

TASKalfa 552ci



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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 20, 2010	1-1-1 to 1-1-3, 1-3-5, 1-3-7, 1-3-14, 1-3-31, 1-3-57, 1-3-58, 1-3-77, 1-3-112, 1-3-131, 1-3-144, 1-4-44, 1-4-45, 1-4-58 to 1-4-60, 2-4-1, 2-4-2, 2-4-7, 2-4-8	-

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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 interface.	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 remove the power plug from the wall outlet before starting machine disassembly	0
Always follow the procedures for maintenance described in the service manual and other related brochures.	\bigcirc
Under no circumstances attempt to bypass or disable safety features including safety mechanisms and protective circuits.	\bigcirc
Always use parts having the correct specifications.	\bigcirc
 Always use the thermostat or thermal fuse specified in the service manual or other related brochure when replacing them. Using a piece of wire, for example, could lead to fire or other serious acci- dent. 	0
• When the service manual or other serious brochure specifies a distance or gap for installation of a part, always use the correct scale and measure carefully.	0
Always check that the copier is correctly connected to an outlet with a ground connection	ł
Check that the power cable covering is free of damage. Check that the power plug is dust-free. If it is dirty, clean it to remove the risk of fire or electric shock.	0
Never attempt to disassemble the optical unit in machines using lasers. Leaking laser light may damage eyesight.	
Handle the charger sections with care. They are charged to high potentials and may cause electric shock if handled improperly.	
ACAUTION	

•	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	Â
•	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.	
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 immedi- ately.	

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.



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	(6) A white line appears longitudinally.	
	(7) A line appears longitudinally	
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INSTALLATION GUIDE

DOCUMENT PROCESSOR PAPER FEEDER 3000 SHEETS PAPER FEEDER DOCUMENT FINISHER 3000 SHEETS DOCUMENT FINISHER CENTER-FOLDING UNIT MAILBOX HOLE PUNCH UNIT JOB SEPARATOR FAX System DT-710 DUCT UNIT This page is intentionally left blank.

1-1-1 Specifications

туре	Desktop			
÷ ·	Electrophotography by semiconductor laser, tandem drum system			
	Sheets, books and three-dimensional objects			
	Maximum size: A3/Ledger			
Original feed system	-			
		163 g/m ²)		
	Cassette: 60 - 163 g/m² (Duplex: 60 - 163 g/m²) MP tray: 60 - 220 g/m²			
Paper type	Cassette: Plain, Rough, Vellum, Recy	reled Preprinted Bond Color (Colour)		
	Prepunched, Letterhead, Thick, High Quality, Custom 1 - 8 (Duplex: Same as Simplex)			
	MP tray: Plain, Transparency (OHP film), Rough, Vellum, Labels, Recycled, Preprinted, Bond, Cardstock, Color (Colour), Prepunched, Letterhead,			
	Thick, Coated, Envelope, High Quality, Custom 1 - 8			
Paper size	Cassette: A3, B4, A4, A4R, B5, B5R, A5R, Ledger, Legal, Letter, LetterR, Statement,			
·	Oficio II, 8.5 x 13.5", Folio, 8K, 16K, 16KR			
	MP tray: A3, B4, A4, A4R, B5, B5R,	IP tray: A3, B4, A4, A4R, B5, B5R, A5R, B6R, A6R, Ledger, Legal, Letter, LetterR, ExecutiveR, Statement, Oficio II, 8.5 x 13.5", Folio, 8K, 16K, 16KR,		
	ExecutiveR, Statement, Ofic			
		Return postcard (148 x 200 mm),		
		, Envelope C4, Envelope #10 (Commercial #10),		
	Envelope #9 (Commercial #9), Envelope #6 (Commercial #6 3/4), Monarch,			
7	ISO B5, Youkei 2, Youkei 4			
	Manual mode: 25 to 400%, 1% incren	nents		
Printing spood	Auto mode: Preset zoom When the document finisher is not installed			
Trinking speed	When the 3000 sheet document finish			
	Black and white copying	Full color copying		
	A4/Letter: 55 sheets/min.	A4/Letter: 50 sheets/min.		
	A4R/LetterR: 37 sheets/min.	A4R/LetterR: 33 sheets/min.		
	A3/Ledger: 28 sheets/min.	A3/Ledger: 25 sheets/min.		
	B4/Legal: 28 sheets/min.	B4/Legal: 25 sheets/min.		
	B5: 55 sheets/min.	B5: 50 sheets/min.		
	When the document finisher is installed			
	Black and white copying	Full color copying		
	A4/Letter: 50 sheets/min.	A4/Letter: 50 sheets/min.		
	A4R/LetterR: 37 sheets/min.	A4R/LetterR: 33 sheets/min.		
	A3/Ledger: 28 sheets/min. B4/Legal: 28 sheets/min.	A3/Ledger: 25 sheets/min. B4/Legal: 25 sheets/min.		
	B4/Legal. 20 sheets/min. B5: 50 sheets/min.	B5: 50 sheets/min.		
First print time	4.6 s or less (black and white)/6.1 s of			
	Room temperature 22 °C/71.6 °F, 609			
······································	Power on: 57.5 s or less			
	Low power mode:30 s or less			
	Sleep mode: 57.5 s or less			
Paper capacity	Cassette 1: 500 sheets (80 g/m ² , A4/l			
	250 sheets (80 g/m ² , B4/Legal or more)			
	Cassette 2: 500 sheets (80 g/m ²)	<i>n</i>		
	MP tray: 100 sheets (80 g/m ² , A4/			
Outer the second site	50 sheets (80 g/m ² , more then A4/Letter)			
Output tray capacity	Top tray: 250 sheets (80 g/m ²)			
Continuous copying	When optional job separator installed: 150 sheets (80 g/m ²)			
Light source				
	Flat bed scanning by CCD image sen	sor		
Photoconductor				
	Semiconductor laser and electrophotography			
Charging system				
Developing system				
	Developer: 2-component			
	Toner replenishing: Automatic from a toner container			

2KY-1

Transfer system	Primary: Transfer belt
2	Secondary: Transfer roller
Separation system	Separation electrode
Cleaning system	
Charge erasing system	
Fusing system	Belt fusing
	Heat source: Halogen heaters
	Abnormally high temperature protection devices: thermostats
Main memory	Standard: 2048 MB
	Maximum: 2048 MB
Hard disk	160 GB or more (standard)
Interface	USB interface connector: 1 (USB Hi-speed)
	USB memory slot: 2 (Full-Speed USB)
	Network interface: 1 (10 BASE-T/100 BASE-TX)
	KUIO/W slot: 2 (option)
Resolution	•
Operating on vironment	Temperature: 10 to 22 $E^{\circ}C/E0$ to 00 $E^{\circ}\Gamma$
Operating environment	Temperature: 10 to 32.5°C/50 to 90.5°F
Operating environment	Humidity: 15 to 80% RH
Operating environment	
	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum
	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only)
Dimensions	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only)
Dimensions	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box)
Dimensions	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray)
Dimensions Weight Space required	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray)
Dimensions	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray) 120 V AC, 60 Hz, 12.0 A
Dimensions Weight Space required Power source	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray) 120 V AC, 60 Hz, 12.0 A 220 to 240 V AC, 50 Hz, 7.2 A
Dimensions Weight Space required Power source	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray) 120 V AC, 60 Hz, 12.0 A 220 to 240 V AC, 50 Hz, 7.2 A Document processor, paper feeder, 3000-sheet paper feeder, document finisher,
Dimensions Weight Space required Power source	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray) 120 V AC, 60 Hz, 12.0 A 220 to 240 V AC, 50 Hz, 7.2 A Document processor, paper feeder, 3000-sheet paper feeder, document finisher, 3000-sheet document finisher, center-folding unit, mailbox, punch unit, job separator,
Dimensions Weight Space required Power source	Humidity: 15 to 80% RH Altitude: 2500 m/8,202 ft maximum Brightness: 1500 lux maximum 605 (W) x 680 (D) x 745 (H) mm (main body only) 23 13/16" (W) x 26 3/4" (D) x 29 5/16" (H) (main body only) 106 kg/233.7 lb (without toner container and waste toner box) 889 mm (W) x 680 (D) mm (using MP tray) 35" (W) x 26 3/4" (D) (using MP tray) 120 V AC, 60 Hz, 12.0 A 220 to 240 V AC, 50 Hz, 7.2 A Document processor, paper feeder, 3000-sheet paper feeder, document finisher,

Printer functions	
Printing speed	Same as copying speed
First print time	5.2 s or less (black and white)/6.7 s or less (full color)
Resolution	600 dpi
Operating system	Windows 2000 (Service Pack 2 or later), Windows XP, Windows Server 2003,
	Windows Vista, Windows 7, Windows Server 2008, Apple Macintosh OS 10.x
Interface	USB interface connector: 1 (USB Hi-speed)
	Network interface: 1 (10 BASE-T/100 BASE-TX)
Page description language	PRESCRIBE

Scanner functions			
System requirements	CPU 600 MHz or higher		
	RAM 128 MB or more		
Resolution	600 dpi, 400 dpi, 300 dpi, 200 dpi, 200 x 100 dpi, 200 x 400 dpi		
	TIFF (MMR/JPEG compression), JPEG, XPS, PDF (MMR/JPEG compression),		
	PDF (high compression)		
Scanning speed	A4 landscape, 300 dpi, Image quality: Text/Photo original		
0	Single scanning: 75 images/min (black and white), 75 images/min (full color)		
	Dual scanning: 100 images/min (black and white), 100 images/min (full color)		
Interface	Ethernet (10 BASE-T/100 BASE-TX)		
Network protocol			,
Transmission system		SMB	Scan to SMB
·		FTP	Scan to FTP, FTP over SSL
	E-mail transmissior	n SMTP	Scan to E-mail
	Twain scan*1		
	WIA scan*2		
	*1 Available operating system: Windows 2000 (Service Pack 2 or later),		
	Windows XP, Windows Server 2003, Windows Vista,		
			Windows Server 2008, Windows 7
	*2 Available operati	ing syste	m: Windows Vista, Windows Server 2008, Windows 7

NOTE: These specifications are subject to change without notice.

