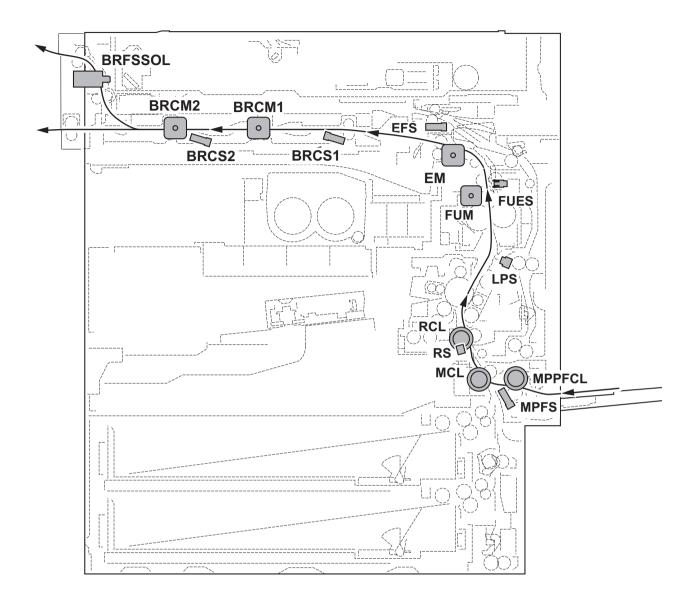
45/55 ppm model



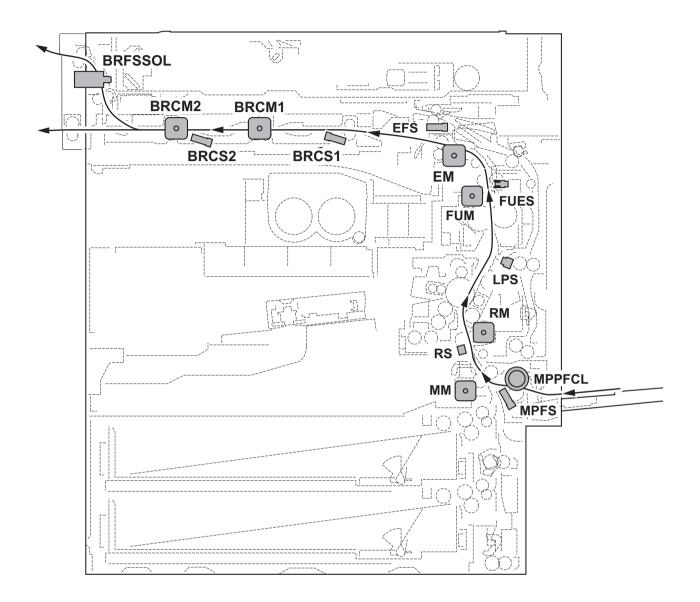
sette2_A4	1/0 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/		OUT		OUT		(McL)*1 OUT			ion clutch (RCL)*2 OUT	оит —			OUT				OUT		
(3) Simplex_Preset 3_cassette2_A4	NAME	Paper feed clutch 2 (PFCL2)	Assist clutch 2 (ASCL2)	Feed sensor 2 (FS2)	Paper conveying clutch (PCCL)	Paper conveying sensor (PCS)	Middle motor (MM)/Middle clutch (MCL)+1	Middle sensor (MS)	Registration sensor (RS)	Registration motor (RM)/Registration clutch (RCL)*2	Fuser motor (FUM)	11 Loop sensor (LPS)	Fuser eject sensor (FUES)	BR conveying motor 1 (BRCM1)	Eject motor (EM)	Eject full sensor (EFS)	BR conveying sensor 1 (BRCS1)	BR conveying motor 2 (BRCM2)	BR conveying sensor 2 (BRCS2)	
		-	2	ო	4	2	9	٢	∞	6	10	Ξ	12	13	14	15	16	17	18	

4. MPF paper feeding, Paper size A4, Simplex, Preset 3

35 ppm model



45/55 ppm model

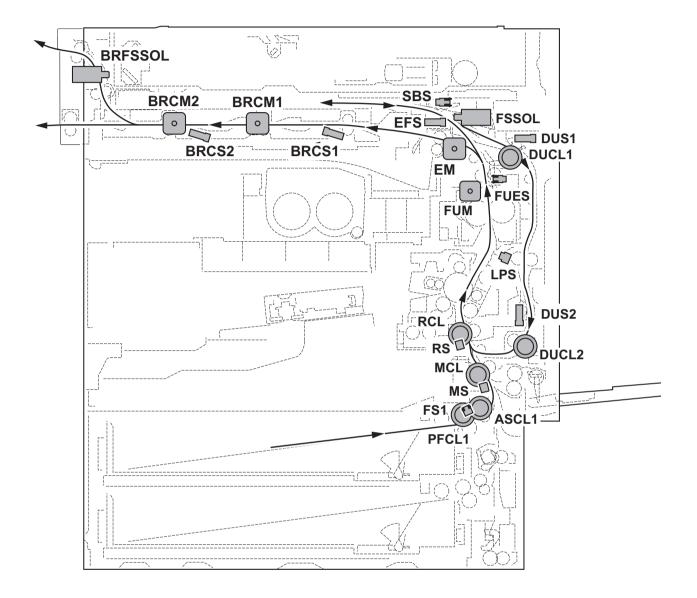


(4) Simplex_Preset 3_MPF_A4

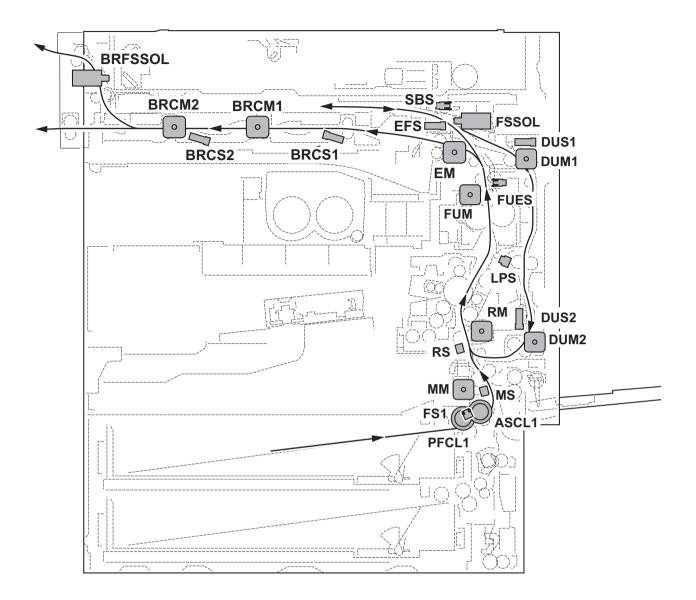
*1 Middle clutch (MCL): 35 ppm model, Middle motor (MM): 45 / 55 ppm model *2 Registration clutch (RCL): 35 ppm model, Registration motor (RM): 45 / 55 ppm model

- 5. Cassette1 paper feeding, Paper size A4, Duplex, Preset 1
- 6. Cassette1 paper feeding, Paper size A4, Duplex, Preset 3