1-1-2 Parts names

(1) Body

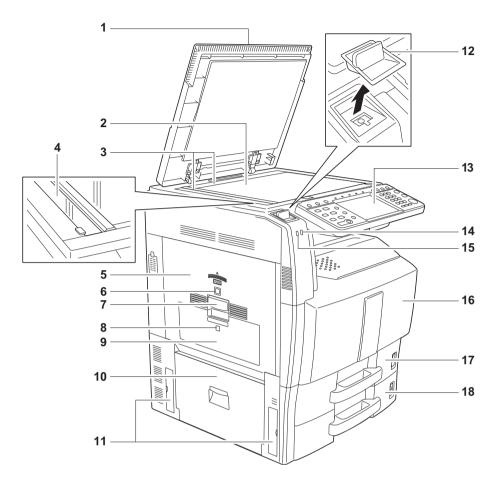


Figure 1-1-1

- 1. Original cover (option)
- Contact glass
 Original size indicator plates
 Slit glass
 Left cover 1

- 6. Left cover 1 indicator
- 7. Left cover 1 lever
- 8. Left cover 2 indicator
- 9. Left cover 2
- 10. Left cover 3
- 11. Handles
- 12. Clip holder
- 13. Operation panel
- 14. Error indicator
- 15. Receive indicator
- 16. Front cover
- 17. Cassette 1
- 18. Cassette 2

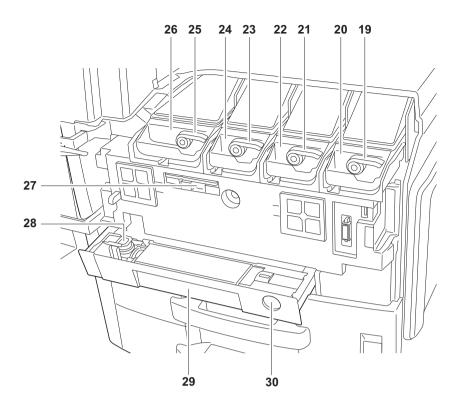


Figure 1-1-2

- 19. Toner container release lever (Magenta)
- 20. Toner container (Magenta)
- 21. Toner container release lever (Cyan)
- 22. Toner container (Cyan)
- 23. Toner container release lever (Yellow)
- 24. Toner container (Yellow)
- 25. Toner container release lever (Black)
- 26. Toner container (Black)
- 27. Cleaning brush
- 28. Waste toner box
- 29. Waste toner tray
- 30. Release button

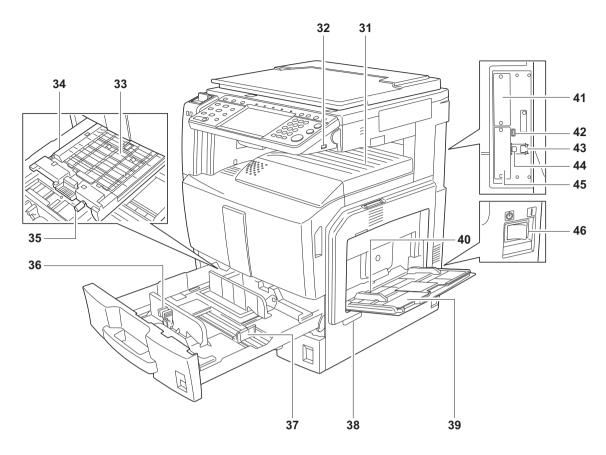


Figure 1-1-3

- 31. Top tray
- 32. USB memory slot
- 33. Paper feed unit cover
- 34. Paper feed unit
- 35. Knob
- 36. Paper width adjusting tab
- 37. Paper length guide
- 38. Handles
- 39. MP tray (multi-purpose tray)
- 40. Paper width guide
- 41. Optional interface slot (OPT2)
- 42. USB port
- 43. Network interface connector
- 44. USB interface connector
- 45. Optional interface slot (OPT1)
- 46. Main power switch

(2) Operation panel

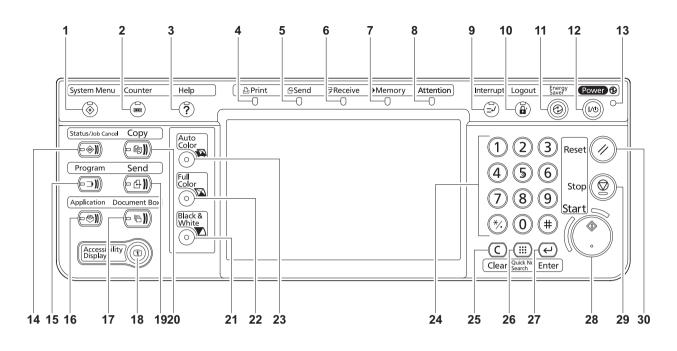


Figure 1-1-4

- 1. System menu key/indicator
- 2. Counter key/indicator
- 3. Help key/indicator
- 4. Print indicator
- 5. Send indicator
- 6. Receive indicator
- 7. Memory indicator
- 8. Attention indicator
- 9. Interrupt key/indicator
- 10. Logout key/indicator
- 11. Energy saver key/indicator
- 12. Power key/indicator
- 13. Main power indicator
- 14. Status/Job cancel key/indicator
- 15. Program key/indicator

- 16. Application key/indicator
- 17. Document box key/indicator
- 18. Accessibility key/indicator
- 19. Send key/indicator
- 20. Copy key/indicator
- 21. Black&White key
- 22. Full-color key
- 23. Auto color key
- 24. Numeric keys
- 25. Clear key
- 26. Quick No. search key
- 27. Enter key
- 28. Start key/indicator
- 29. Stop key
- 30. Reset key

1-1-3 Machine cross section

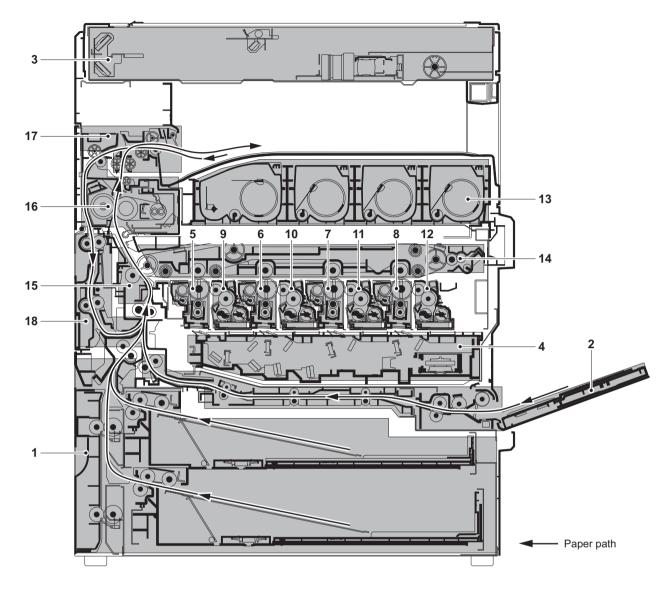


Figure 1-1-5 Machine cross section

- 1. Cassette paper feed section
- 2. MP tray paper feed section
- 3. Image scanner section
- 4. Laser scanner section
- 5. Drum section (Black)
- 6. Drum section (Yellow)
- 7. Drum section (Cyan)
- 8. Drum section (Magenta)
- 9. Developing section (Black)

- 10. Developing section (Yellow)
- 11. Developing section (Cyan)
- 12. Developing section (Magenta)
- 13. Toner container section
- 14. Primary transfer section
- 15. Secondary transfer/separation section
- 16. Fuser section
- 17. Eject/feedshift section
- 18. Duplex section

1-2-1 Installation environment

- 1. Temperature: 10 to 32.5°C/50 to 90.5°F
- 2. Humidity: 15 to 80%
- 3. Power supply: 120 V AC, 12.0 A/220 to 240 V AC, 6.5 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.

 Allow sufficient access for proper operation and maintenance of the machine. Machine front: 1000 mm/39 3/8" Machine rear: 100 mm/3 15/16" Machine right: 300 mm/11 13/16" Machine left: 300 mm/11 13/16"

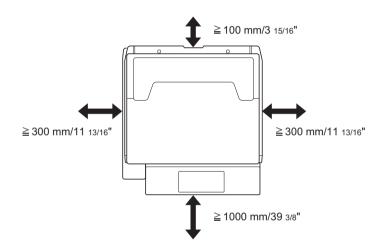
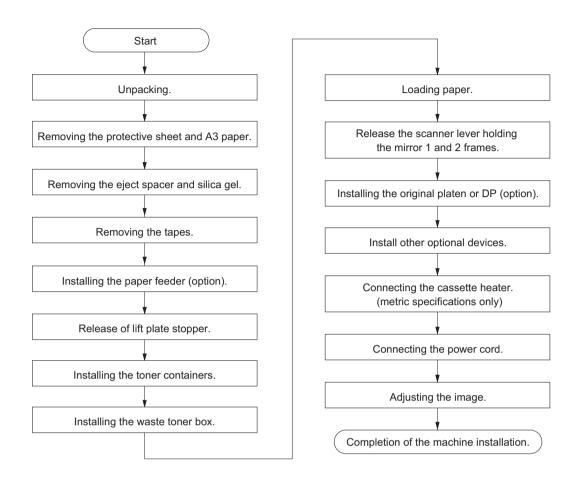


Figure 1-2-1 Installation dimensions

1-2-2 Unpacking and installation

(1) Installation procedure



Moving the machine When moving the machine, pull out two carrying handles on the left side, and move with carrying handles and the hand-hold two place of the right side.

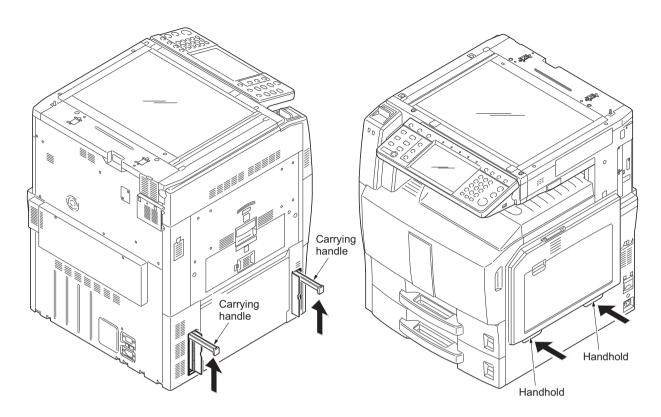
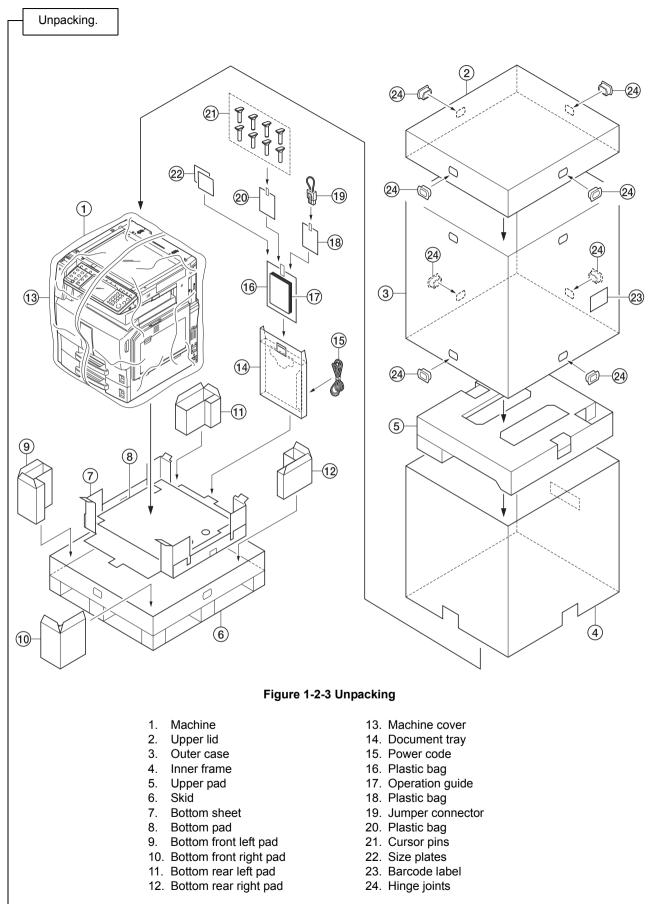
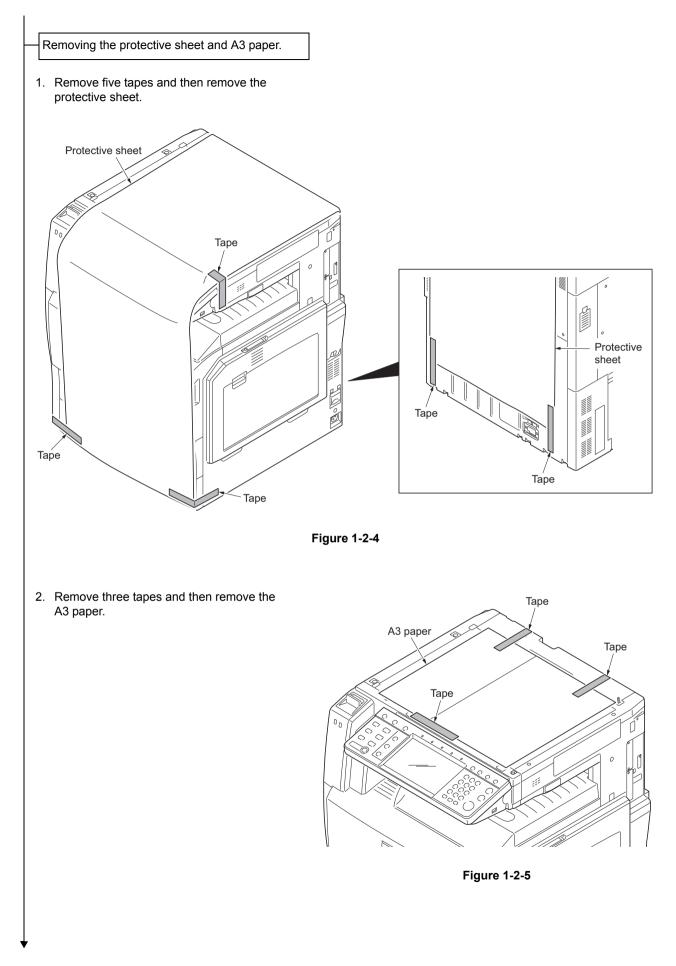
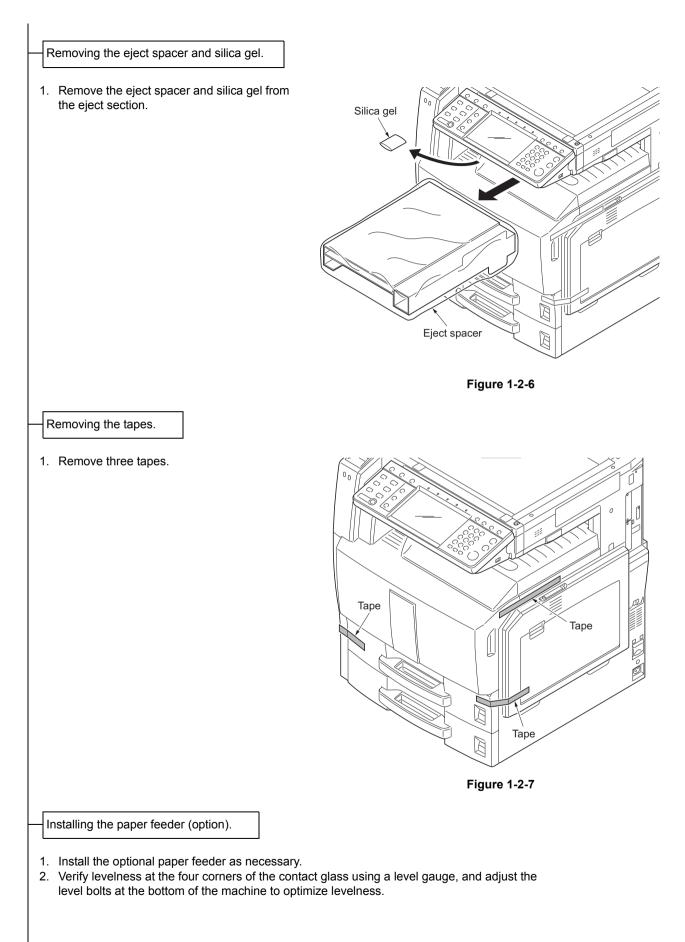


Figure 1-2-2



Place the machine on a level surface.





Release of lift plate stopper.

- Pull cassette 1 and 2 out. 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.
- 2. Gently push cassette 1 and 2 back in.