35 ppm model



45/55 ppm model



		<pre>(5) Duplex_Preset 1_cassette1_A4</pre>		
Paper feed clutch 1 (PFCL1)OUTAssist clutch 1 (ASCL1)OUTAssist clutch 1 (ASCL1)OUTFeed sensor 1 (FS1)Niddle motor (MM)/Middle clutch (MCL)*1OUTMiddle motor (MM)/Middle clutch (MCL)*1OUTMiddle sensor (MS)NNRegistration sensor (RS)OUTRegistration sensor (RS)OUTRegistration motor (RM)/Registration clutch (RCL)*2OUTFuser motor (FUM)OUTFuser motor (FUM)OUTFuser motor (LPS)NFuser eject sensor (RS)OUTFuser eject sensor (RUM)/Duplex clutch 1 (DUCL1)*3OUTDuplex motor 1 (DUM1)/Duplex clutch 2 (DUCL2)*4NDuplex sensor 1 (DUS1)NDuplex sensor 1 (BRCM1)NDuplex sensor 1 (BRCM1)NBR conveying sensor 1 (BRCM2)NBR conveying sensor 1 (BRCM2)N<				250ms 500ms 750ms 750ms 1s
Assist clutch 1 (ASCL1)OUTFeed sensor 1 (FS1)INFeed sensor 1 (FS1)Niddle motor (MM)/Middle clutch (MCL)*1NIMiddle sensor (MS)NIMiddle sensor (MS)INRegistration sensor (RS)OUTRegistration sensor (RM)/Registration clutch (RCL)*2OUTFuser motor (RM)/Registration clutch (RCL)*2OUTFuser motor (RM)/Registration clutch (RCL)*2OUTFuser motor (RUM)/Registration clutch (RCL)*2OUTFuser elset sensor (LPS)NIFuser elset sensor (LPS)OUTFuser elset sensor (LDS)NIFuser elset sensor (LDS)NIUnplex motor 1 (DUN1)/Duplex clutch 1 (DUCL)*3NIDuplex sensor 1 (DUS1)NIDuplex sensor 1 (DUS1)NIDuplex sensor 2 (DUS2)NIBreonveying motor 1 (BRCM1)NIBreonveying sensor 1 (BRCN1)NIBreonveying sensor 2 (BRCS2)NIBreonveying sensor 2 (BRCS2)	-	Paper feed clutch 1 (PFCL1)	OUT	
Feed sensor 1 (FS1) Middle motor (MM)/Middle clutch (MCL)*1 Middle sensor (MS) Registration sensor (RS) Registration motor (RM)/Registration clutch (RCL)*2 Elser motor (FUM) Loop sensor (LPS) Feedshift solenoid (FSSOL) Feedshift solenoid (FSSOL) Fuser motor (LDM) Uoop sensor (LDS) Feedshift solenoid (FSSOL) Fuser eject sensor (LDS) Beget motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex motor 1 (DUM1)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 1 (DUS1) Br conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCM1) BR conveying sensor 1 (BRCM2) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2)	7	Assist clutch 1 (ASCL1)	OUT	
Middle motor (MM)/ Middle clutch (MCL)*1 Middle sensor (MS) Registration sensor (RS) Registration motor (RM)/ Registration clutch (RCL)*2 Fuser motor (FU M) Loop sensor (FU S) Feedshift solenoid (FSSOL) Fuser eject sensor (LDS) Eedshift solenoid (FSSOL) Switchback sensor (RU ES) Uplex motor (EM) Switchback sensor (RU ES) Beet motor 1 (DU M1)/ Duplex clutch 1 (DU CL1)*3 Duplex sensor 1 (DU S1) Duplex sensor 1 (DUS1) Duplex sensor 2 (DU S2) BR conveying motor 1 (BRCM1) Eject full sensor 1 (BRCM1) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	c	Feed sensor 1 (FS1)	N	
Middle sensor (MS) Registration sensor (RS) Fuser motor (FM)/Registration clutch (RCL)*2 Fuser motor (FUM) Loop sensor (FUM) Feedshift solenoid (FSSOL) Feedshift solenoid (FSSOL) Feedshift solenoid (FSSOL) Fuser eject sensor (FUES) Fuser eject sensor (FUES) Switchback sensor (FUES) Uplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUN1)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 1 (DUS1) Buplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (ESS) BR conveying sensor 1 (BRCM2) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	4	Middle motor (MM)/Middle clutch (MCL)*1	OUT	
Registration sensor (RS) Registration motor (RM)/Registration clutch (RCL)*2 Euser motor (FUM) Loop sensor (FUM) Feedshift solenoid (FSSOL) Feedshift solenoid (FSSOL) Fuser eject sensor (FUES) Eject motor (EM) Switchback sensor (FUES) Uplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) BR conveying motor 1 (BRCM1) Eject full sensor 2 (DUS2) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	5	Middle sensor (MS)	IN	
Registration motor (RM)/Registration clutch (RCL)*2 Fuser motor (FU M) Loop sensor (LPS) Feedshift solenoid (FSSOL) Fuser eject sensor (LDS) Eject motor (EM) Switchback sensor (RUES) Switchback sensor (RUE1)/Duplex clutch 1 (DUCL1)*3 Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCM2) BR conveying sensor 1 (BRCM2) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2)	9	Registration sensor (RS)	IN	
Fuser motor (FUM) Loop sensor (LPS) Feedshift solenoid (FSSOL) Fuser eject sensor (LUES) Eject motor (EM) Switchback sensor (FUES) Switchback sensor (NU1)/Duplex clutch 1 (DUCL1)*3 Duplex motor 1 (DUN1)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) BR conveying motor 1 (BRCM1) Eject full sensor 2 (DUS2) BR conveying sensor 1 (BRCM1) Eject full sensor 2 (DUS2) BR conveying sensor 1 (BRCM1) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCM2)	7	$Registration\ motor\ (RM)/Registration\ clutch\ (RCL)*2$	OUT	
Loop sensor (LPS) Feedshift solenoid (FSSOL) Fuser eject sensor (FUES) Eject motor (EM) Switchback sensor (SBS) Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)+3 Duplex motor 1 (DUS1) Duplex sensor 1 (DUS1) Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor 1 (BRCM1) Est ctureying sensor 1 (BRCM2) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCM2) BR conveying sensor 2 (BRCS2)	8	Fuser motor (FUM)	OUT	
Feedshift solenoid (FSSOL) Fuser eject sensor (FUES) Eject motor (EM) Switchback sensor (SBS) Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUS1) Duplex sensor 1 (DUS1) Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor 2 (DUS2) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS1) BR conveying sensor 2 (BRCS1) BR conveying sensor 2 (BRCS2)	6	Loop sensor (LPS)	IN	
Fuser eject sensor (FUES)Eject motor (EM)Switchback sensor (SBS)Switchback sensor (SBS)Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3Duplex sensor 1 (DUS1)Duplex sensor 2 (DUN2)/Duplex clutch 2 (DUCL2)*4Duplex sensor 2 (DUS2)BR conveying motor 1 (BRCM1)Eject full sensor 1 (BRCM1)BR conveying sensor 1 (BRCM2)BR conveying sensor 1 (BRCS1)BR conveying sensor 2 (BRCM2)BR conveying sensor 2 (BRCS2)BR conveying sensor 2 (BRCS2)BR conveying sensor 2 (BRCS2)	10	Feedshift solenoid (FSSOL)	OUT	
Eject motor (EM) Switchback sensor (SBS) Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)*4 Duplex motor 2 (DUX2)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	Ξ	Fuser eject sensor (FUES)	IN	
Switchback sensor (SBS) Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUS1) Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	12	Eject motor (EM)	OUT	
Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 Duplex sensor 1 (DUS1) Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	13	Switchback sensor (SBS)	N	
Duplex sensor 1 (DUS 1) Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying sensor 1 (BRCS1) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	14		OUT	
Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)*4 Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying motor 2 (BRCS2) BR conveying sensor 2 (BRCS2) BR conveying sensor 2 (BRCS2)	15		N	
Duplex sensor 2 (DUS2) BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying motor 2 (BRCS2) BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	16		OUT	
BR conveying motor 1 (BRCM1) Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying motor 2 (BRCM2) BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	17	Duplex sensor 2 (DUS2)	N	
Eject full sensor (EFS) BR conveying sensor 1 (BRCS1) BR conveying motor 2 (BRCM2) BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	18		OUT	
BR conveying sensor 1 (BRCS1) BR conveying motor 2 (BRCM2) BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	19		IN	
BR conveying motor 2 (BRCM2) BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	20		IN	
BR conveying sensor 2 (BRCS2) BR feedshift solenoid (BRFSSOL)	21	BR conveying motor 2 (BRCM2)	OUT	
B R feedshift solenoid (BRFS SOL)	22		N	
	23		OUT	

*1 Middle clutch (MCL): 35 ppm model, Middle motor (MM): 45 / 55 ppm model
*2 Registration clutch (RCL): 35 ppm model, Registration motor (RM): 45 / 55 ppm model
*3 Duplex clutch 1 (DUCL1): 35 ppm model, Duplex motor 1 (DUM1): 45 / 55 ppm model
*4 Duplex clutch 2 (DUCL2): 35 ppm model, Duplex motor 2 (DUM2): 45 / 55 ppm model

58 108 108 158 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																							
0 0/1			NI	OUT OUT	Z		OUT OUT	OUT OUT	NI	OUT	NI	out	Z	OUT	NI	оит	NI	OUT	NI	NI	оит	N	OUT
<pre>(6) Duplex_Preset 3_cassette1_A4</pre>	eed clutch 1 (PFCL1)	Assist clutch 1 (ASCL1) C	Feed sensor 1 (FS1)	4 Middle motor (MM)/Middle clutch (MCL)*1 C	Middle sensor (MS)	Registration sensor (RS)	Registration motor (RM)/Registration clutch (RCL)*2 C	Fuser motor (FUM)	Loop sensor (LPS)	10 Feedshift solenoid (FSSOL) C	11 Fuser eject sensor (FUES)	12 Eject motor (EM)	13 Switchback sensor (SBS) II	14 Duplex motor 1 (DUM1)/Duplex clutch 1 (DUCL1)*3 C	15 Duplex sensor 1 (DUS1) II	16 Duplex motor 2 (DUM2)/Duplex clutch 2 (DUCL2)#4 C	17 Duplex sensor 2 (DUS2)	18 BR conveying motor 1 (BRCM1) C	19 Eject full sensor (EFS) II	20 BR conveying sensor 1 (BRCS1) II	21 BR conveying motor 2 (BRCM2) C	22 BR conveying sensor 2 (BRCS2)	23 BR feedshift solenoid (BRFSSOL) C

*1 Middle clutch (MCL): 35 ppm model, Middle motor (MM): 45 / 55 ppm model
*2 Registration clutch (RCL):35 ppm model, Registration motor (RM): 45 / 55 ppm model
*3 Duplex clutch 1 (DUCL1): 35 ppm model, Duplex motor 1 (DUM1): 45 / 55 ppm model
*4 Duplex clutch 2 (DUCL2): 35 ppm model, Duplex motor 2 (DUM2): 45 / 55 ppm model

(9) Chart of image adjustment procedures

Adjusting	lán un		Decemination	Ma	aintenance mode	Original	Dama	Π
order	Item	Image	Description	Item No.	Mode	Original	Page	
1	Adjusting the magnification in the auxiliary scanning direction (printing adjustment)		Data processing	U039	Sub Scan	U039 test pattern	P.1-3-38	
2	Adjusting the center line of the MP tray (printing adjustment)	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Adjusting the LSU print start timing	U034	LSU Out Left	U034 test pattern	P.1-3-33	
3	Adjusting the center line of the cas- settes (printing adjustment)	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Adjusting the LSU print start timing	U034	LSU Out Left	U034 test pattern	P.1-3-33	
4	Adjusting the leading edge registra- tion of the MP tray (printing adjustment)		Registration motor turning on timing (secondary paper feed start timing)	U034	LSU Out Top	U034 test pattern	P.1-3-34	
5	Adjusting the leading edge registra- tion of the cassette (printing adjustment)	*	Registration motor turning on timing (secondary paper feed start timing)	U034	LSU Out Top	U034 test pattern	P.1-3-34	
6	Adjusting the leading edge margin (printing adjustment)	*	LSU illumination start timing	U402	Lead	U402 test pattern	P.1-3-133	
7	Adjusting the trailing edge margin (printing adjustment)	*	LSU illumination end timing	U402	Trail	U402 test pattern	P.1-3-133	
8	Adjusting the left and right margins (printing adjustment)		LSU illumination start/end timing	U402	A Margin C Margin	U402 test pattern	P.1-3-133	
9	Adjusting magnification of the scanner in the main scanning direc- tion (scanning adjustment)		Data processing	U065 U070	Main Scan Main Scan	Test chart	P.1-3-47 P.1-3-52	
10	Adjusting magnification of the scanner in the auxiliary scanning direction (scanning adjustment)		Original scanning speed	U065 U070	Sub Scan Sub Scan	Test chart	P.1-3-47 P.1-3-52	

Remarks
To make an adjustment for duplex copying, select Duplex.
To make an adjustment for duplex copying, select Duplex.
U065: For copying an original placed on the platen. U070: For copying originals from the DP.
U065: For copying an original placed on the platen. U070: For copying originals from the DP.