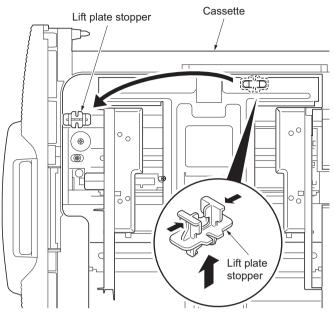


Figure 1-2-8

Installing the toner containers.

- 1. Open the front cover.
- 2. Hold the toner container with the toner container release lever positioned on the top, and shake the toner container in the horizontal direction.

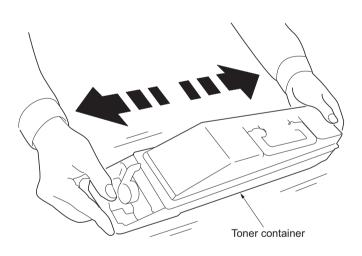
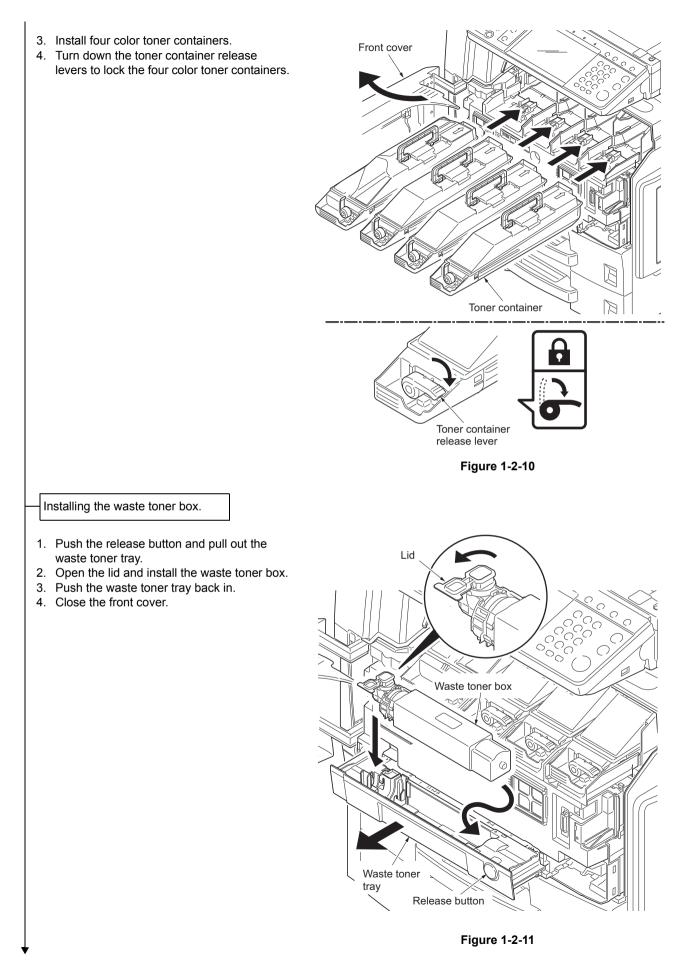


Figure 1-2-9



Loading paper.

- 1. Pull the cassette out.
- 2. Adjust the paper length guide to fit the paper size.
- 3. Holding the paper width adjusting tab both ends, move the paper width guide to fit the paper.
- 4. When loading paper smaller than A4 or Letter into cassette 1, raise the support lever as shown in the figure.

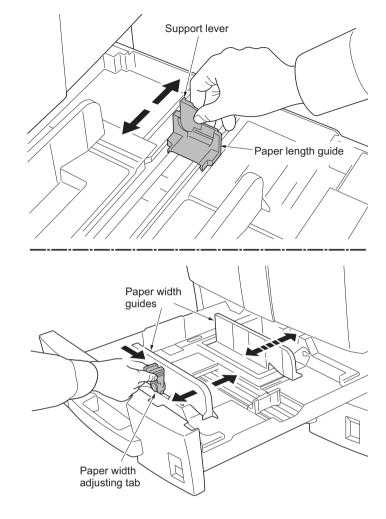
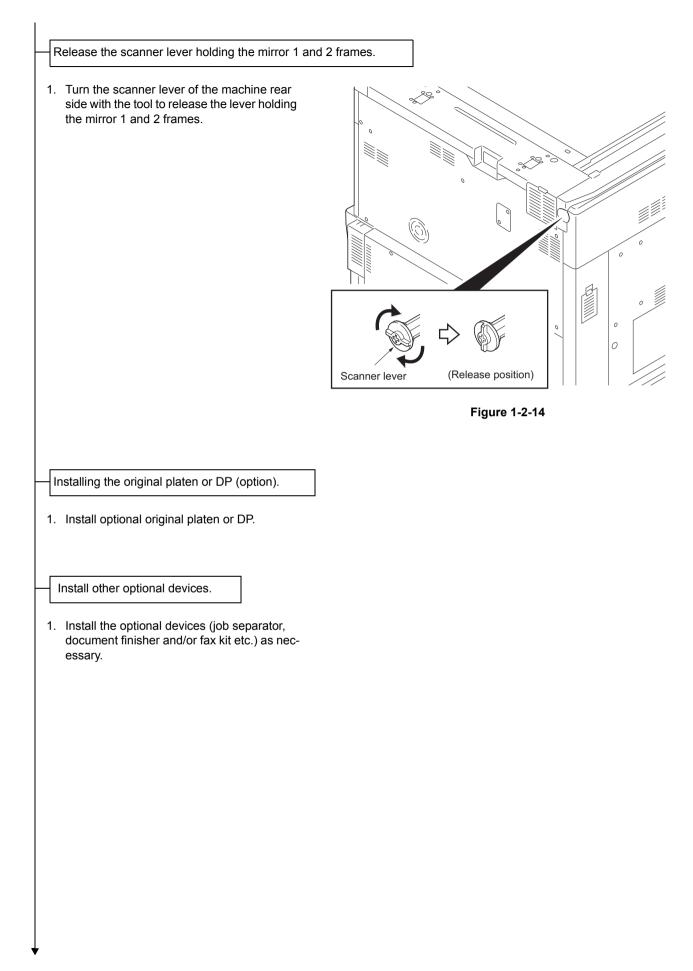


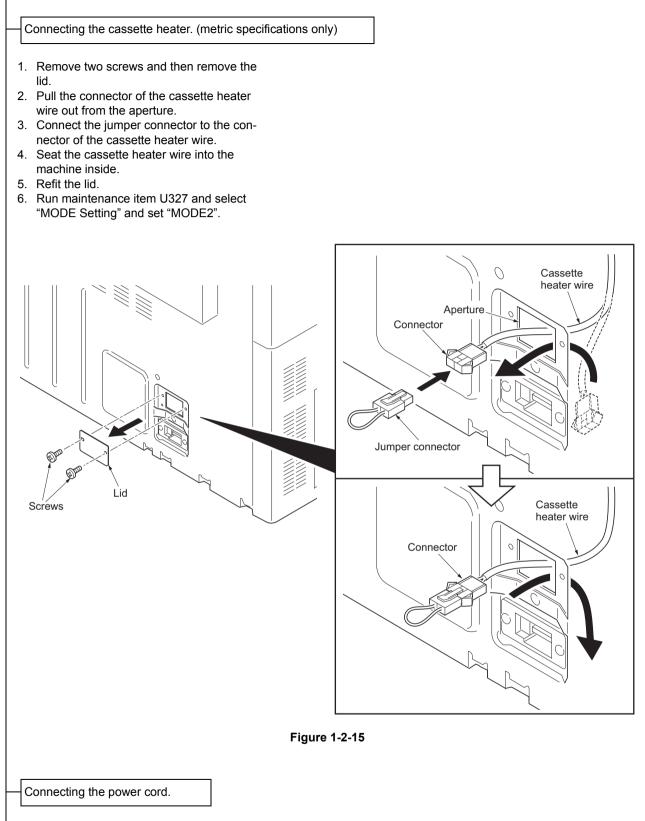
Figure 1-2-12

5. Align the paper flush against the left side of the cassette.
IMPORTANT: Verify that the paper is pressed snugly against the vertical and horizontal size guides. If a gap is present, reset the width guides or length guide.
Before loading the paper, be sure that it is not curled or folded.
Ensure that the loaded paper does not exceed the level indicated.

Figure 1-2-13

- 6. Insert the appropriate paper size card in the slot to indicate the size of the loaded paper.
- 7. Gently push the cassette back in.





- 1. Connect the power cord to the power cord connector on lower left of the machine.
- 2. Connect the power plug to the wall outlet.