Adjusting	Item	Image	Description	Ma	aintenance mode	- Original	Page	Remarks
order	nem	inage	Description	Item No.	Mode	Original	Faye	Remarks
11	Adjusting the center line (scanning adjustment)		Adjusting the original scan data (image adjustment)	U067 U072	Front Rotate Front Back	Test chart	P.1-3-50 P.1-3-56	 U067: For copying an original placed on the platen. To make an adjustment for rotate copying, select Rotate. U072: For copying originals from the DP. To make an adjustment for duplex copying, select Back.
12	Adjusting the leading edge registra- tion (scanning adjustment)		Original scan start timing	U066 U071	Front Rotate Front Head Back Head	Test chart	P.1-3-49 P.1-3-54	 U066: For copying an original placed on the platen. To make an adjustment for trailing edge registra- tion, select Rotate. U071: For copying originals from the DP. To make an adjustment for duplex copying, select Back Head.
13	Adjusting the leading edge margin (scanning adjustment)	*	Adjusting the original scan data (image adjustment)	U403 U404	B Margin B Margin	Test chart	P.1-3-134 P.1-3-135	U403: For copying an original placed on the contact glass U404: For copying originals from the DP.
14	Adjusting the trailing edge margin (scanning adjustment)	*	Adjusting the original scan data (image adjustment)	U403 U404	D Margin D Margin	Test chart	P.1-3-134 P.1-3-135	U403: For copying an original placed on the contact glass U404: For copying originals from the DP.
15	Adjusting the left and right margins (scanning adjustment)		Adjusting the original scan data (image adjustment)	U403 U404	A Margin C Margin A Margin C Margin	Test chart	P.1-3-134 P.1-3-135	U403: For copying an original placed on the contact glass U404: For copying originals from the DP.

When maintenance item U411 (Automatic adjustment in the scanner) is run using the specified original (P/N 7505000005), the following adjustments are automatically made:

Adjusting the scanner auxiliary scanning direction magnification (U065) Adjusting the DP magnification (U070) Adjusting the scanner leading edge registration (U066) Adjusting the scanner center line (U067)

Adjusting the DP leading edge registration (U071) Adjusting the DP center line (U072)

When maintenance item U411 (Automatic adjustment in the scanner) is run using the specified original (P/N 302AC68243), the following adjustments are automatically made:

Adjusting the DP magnification (U070)

Adjusting the DP leading edge registration (U071) Adjusting the DP center line (U072)

When maintenance item U411 (Automatic adjustment in the scanner) is run using the chart printed from the machine, the following adjustments are automatically made:

Adjusting the DP magnification (U070) Adjusting the DP leading edge registration (U071) Adjusting the DP center line (U072)

Adjusting the DP magnification (U070) Adjusting the DP leading edge registration (U071) Adjusting the DP center line (U072)

Image quality

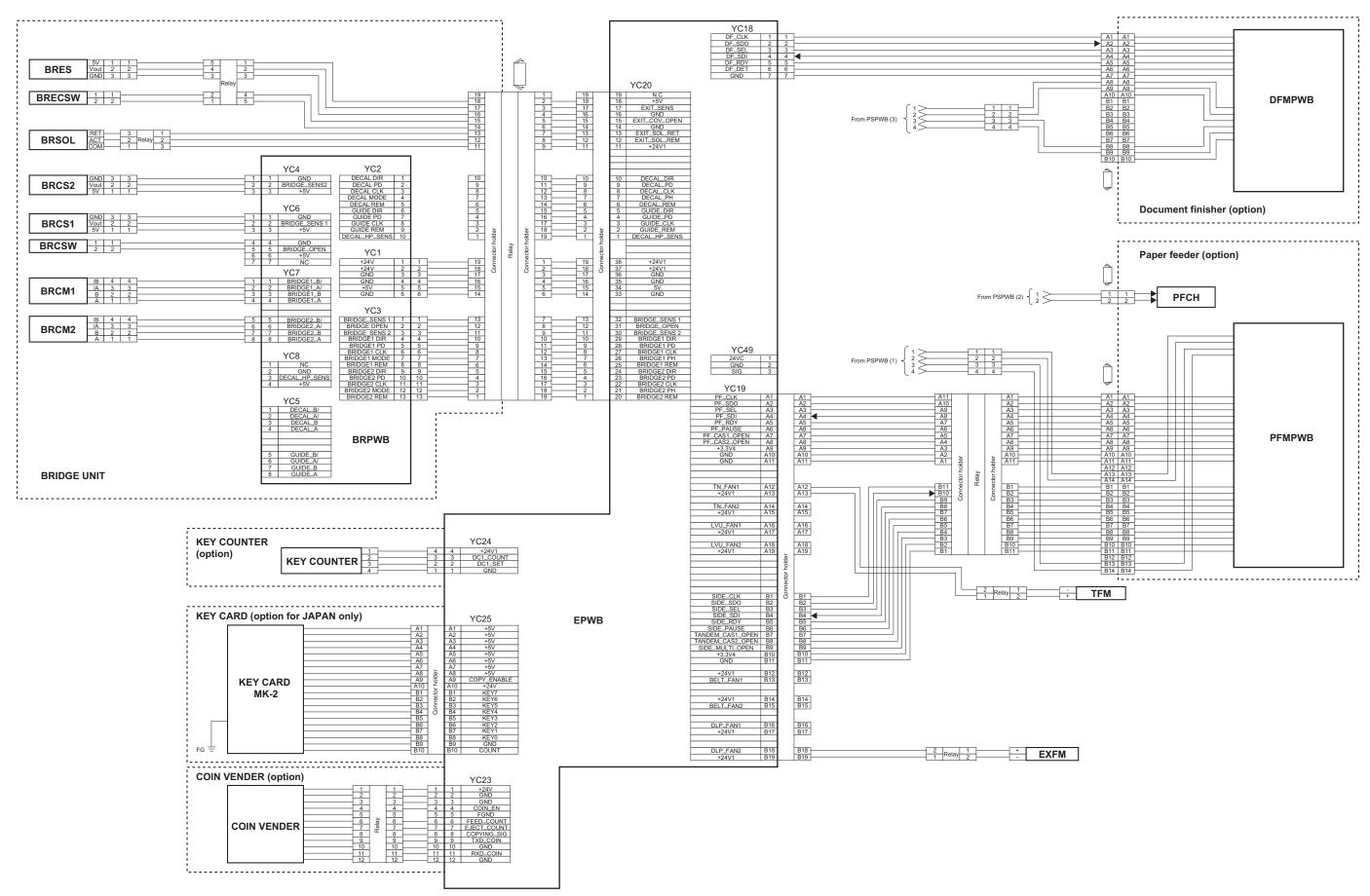
ltem	Specifications	ltem	Specifications
100% magnifica-	Machine: ± 0.8 %	Leading edge	Cassette: +1.0/-1.5 mm
tion	Using DP: ± 1.5 %	registration	MP tray: +1.0/-1.5 mm
Enlargement/	Machine: ± 1.0 %		Duplex: +1.0/-1.5 mm
reduction	Using DP: ± 1.5 %	Skewed paper	Cassette: 1.5 mm or less
Lateral square-	Machine: ± 1.5 mm/375 mm	feed (left-right differ-	MP tray: 1.5 mm or less
ness	Using DP: ± 3.0 mm/375 mm	ence)	Duplex: 2.0 mm or less
		Lateral image	Cassette: ± 2.0 mm
		shifting	MP tray: ± 2.0 mm
			Duplex: ± 3.0 mm