Adjusting the image. 1. Open the main power switch cover and turn the main power switch on. 2. Check the messages on the operation panel After completion of warming up, in case to display "Warning for high temperature. Adjust the room temperature." on the operation panel, follow the step 3. (Performing Drum Refresh) In case to have no display, follow the step 4. (Performing Color Registration) 3. Performing drum refreshing Press the System menu key and arrow down key and select [Adjustment/Maintenance]. Select [Drum Refresh] and press [Execute] to begin drum refreshing. 4. Performing color registration (see page 1-3-164) Press the System menu key and arrow down key and select [Adjustment/Maintenance]. Press the arrow down key and select Color Registration and press [Print]. Select [Next] and enter the values for magenta/cyan/yellow, then press [Execute]. When completed, press [OK]. Check the output of color registration chart and if the adjustments are incorrect, proceed to color registration and adjust again. Press close and continues to the step 5. (Performing Color adjustment) 5. Performing Color adjustment (see page 1-3-166) Select Color Calibration and press [Next]. Press [Execute] to perform Color Calibration. The message "Performing Color Calibration, Remaining: XXsec," is displayed. Once "Completed" is displayed, press [OK] and press System menu to exit. 6. Adjusting the halftone automatically (maintenance item U410) 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. Select [Continuous Adjustment] to print a test pattern 1. Use the test pattern 1 printed as the original and place approximately 20 sheets of white paper on the test pattern and then press the start key to adjust automatically. Test pattern 2 is printed. Use the test pattern 2 printed as the original and place approximately 20 sheets of white paper on the test pattern and then press the start key to adjust automatically. Test pattern 3 is printed. Use the test pattern 3 printed as the original and place approximately 20 sheets of white paper on the test pattern and then press the start key to adjust automatically. When function is completed, [ALL COMP.] is displayed. Press the stop key twice to exit. If image quality is unsatisfactory after test copying, execute Color Calibration under Adjustment/Maintenance in the System menu, then retry U410-Adjusting the halftone automatically. 7. Setting the delivery date (maintenance item U278) 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. 8. Output status report Before exiting the maintenance mode, use the numeric keys to enter 000 and press the start key. Select [MAINTENANCE]. Press the start key. A status report is output. Press the stop key to exit. 9. Enter 001 using the numeric keys, then press the start key to exit the maintenance mode.

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	DOUBLE COUNT (A3/LEDGER)	
U260	Selecting the timing for copy counting	EJECT	
U276	Setting the copy count mode	MODE0	
U284	Setting 2 color copy mode	OFF	
U285	Setting service status page	ON	
U325	Setting the paper interval	ON/1	
U326	Setting the black line cleaning indication	ON/8	
U327	Setting the cassette heater control	OFF/NONE	
U328	Side ejection setting	OFF	
U343	Switching between duplex/simplex copy mode	OFF	

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

Key counter installation requires the following parts:

Key counter (P/N 3025418011) Key counter set (P/N 302A369708) Key counter wire set (P/N 302H794560) Key counter mount (P/N 302FZ03010) One (1) M4 \times 8 tap-tight S screw (P/N B1A54080)

Supplied parts of key counter set:

Key counter socket assembly (P/N 3029236241) Key counter cover (P/N 3066060011) Key counter mount (P/N 3066060041) Key counter retainer (P/N 302GR03020) Key counter cover retainer (P/N 302GR03010) One (1) M3 × 8 tap-tight P screw (P/N 5MBTPB3008PW++R) Two (2) M4 × 10 tap-tight P screws (P/N 5MBTPB4010PW++R) Two (2) M4 × 10 tap-tight S screws (P/N 5MBTPB4010TW++R) Two (2) M3 × 6 bronze flat-head screws (P/N 7BB003306H) One (1) M4 × 20 tap-tight S screw (P/N 7BB100420H) One (1) M3 v 8 bronze nut (P/N 7BC1003055++H01) One (1) M3 × 8 bronze binding screw (P/N B1B03080) One (1) M4 × 30 tap-tight S screw (P/N B1B54300) Five (5) M4 × 6 chrome TP screws (P/N B4A04060) Two (2) M4 × 10 chrome TP screws (P/N B4A04100)

Supplied parts of key counter wire set:

Key counter wire (P/N 302H746930) Wire film R (P/N 302H739960)

Procedure

- 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.
- 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.

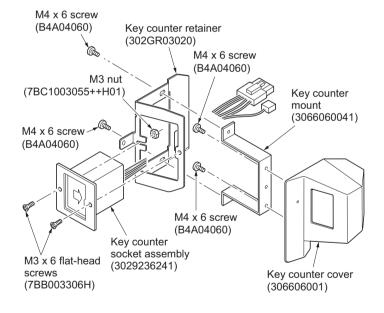


Figure 1-2-16

5. Remove two screws and then remove the scanner right cover.

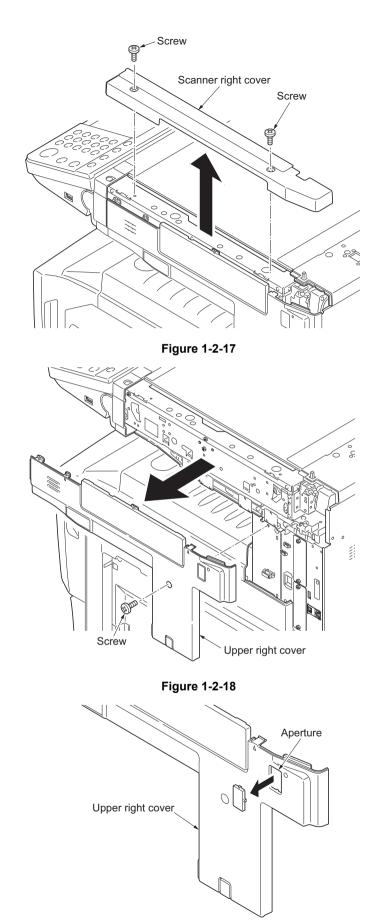


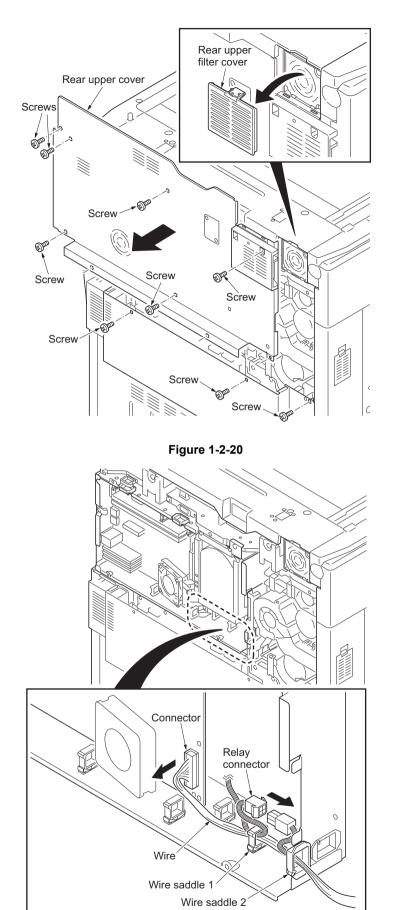
Figure 1-2-19

6. Remove the screw and then remove the upper right cover.

7. Cut out the aperture plate on the upper right

cover using nippers.

- 8. Remove the rear upper filter cover.
- 9. Remove nine screws and then remove the rear upper cover.



- 10. Remove the connector.
- 11. Remove the relay connector.
- 12. Release wire saddle 1 and 2, and then remove the wire.

- 13. Remove two connectors (YC17 and YC21).
- 14. Remove the screw and then remove the clamp.
- 15. Remove the connector (YC12).
- 16. Release wire saddle 1 and 2, and then remove the wires.

- 17. While pressing and holding the lock levers, remove the three connectors (YC3, YC4 and YC11).
- 18. Release wire saddles 3 to 6, and then remove the wires.

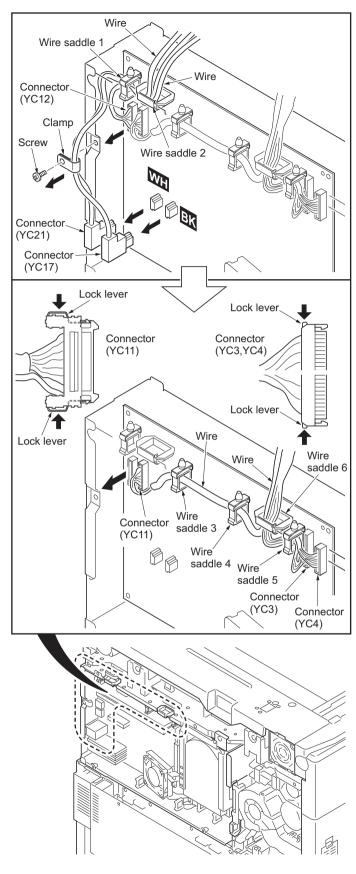


Figure 1-2-22

19. Remove three screws

20. Open the controller box.

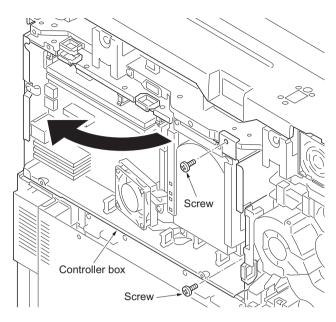


Figure 1-2-23

21. While holding the controller box, remove the pin. Take care not to drop the controller box.

22. Remove the controller box.

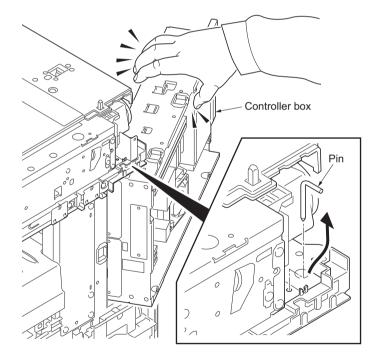
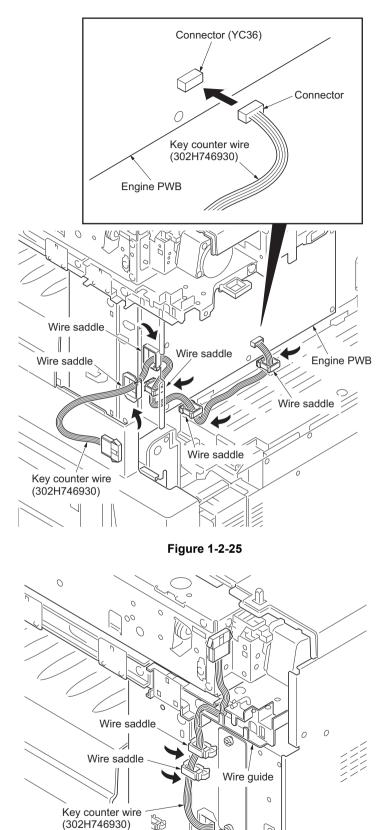