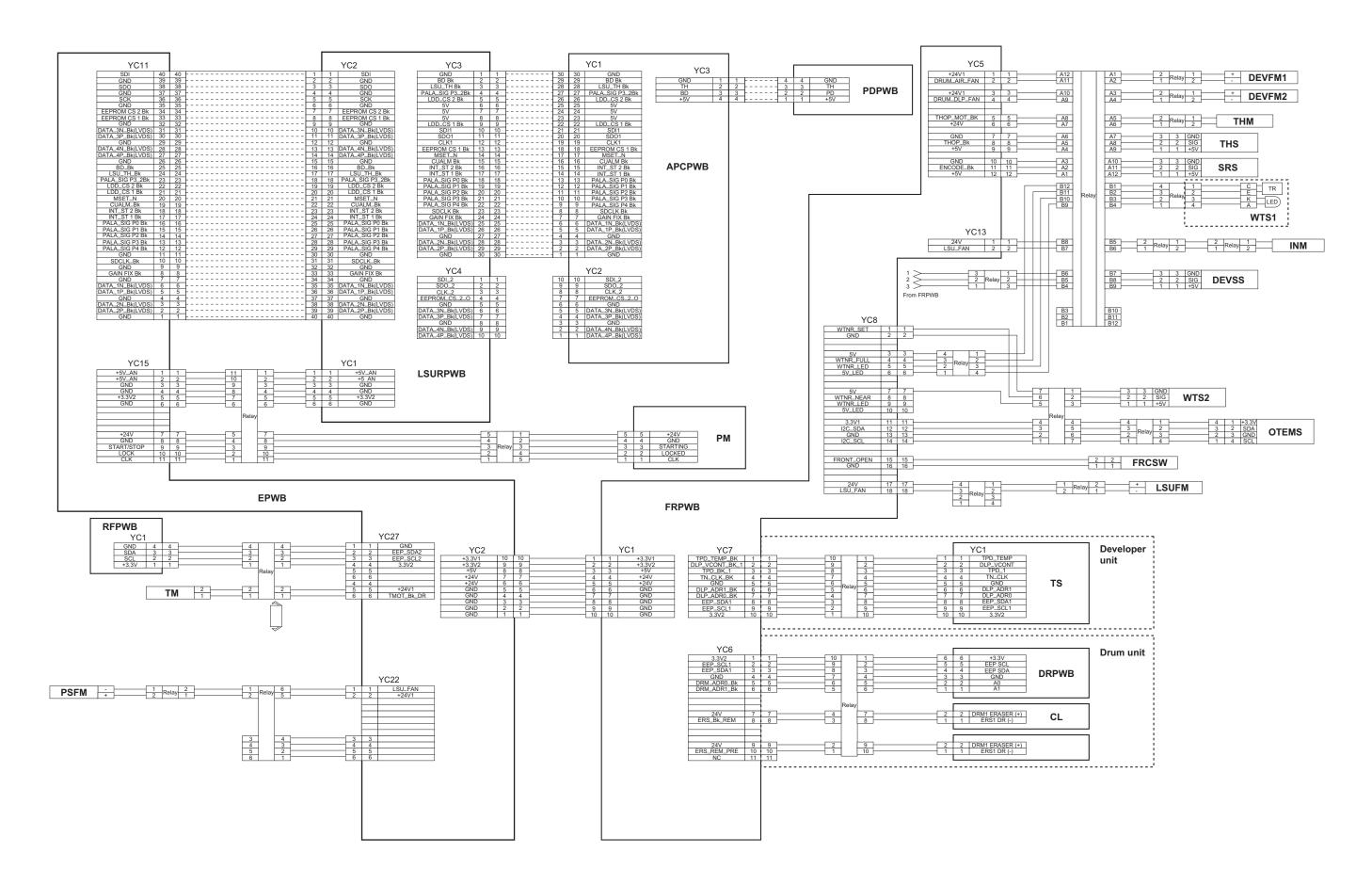
When maintenance item U415 (Adjusting the print position automatically) is run, the following adjustments are automatically made: Adjusting the printer leading edge registration (U034) Adjusting the printer center line (U034)

Adjusting the printer margin (U402)

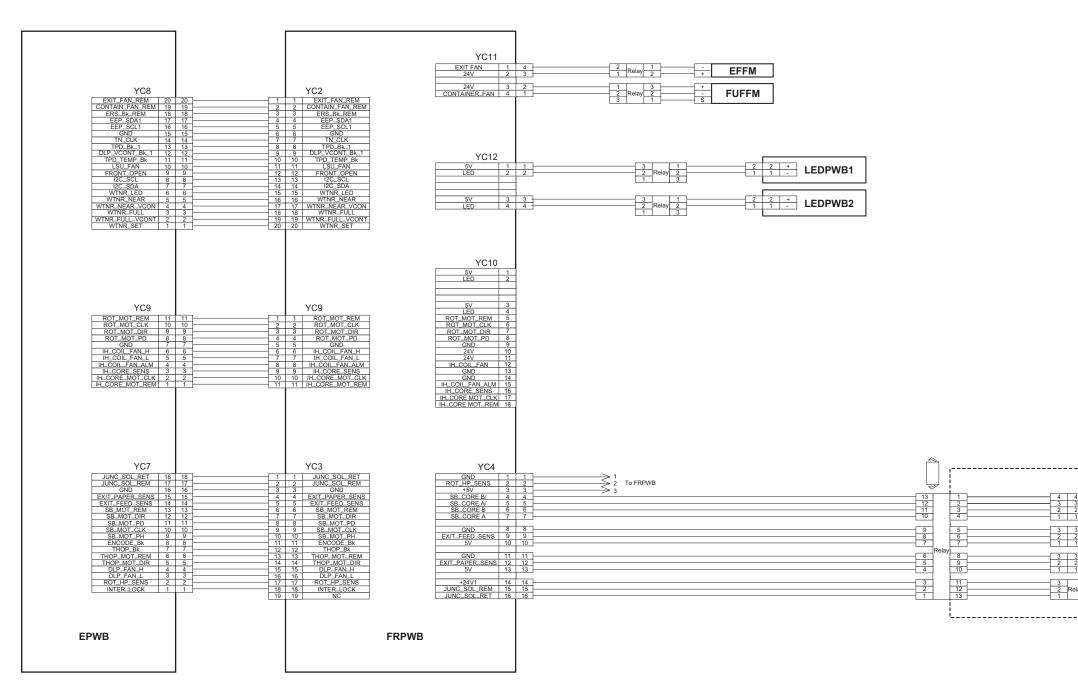
(10) Wiring diagram

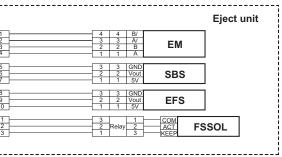
No.1

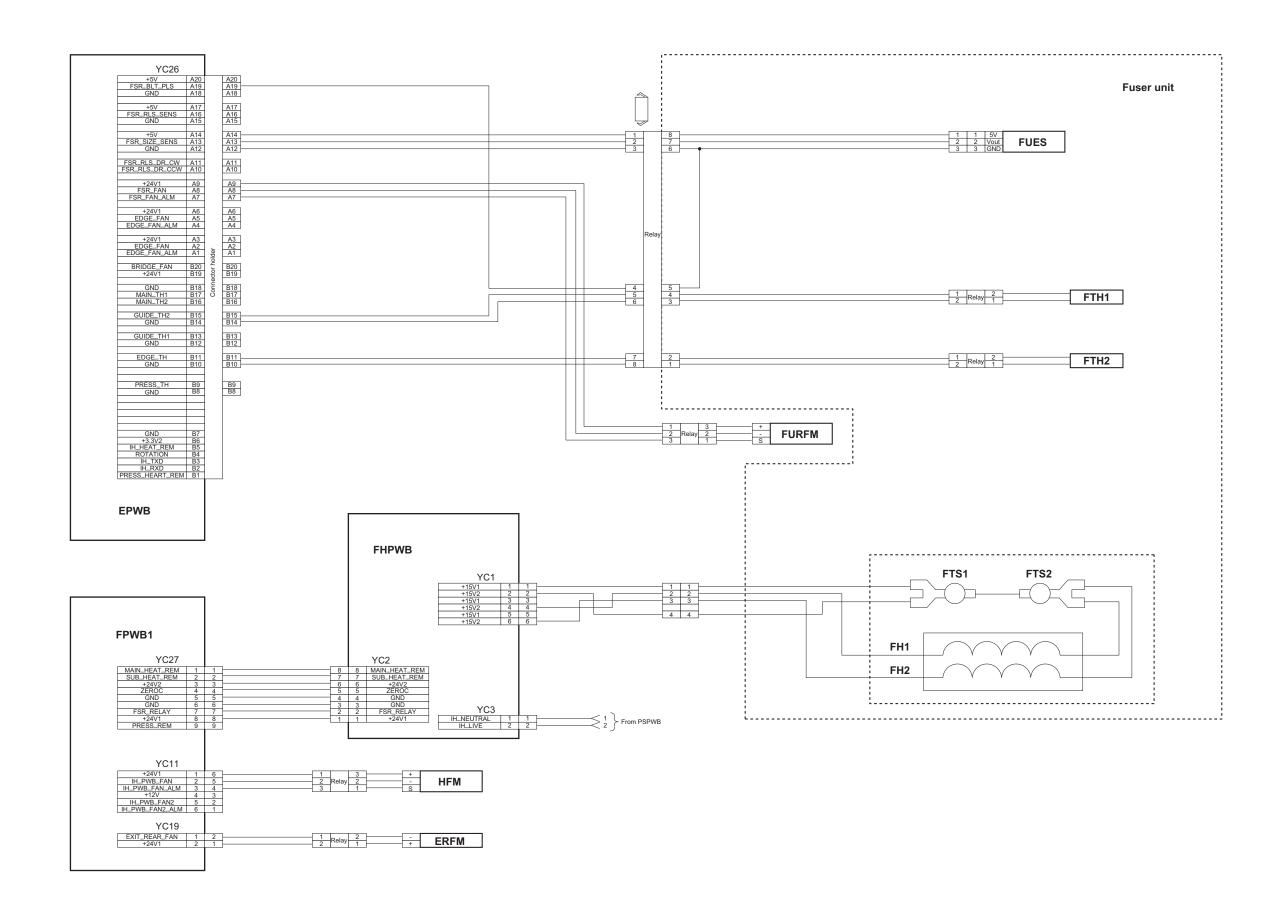




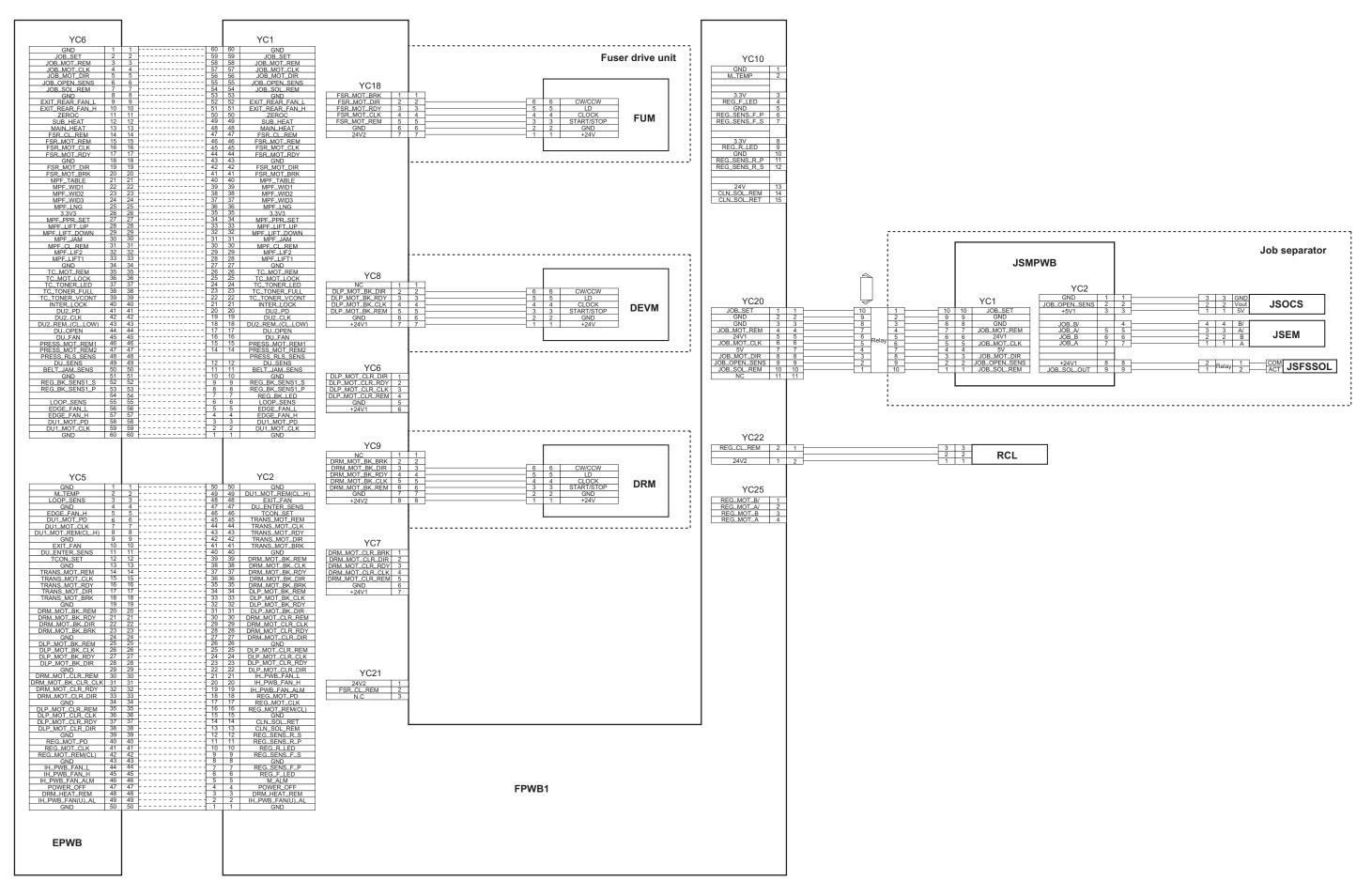




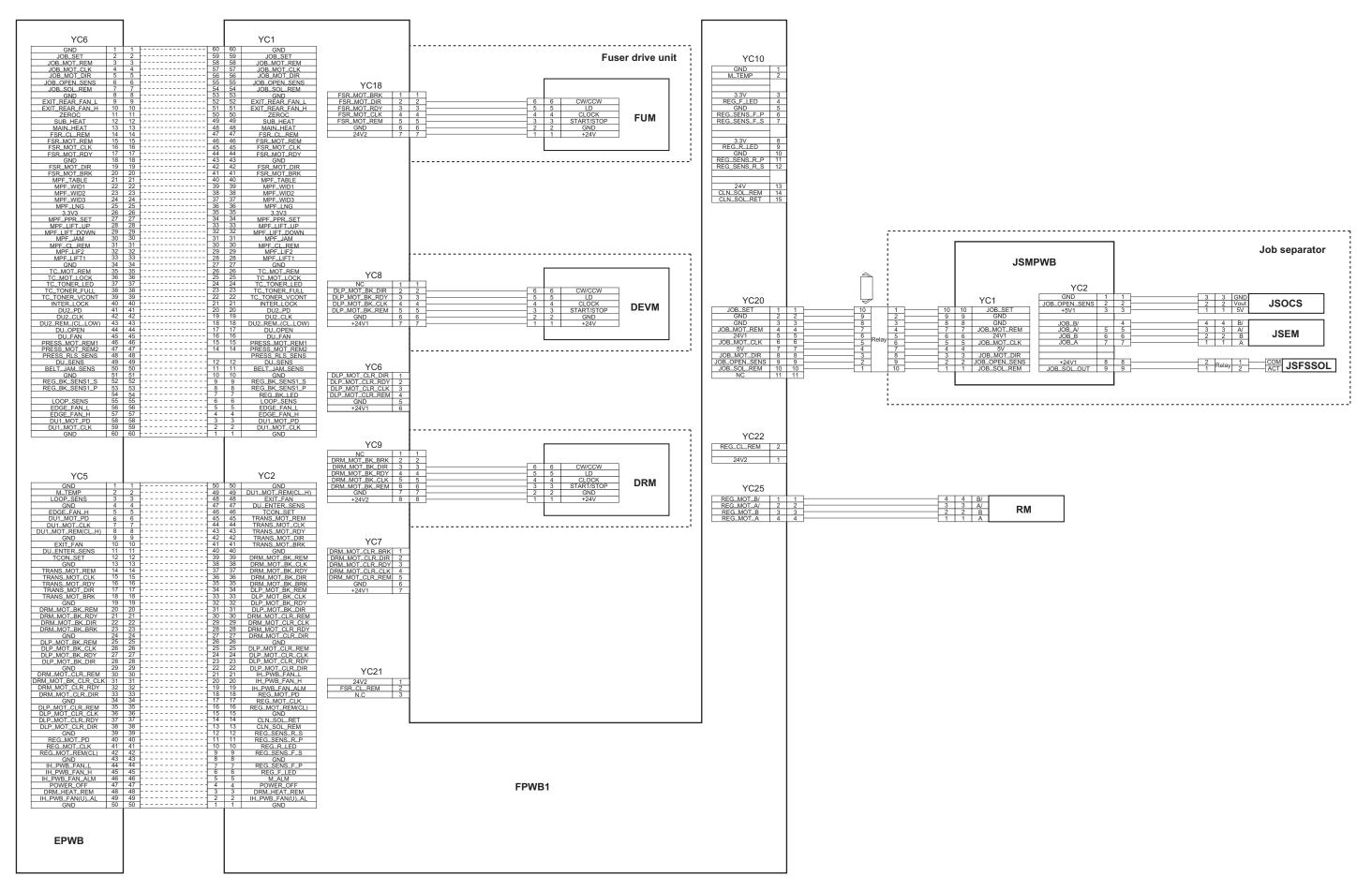


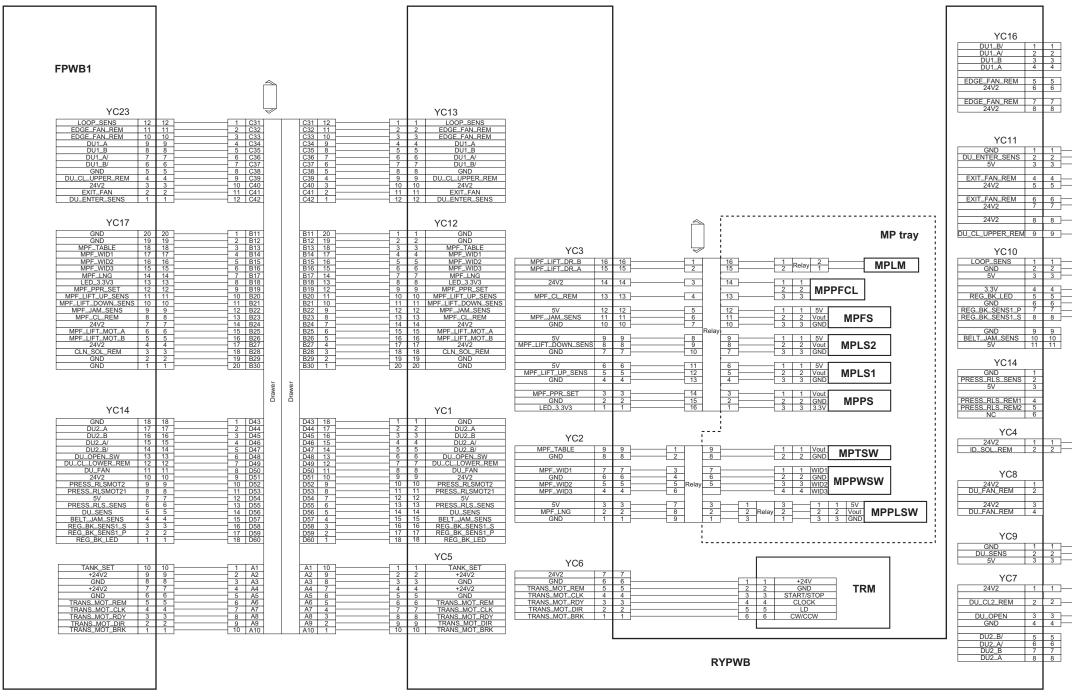


No.5 (35 ppm model)