Figure 1-2-24

- 23. Connect the connector of the key counter wire to the connector YC36 on the engine PWB.
- 24. Release five wire saddles and then fasten the key counter wire.
- 25. Refit all the parts removed in steps 22 to 8.



- 26. Release two wire saddles and then fasten the key counter wire.
- 27. Carry out wiring of key counter wire on the wire guide.

Figure 1-2-26

28. Remove the wire film.

29. Fit the wire film R to wire guide.

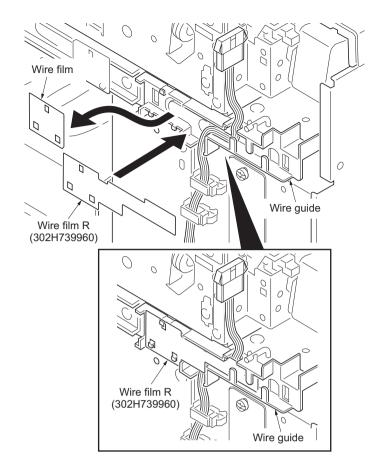


Figure 1-2-27

30. Fit the key counter mount to the rear upper frame using the M4 x 8 screw.

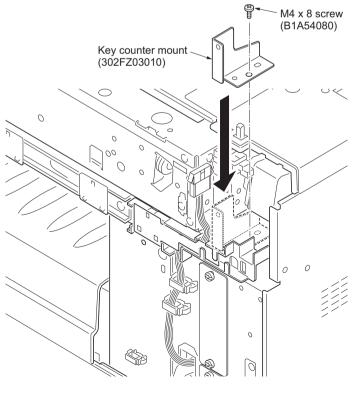


Figure 1-2-28

- 31. Pass the connector of the key counter wire through the aperture in the upper right cover.
- 32. Refit the upper right cover.

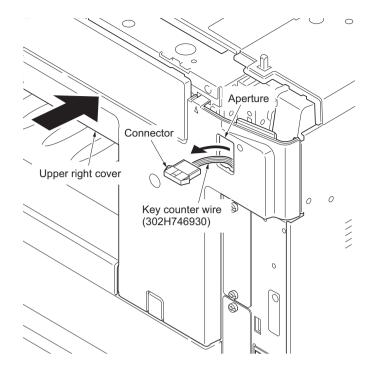


Figure 1-2-29

- 33. Pass the key counter wire through the aperture in the key counter cover retainer.
- 34. Insert the projection of the key counter cover retainer in the slit of the upper right cover.
- 35. Fit the key counter cover retainer using the M4 x 20 screw.

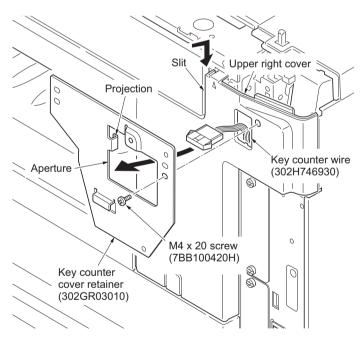


Figure 1-2-30

- 36. Connect the connector of the key counter signal cable to the connector of the key counter wire.
- 37. Fit the key counter cover to the machine using the M4 x 6 screw.
- 38. Refit the scanner right cover.
- 39. Insert the key counter into the key counter socket assembly.

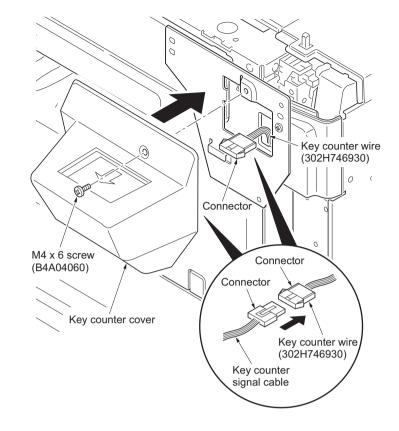


Figure 1-2-31

- 40. Turn the main power switch on and enter the maintenance mode.
- 41. Run maintenance item U204 and select "Key-Counter".
- 42. Exit the maintenance mode.
- 43. Check that the message requesting the key counter to be inserted is displayed on the touch panel when the key counter is pulled out.
- 44. Check that the counter counts up as copies are made.

1-2-4 Installing the cassette heater (option) (inch specifications only)

Installing the cassette heater requires the following component:

Cassette heater (P/N 302H794760) Two (2) M4 x 10 screws (P/N 7BB700410H)

Procedure

- 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 cassette 1 and 2.
- 3. Remove the screw and then remove the connector cover.
- 4. Place the cassette heater by engaging it with the four hooks.
- 5. Fit the cassette heater using two screws.

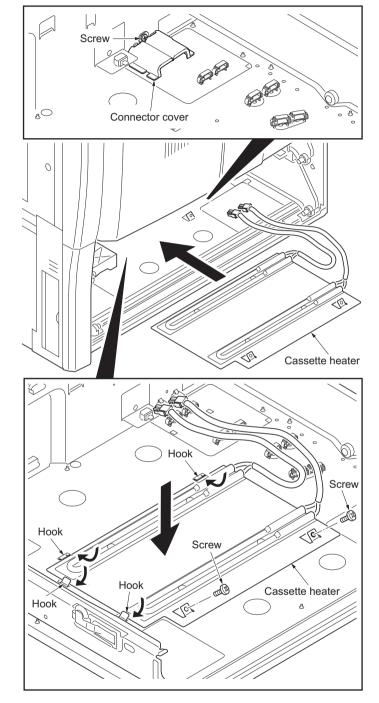


Figure 1-2-32

- 6. Fasten the cassette heater wires to eight wire saddles.
- 7. Connect two connectors of cassette heater wires to each connector of the machine.
- 8. Refit the connector cover.
- 9. Refit the cassette 1 and 2.

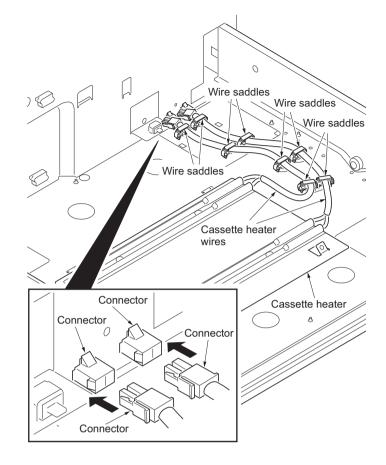


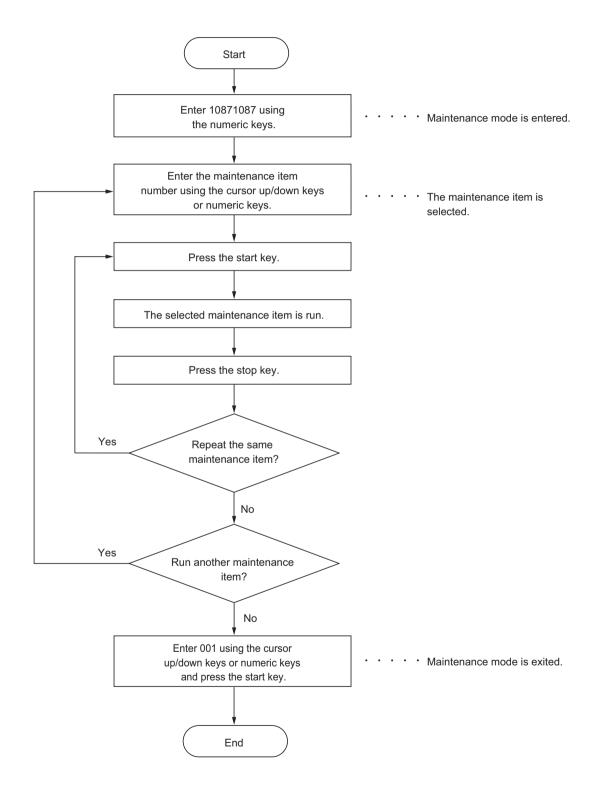
Figure 1-2-33

- 10. Turn the main power switch on and enter the maintenance mode.
- 11. Run maintenance item U327 and select "MODE Setting" and set "MODE2".