No.5 (45 ppm model/55 ppm model)

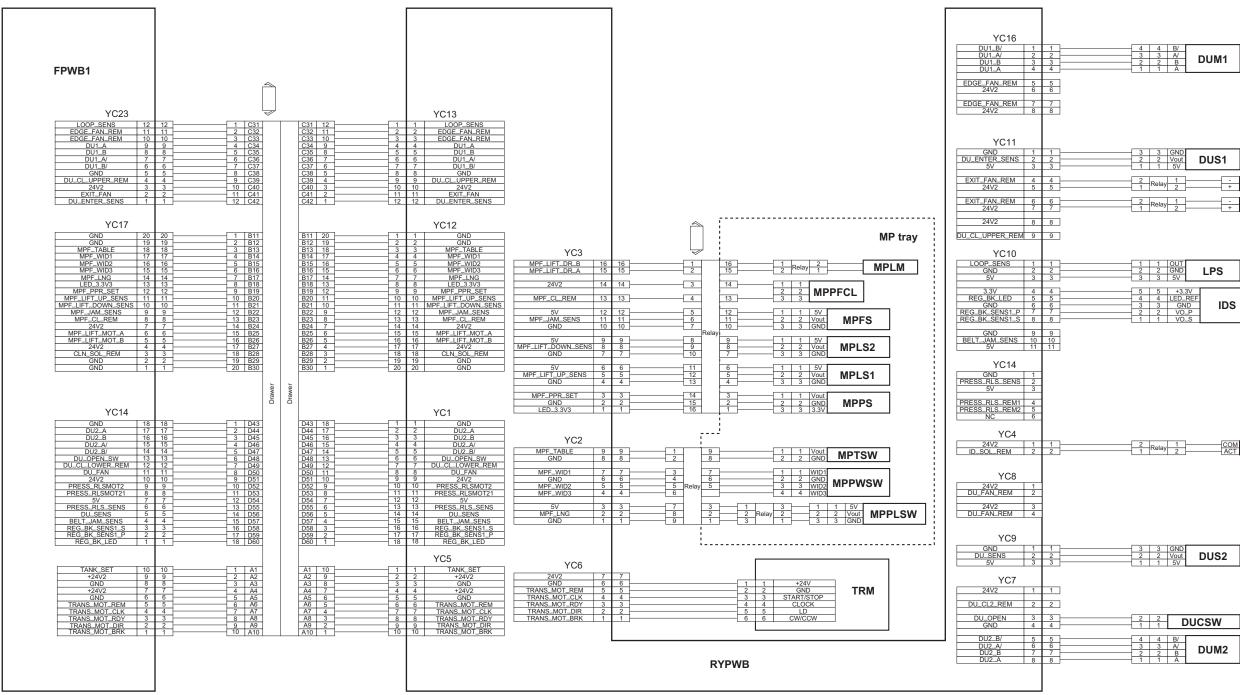




	DUS1	GND Vout 5V	3 2 1	- <u>3</u> - <u>2</u> - 1	
EFM1	- +	1	Relay	2	
EFM2	- +	1	Relay	2	
	CL1	DU	3 2 1	3 2 1	
	LPS	OUT GND 5V	1 2 3	1 2 3	
	IDS	+3.3V LED_REF GND VO_P VO_S	5 4 3 2 1	5 4 3 2	

0				
2	Relay	1		CLSOL
		2	ACT	

3 2 1	3 2 1	GND Vout 5V	DUS2
3	3		
2	2		DUCL2
2	2		OUCSW



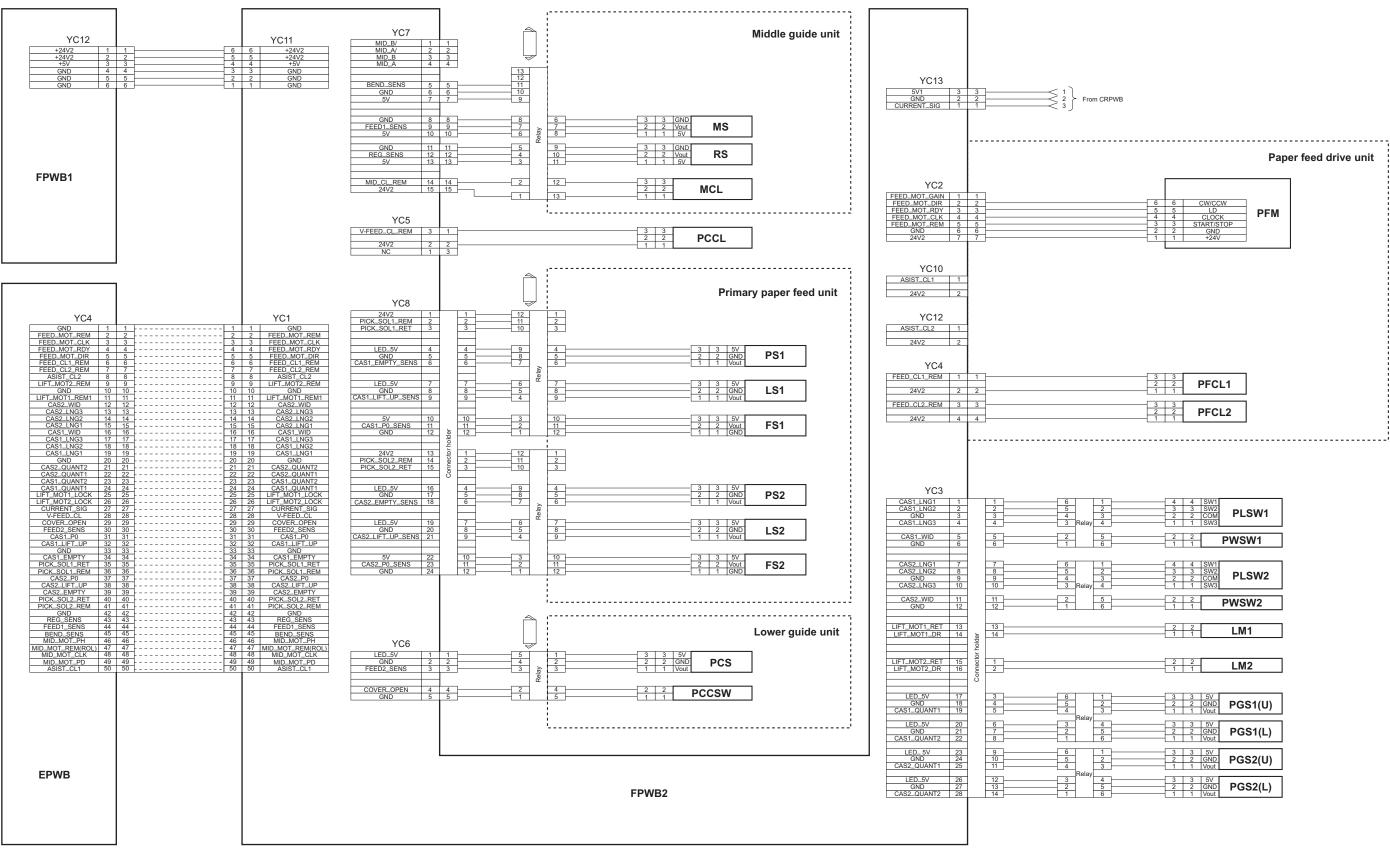
3 2 1	3 2 1	GND Vout 5V	DUS1	
2 1	Relay	1	- +	EFM1
2	Relay	1 2	- +	EFM2