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 mode item list

General	U000 U001 U002 U003 U004 U019 U021 U024 U030	Outputting an own-status report Exiting the maintenance mode Setting the factory default data Setting the service telephone number Setting the machine number Displaying the ROM version Memory initializing	- - - - - - - -
Drive, paper feed and	U002 U003 U004 U019 U021 U024	Setting the factory default data Setting the service telephone number Setting the machine number Displaying the ROM version Memory initializing	- - - - -
Drive, paper feed and	U003 U004 U019 U021 U024	Setting the service telephone number Setting the machine number Displaying the ROM version Memory initializing	- - - -
Drive, paper feed and	U004 U019 U021 U024	Setting the machine number Displaying the ROM version Memory initializing	
Drive, paper feed and	U019 U021 U024	Displaying the ROM version Memory initializing	-
Drive, paper feed and	U021 U024	Memory initializing	-
Drive, paper feed and	U024		
feed and			-
feed and	U030	HDD formatting	-
		Checking the operation of the motors	-
paper convey-	U031	Checking switches and sensors for paper conveying	-
ng system	U032	Checking the operation of the clutches	-
	U033	Checking the operation of the solenoids	-
F	U034	Adjusting the print start timing	
		LSUOUT TOP	0/
		LSUOUT LEFT	0/0/0/0/0/0
		LSUOUT TOP B/W	0/0/0/0/0/0
	U035	Setting the printing area for folio paper	330/210
	U037	Checking the operation of the fan motors	-
l l	U051	Adjusting the deflection in the paper	
		Paper Loop Amount	-1/7/1/13/-2/8/-1/-2 0/4/-2/-1
		Paper Loop Amount B/W	-1/1/-1/0
	U052	Setting the fuser motor control	
		Set Loop Sensor	-
		Loop Sensor Control	OFF/ON/ON/ON
	U053	Setting the adjustment of the motor speed	
		Set MOTOR 1	9/9/9/9/47/47/47/47
		Set MOTOR 2	0/0/0/0/0/0/0
		Set MOTOR 3	0/0/0/80/0/0
		Set MOTOR 4	21
		Set MOTOR 5	0/0/0/0/0
		Set MOTOR 6	0/0/0/50/0
	U059	Setting fan mode	
		Set Operation Mode	MODE1
		Set Timing	0
		Set FAN Mode	MODE2
		Adjust Cooling Mode	0

Section	ltem No.	Content of maintenance item	Initial setting*
Optical	U061	Checking the operation of the exposure lamp	-
	U063	Adjusting the shading position	0
	U065	Adjusting the scanner magnification	0/0
	U066	Adjusting the scanner leading edge registration	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	0/0/0/0/0/0
	U072	Adjusting the DP center line	0/0/0
	U073	Checking the scanner operation	-
	U074	Adjusting the DP input light luminosity	0
	U080	Setting the economy mode	60/60
	U081	Adjusting the correct exposure	0/0/0/0/0/0
	U087	Setting DP reading position modification operation	145/145/145
	U089	Outputting the MIP-PG pattern	-
	U091	Setting the white line correction	112/75/0
	U093	Adjusting the exposure density gradient	
		TEXT	0/0/0/0
		MIXED	0/0/0/0
		OTHER	0/0/0/0
		FAX TEXT	0/0
		FAX PHOTO	0/0
	U099	Adjusting original size detection	40/30/20/40/30/20/40/30/20/ 19/19/19/150
			50/50/50/50/50/50/50/50/ 49/49/49/150 (when DP is installed)
High voltage	U100	Adjusting main high voltage	
		Adjust MC AC Bias	-
		AC Auto Adjustment	ON
		Set DC1	-
		Adjust DC2	0/0/0/0/0/0/0/0
		Adjust DC2(B/W)	0
		Low Temp. Setting (Drum)	1
		Set Charger Freq	31449/28544

Sec	ction	ltem No.	Content of maintenance item
High v	oltage	U101	Setting the voltage for the primary transfer
			Normal (Full M)
			Normal (Half M)
			Normal (B/W M)
			Add Color (C)
			Add Color (Y)
			Add Color (K)

High voltage	U101	Setting the voltage for the primary transfer	
		Normal (Full M)	116
		Normal (Half M)	90
		Normal (B/W M)	120
		Add Color (C)	5
		Add Color (Y)	5
		Add Color (K)	20
		Add Color 2nd(C)	0
		Add Color 2nd(M)	-5
		Add Color 2nd(Y)	-5
		Add Color 2nd(K)	-15
		Surround Correct	0
	U106	Setting the voltage for the secondary transfer	
		Light/Normal 1 Full Front	130/115/100/90
		Normal 2/3 Full Front	150/125/110
		Light/Normal 1 Full Back	150/125/85/75
		Normal 2/3 Full Back	130/110/90
		Light Normal1(F)Front BW	150/115/110
		Normal2/3(F)Front BW	150/115/110
		Light/Normal1(F)Back BW	130/110/75
		Normal2/3(F)Back BW	130/110/75
		Heavy 1 - 3 (H)Front	125/90/80
		Heavy 1 - 3 (H)Back	150/100/65
		ОНР	110/60
		Bias	190/190/31/31/31
	U107	Setting the transfer cleaning voltage	
		Belt Clean A(F)	93/93/93
		Belt Clean A(H)	62/62/62
		Belt Clean B	150/120/150
		Belt Clean A(BW)	120/120/120
	U108	Setting separation shift bias	
		Set Output Value	85/60/52/60/8/26/85/60/52/60
		Set Timing	-150/0/40
	U109	Checking the drum type	-
	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	-
	U122	Checking the transfer belt unit number	-
	U123	Displaying the transfer belt unit history	-
*Initial setting fo	n executin	g U020, *1: The item initialized for executing U021	

Initial setting*

*Initial setting for executing U020, *1: The item initialized for executing U021

L

Section	ltem No.	Content of maintenance item	Initial setting*
High voltage	U127	Checking/clearing the transfer count	-
	U128	Setting transfer high-voltage timing	-54/-54/10
Developing	U131	Adjusting the toner sensor control voltage	
		Manual Adjustment	116/116/116/116
		Auto Adjustment	-
		Set Operation Mode	Automatic adjustment
	U132	Replenishing toner forcibly	-
	U135	Checking toner motor operation	-
	U136	Setting toner near end detection	3/3
	U139	Displaying the temperature and humidity outside the machine	-
	U140	Displaying developing bias	
		Dev Roll2 DC	93/93/93/93/93
		Dev Roll1(Calib)DC	112/142/173/204/ 112/142/173/204
		Dev Roll2 AC	174/174/174/174/174
		Dev Roll1DC	162/162/162/162/162
		Roll1 DC Int	1/64/64/64/1
		Dev Roll1AC	255/255/255/255/255
		DEV Roll Freq	858/858/858/858/791
		DEV Roll Duty	592/592/592/592/546
		Dev Roll2 Duty	353/353/353/353/320
	U147	Setting for toner applying operation	
		Transition Time	50
		Set Operation Mode	MODE1
		Upper Limit	5.0
		Sleeve Cleaning Interval	60
		Set Drum Cleaning Mode	MODE1
		Set Minimum Value	10/20
	U148	Setting drum refresh mode	ON
	U155	Displaying the toner sensor output	-
	U156	Setting the toner replenishment level Supply Level Empty Level	502/502/502/502/502/502 101/101/101/101/101/101
	U157	Checking the developing drive time	-
	U158	Checking the developing count	-
Fuser	U161	Setting the fuser control temperature	
		Ready Temp.	165 ^{*1}
		Stable (Driving)	170 *1
		Stable (Stop)	170 ^{*1}
		Temp. Print Full	170 *1
		Shift Print Dup	-5*1
		P. Roller Temp.	140*1

Section	ltem No.	Content of maintenance item	Initial setting*
Fuser	U163	Resetting the fuser problem data	-
	U167	Checking/clearing the fuser count	-
	U199	Displaying fuser heater temperature	-
Operation	U200	Turning all LEDs on	-
panel and support	U201	Initializing the touch panel	-
equipment	U202	Setting the KMAS host monitoring system	-
	U203	Operating the DP separately	0
	U204	Setting the presence or absence of a key card or key coun- ter	
		Device Setting	OFF ^{*1}
		Message Setting	Coin Vender ^{*1}
	U206	Setting the presence or absence of the coin vender	-
	U207	Checking the operation panel keys	-
	U208	Setting the paper size for the paper feeder	Letter (Inch)/A4 (Metric)*1
	U221	Setting the USB host lock function	OFF ^{*1}
	U222	Setting the IC card type	-
	U223	Operation panel lock	Unlock*1
	U224	Panel sheet extension	-
	U234	Setting punch destination	INCH (Inch)/ EUROPE METRIC (Metric)
	U237	Setting finisher stack quantity	0/0*1
	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	
		3000 FINISHER	0/0/0/0/0/0*1
		BOOKLET FOLDER	0/0/0/0/0/0/0/0*1
	U247	Setting the paper feed device	-
Mode setting	U250	Change the maintenance count pre-set	-
	U251	Checking/clearing the maintenance count	-
	U252	Setting the destination	-
	U253	Switching between double and single counts	DOUBLE (A3/LEDGER)
	U260	Selecting the timing for copy counting	EJECT ^{*1}
	U265	Setting OEM purchaser code	-
	U276	Setting the copy count mode	MODE0 ^{*1}
	U278	Setting the delivery date	-
	U284	Setting 2 color copy mode	OFF ^{*1}
	U285	Setting service status page	ON
	U323	Setting abnormal temperature and humidity warning	ON
	U325	Setting the paper interval	ON/1