 1	1	OUT			
 2	2	GND		LPS	
 3	3	5V			
 5	5	+3.			
 4	4	LED_	REF		
 3	3	GN	D	IDS	
 2	2	VO.	Р		
 1	1	VO.	_S		

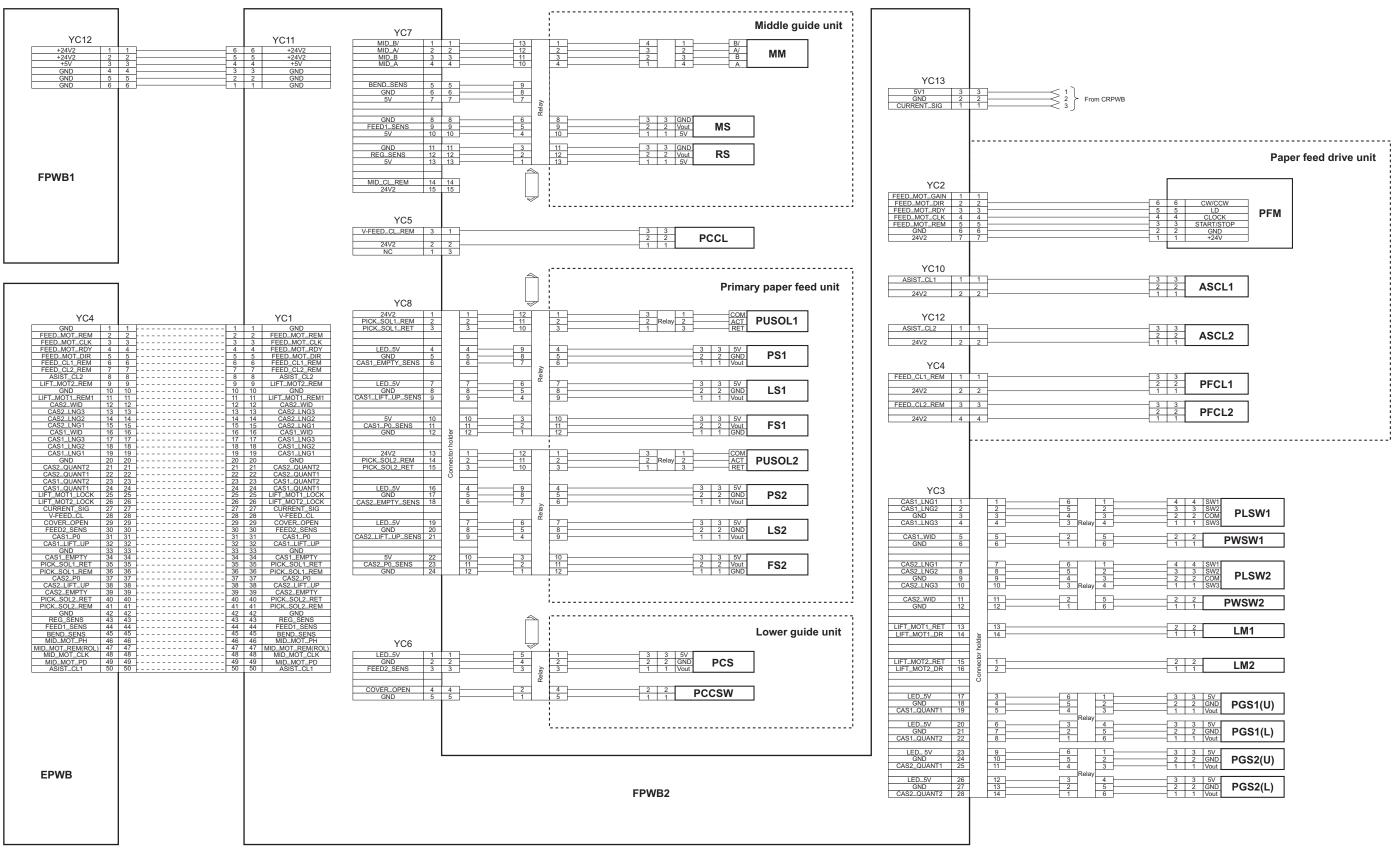
2	Delay	1	 COM	CLSOL
1	Relay	2	 ACT	CLOUL

3	3	GND	
2	2	Vout	DUS2
1	1	5V	0001

2	2		DUCSW
4	4	B/	
3	3	A/	DUM2
2	2	В	
1	1	A	

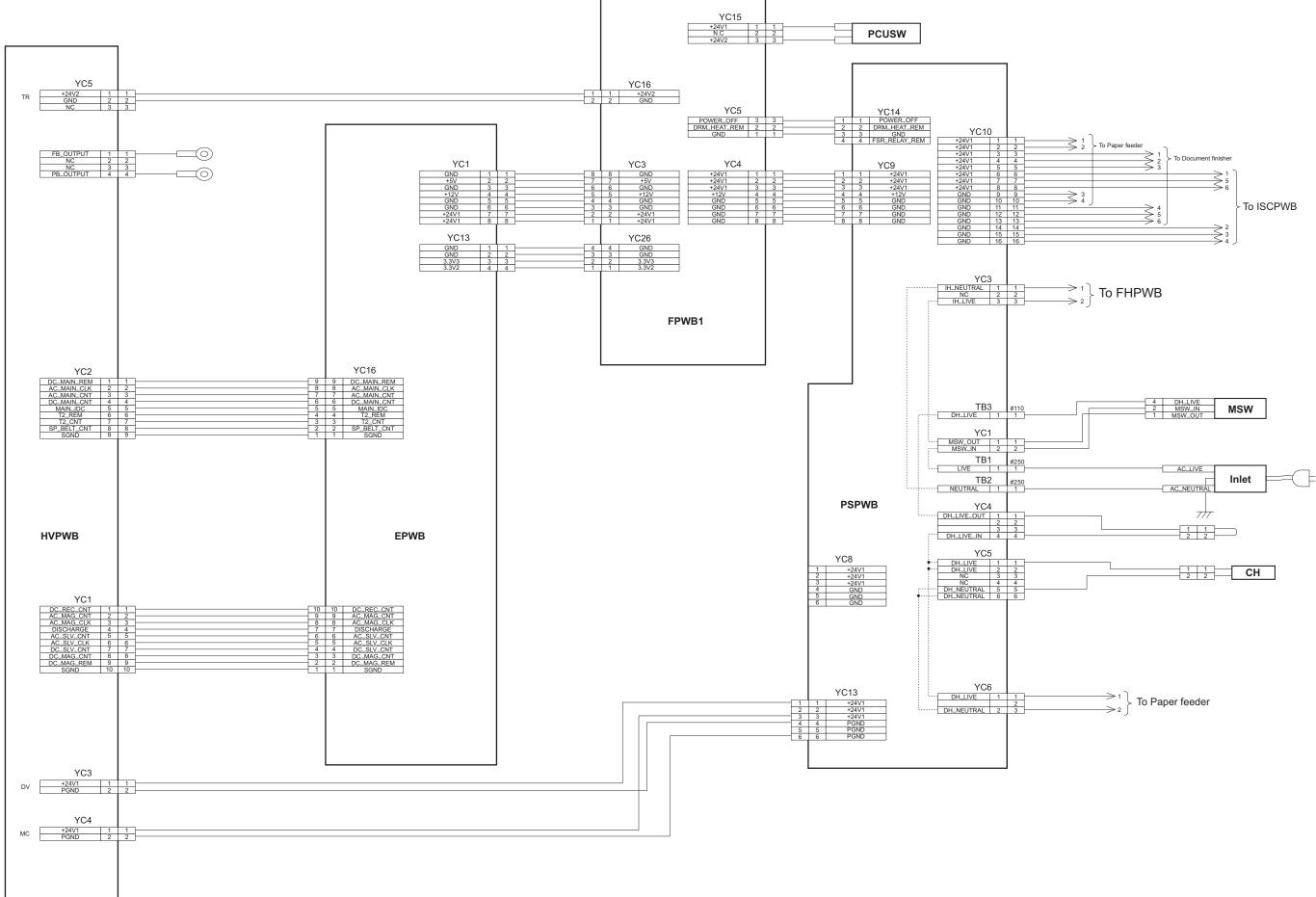


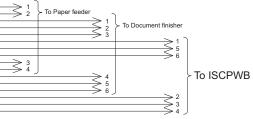
	SW1	4	4		1
PLSW1	SW2	3	3	2	2 3 4
PLOVVI	COM	2	2	3	3
	SW3	1	1	1	4
		2	2	_	5
PWSW1	1	1	1	<u></u>	6
					-
	SW1	4	4		1
	SW2	3	3	 <u> </u>	2
PLSW2	COM	2	2	 -	3
-	SW3	1	1	í —	2 3 4
					_
PWSW2	4	2	2		5 6
	L	1			U
LM1		2	2	 	
		1	1		
LM2	-	2	2		
	<u> </u>				
		-	-		
DO04/UN	5V GND	3	3	<u> </u>	1
PGS1(U)	Vout	2	1	<u></u>	2 3
. ,	vout				5
	5V	3	3	1	4
PGS1(L)	GND	2	2	5	4 5 6
	Vout	1	1	; —	6
		0	0	_	1
DCC2/UN	5V GND	3	3		
PGS2(U)	Vout	2	2		2 3
	vout			<u> </u>	3
	5V	3	3		4
DCS2/I)	GND	2	2		5



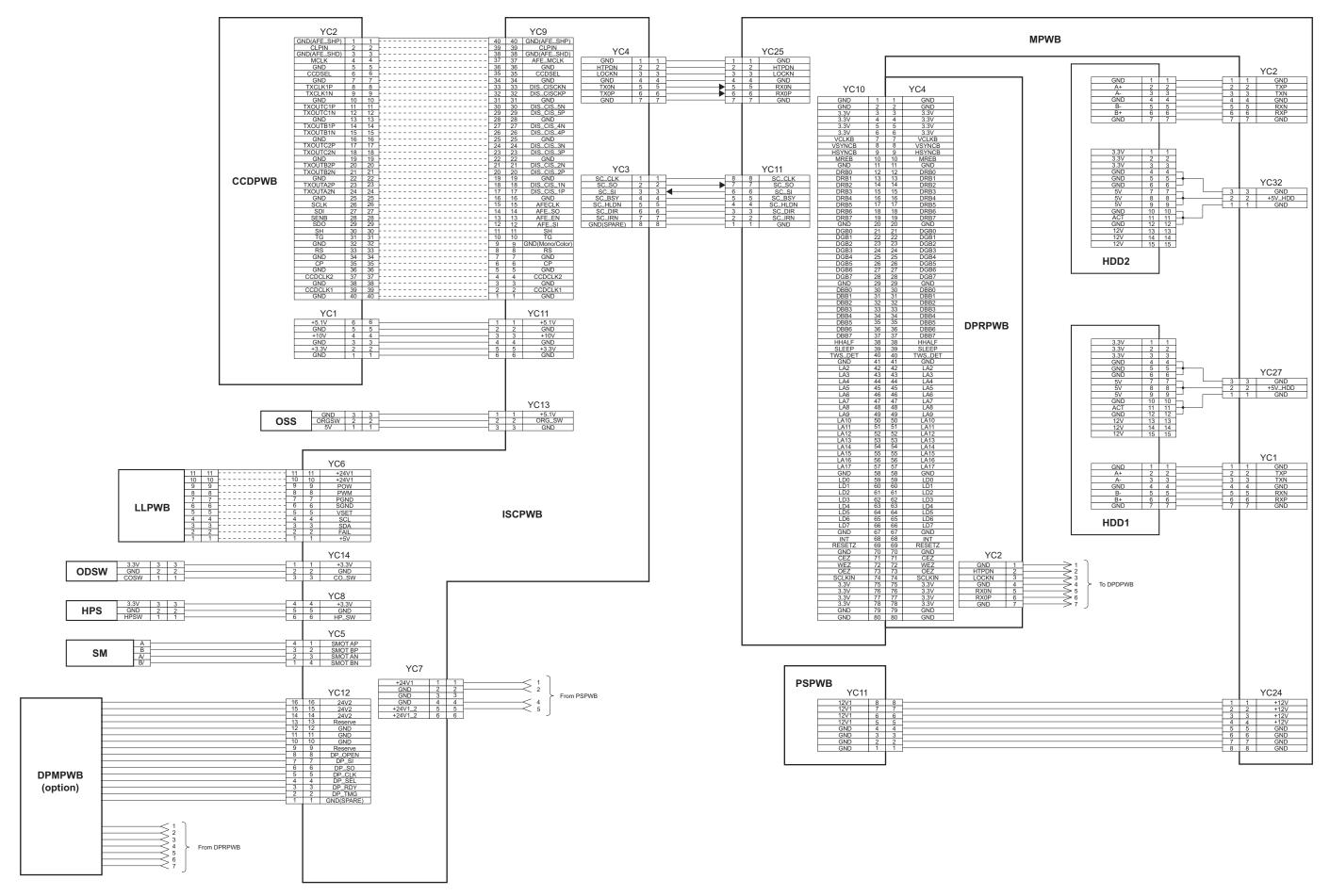
	SW1	4	4		1
PLSW1	SW2	3	3		1 2 3 4
PLOWI	COM	2	2		3
	SW3	1	1	-	4
		2	2		5
PWSW1		1	2		5
	SW1	4	4		1
	SW2	3			2 -
PLSW2	COM	2	3		2 3 4
	SW3	1	1		4
		2	2		5
PWSW2		2	2		5
					-
		-			
LM1		2	2		
		0			
LM2		2	2		
					_
D004/UN	5V GND	3	3		1
PGS1(U)	Vout	2	 1		2 3
	vout		- 1		0
D004(1)	5V	3	3		4 5 6
PGS1(L)	GND Vout	2	2		2
	vout		1		U
	5V	3	3		1
PGS2(U)	GND	2	2		1
PGS2(U)		3 2 1	3 2 1		1 2 3
PGS2(U)	GND	2	2		1 2 3 4

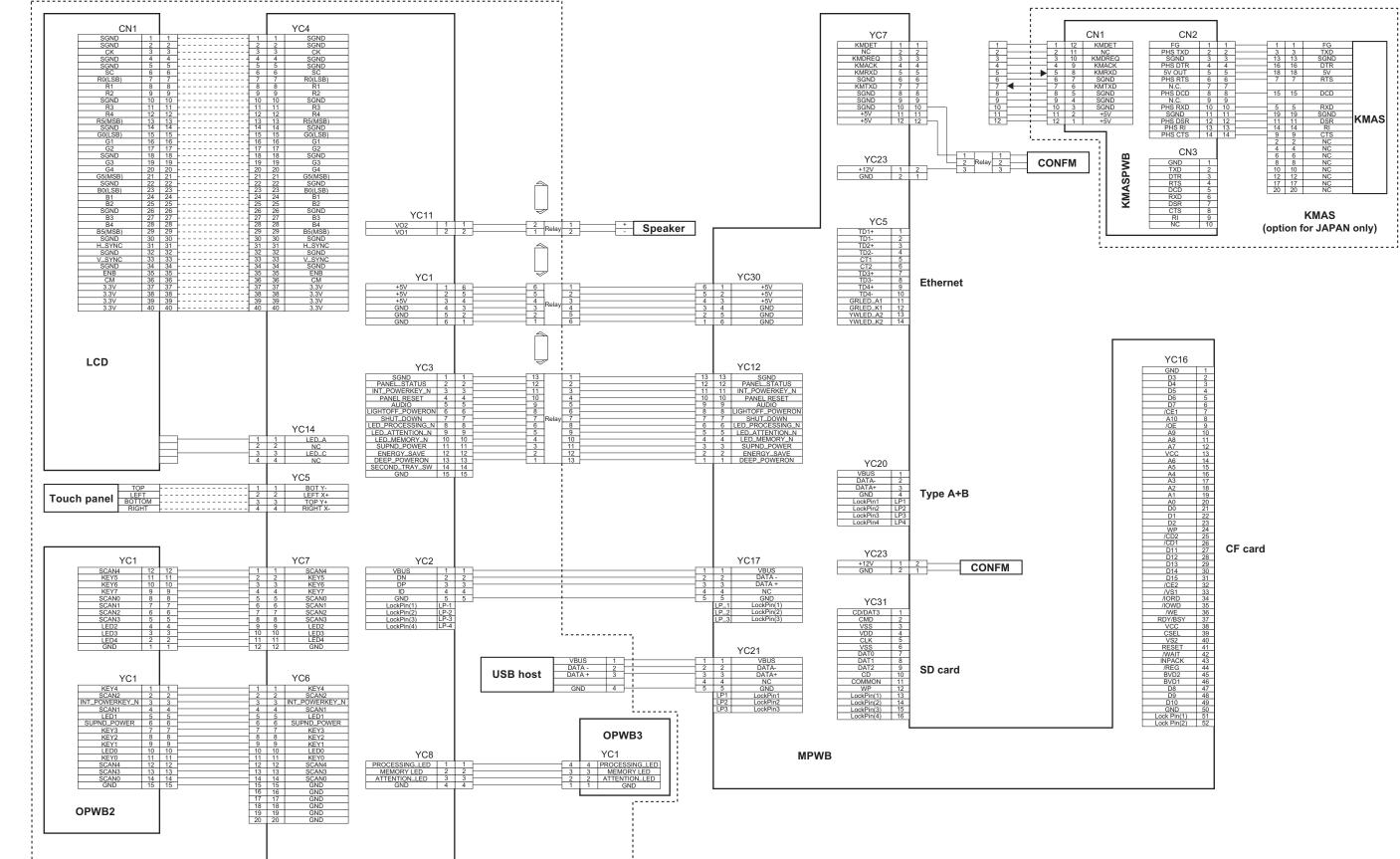












2-4-53

No.10

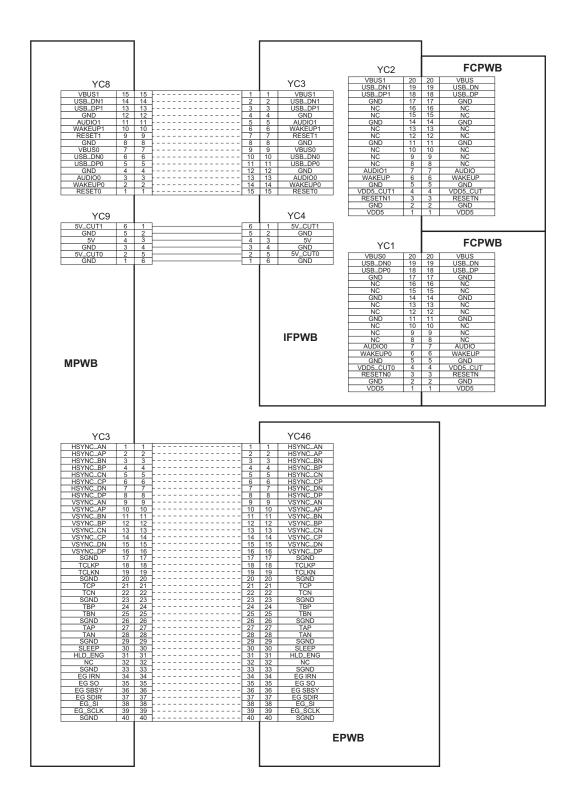
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OPWB1

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GND	1
D3	
D4	2
D5	4
D6	5
D7	6
/CE1	7
A10	8
/OE	9
A9	10
A8	11
A7	12
VCC	13
A6	14
A5	15
A4	16
A3	17
A2	18
A1	19
<u>A0</u>	20
D0	21
D1	22
D2	23
WP	24
/CD2 /CD1	25
/CD1	26
D11	20
D12 D13	28
	29
D14 D15	30 31
/CE2	31
/VS1	33
/IORD	33
/IOWD	35
/WE	36
RDY/BSY	37
VCC	38
CSEL	39
CSEL VS2 RESET	40
RESET	41
/VVAII	42
INPACK	43
/REG	44
BVD2	45
BVD1	46
D8	47
D9	48
D10	49
GND	50
Lock Pin(1)	51
Lock Pin(2)	52

No.11



2LL/2LJ/2LH