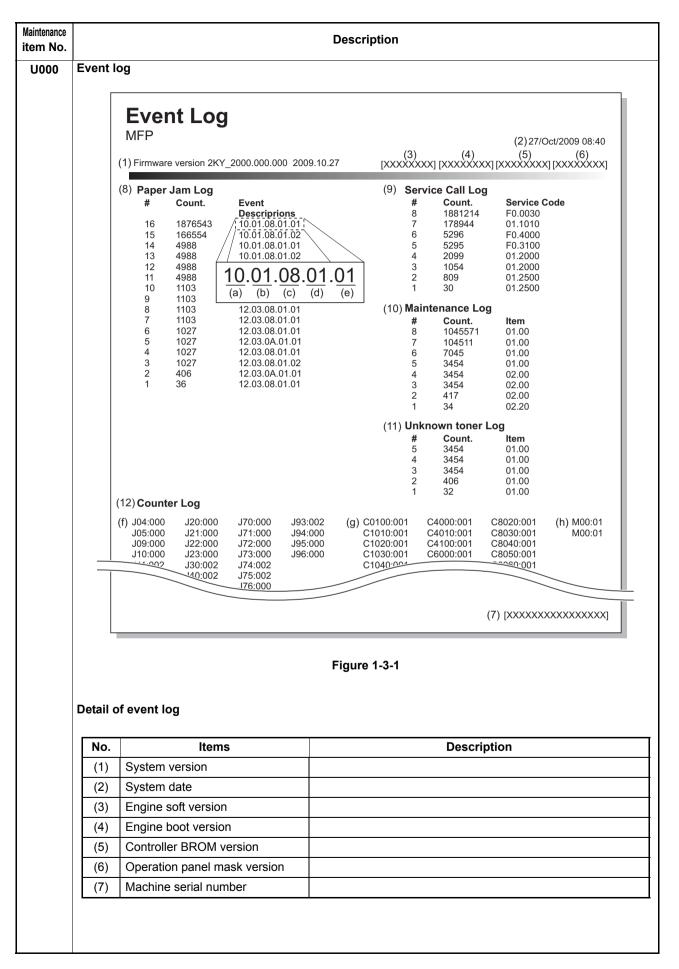
	No.	Content of maintenance item	Initial setting*
Mode setting	U326	Setting the black line cleaning indication	ON*1/8
	U327	Setting the cassette heater control	OFF/NONE
	U328	Side ejection setting	OFF ^{*1}
	U332	Setting the size conversion factor	1.0*1
	U340	Setting the applied mode	0/0*1
	U341	Specific paper feed location setting for printing function	-
	U343	Switching between duplex/simplex copy mode	OFF ^{*1}
	U345	Setting the value for maintenance due indication	-
Image	U402	Adjusting margins of image printing	4.0/3.0/3.0/3.9
processing	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 memory image printing	0
	U410	Adjusting the halftone automatically	Table1
	U411	Adjusting the scanner automatically	-
	U412	Adjusting the uneven density	-
	U425	Setting the target	-
	U429	Setting the offset for the color balance	0/0/0/0
	U432	Setting the center offset for the exposure	
		Full Color	0/0/0
		Mono Color	0/0/0
	U464	Setting the ID correction operation	
		Permission	ON
		Set Time Interval	480
		Leaving Time	60
		Permission Act.(50sheets)	ON
		Permission (ON/Sleep out)	ON
		Permission (AP/NE)	ON
		Execution Timing	1800
		Driving Time	600
		Execution Print Rate	20
		Set Custom	OFF
		Target Value	500/500/500/10/ 300/300/300/300
		Permission(B/W)	50
		AC Calib Magnification	3/3/3/3
		SetInt.Calib PrintRate(H)	10
		Set Calib TimingduringPrint(H)	60
		AC Calib Type	MODE1
	U465	Data reference for ID correction	-

Section	ltem No.	Content of maintenance item	Initial setting*
Image	U467	Setting the color registration adjustment	
processing		Color Regist Adjustment	ON
		Transfer Belt Speed Adj.	ON
		Set Timing	10
	U468	Checking the color registration data	-
	U470	Setting the JPEG compression ratio	
		System	90/90*1
		Сору	90/90/90/90*1
		Send	30/40/51/70/90 ^{*1} 30/40/51/70/90 ^{*1} 30/40/51/70/90 ^{*1} 30/40/51/70/90 ^{*1} 15/25/60 ^{*1} 15/25/60 ^{*1}
	U473	Adjusting laser power output	
		Set Sensitivity	-
		Adjust LSU Laser Power	16/16/16/16/
		Density Correction	ON
		Input Density Adjust Value	-
		Set Density (Emit Time/Dot)	ALL:0
	U474	Checking LSU cleaning operation	1000/1
	U485	Setting the image processing mode	1/0*1
	U486	Setting color/black and white operation mode	MODE2
Network scanner	U510	Setting the enterprise mode	ON (Inch)/OFF (Metric)
Other	U901	Checking copy counts by paper feed locations	-
	U902	Checking/clearing finisher punch count	-
	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 coverage data	-
	U911	Checking/clearing 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	-
	U942	Setting of deflection for feeding from DP	0/0/0
	U964	Checking of log	-

Section	ltem No.	Content of maintenance item	Initial setting*
Other	U969	Checking of toner area code	-
	U977	Data capture mode	-
	U984	Checking the developing unit number	-
	U985	Displaying the developing unit history	-
	U989	HDD Scandisk	-
	U990	Checking/clearing the time for the exposure lamp to light	-
	U991	Checking the scanner operation count	-
	U996	Setting the Self-diagnostic function mode	-
		g U020. *1: The item initialized for executing U021	

(3) Contents of maintenance mode items

Maintenance item No.			Description			
U000		utting an own-status repo	ort			
	Outputs lists of the current settings of the maintenance items, and paper jam and service call occurrences. Outputs the event log or service status page. Also sends output data to the USB memory. Printing a report is disabled either when a job is remaining in the buffer or when [Pause All Print Jobs] is pressed to halt printing. Purpose					
	izing		e maintenance items, or paper jam or service call occurrences. Before initial M, output a list of the current settings of the maintenance items to reenter the acement.			
		od Press the start key. Select the item to be outpu	ıt.			
		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			
		The output status is display	the screen for selecting an item is displayed. yed. Description			
		READY	Standing by for output (including while outputting other reports)			
		ACTIVE	Performing output processing			
		COMPLETE	Output processing completed normally			
		ERROR	Output processing terminated with an error			
	1. 2. 3. 4. 5. 6.	od: Send to the USB men Press the power key on the switch off the main power se Insert USB memory in USE Turn the main power switch Enter the maintenance iter Press the start key. Select the item to be send. Select [TEXT] or [HTML].	e operation panel, and after verifying the main power indicator has gone off, switch. 3 memory slot. h on. n.			
		Display	Output list			
		Print	Outputs the report			
		To USB (TEXT)	Sends output data to the USB memory (text type)			
		To USB (HTML)	Sends output data to the USB memory (HTML type)			
	8.	Press the start key. Output will be sent to the L	JSB memory.			



Maintenance item No.	Description					
U000	No. Items Description					
	(8)	Paper Jam Log	# Count.	Event		
			Remembers 1 to 16 of occurrence. If the occurrence of the previ- ous paper jam is less	e count at Log code (2 digit, hexa-		
			than 16, all of the paper jams are logged. When the occurrence excesseds 16, the old- est occurrence is	jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject		
			removed.			
			(a) Cause of paper jam (Hexadecimal) 00: Initial JAM			
			04: Cover open JAM	4		
			05: Secondary paper feed does not star 09: Sequence error JAM	l		
			10: No paper feed from cassette 1 11: No paper feed from cassette 2			
			12: No paper feed from optional cassette 3 13: No paper feed from optional cassette 4 14: No paper feed from MP tray			
			15: Misfeed in paper feeder horizontal paper conveying section 1			
16: Misfeed in paper feeder horizontal paper conveying se 17: Misfeed in paper feeder horizontal paper conveying se						
		18: Misfeed in vertical paper conveying section 19: Misfeed in paper feeder paper conveying section				
			21: Multiple sheets in MP tray paper fee			
			22: Multiple sheets in cassette 1 paper f 23: Multiple sheets in cassette 2 paper f			
			24: Multiple sheets in cassette 2 paper f			
			25: Multiple sheets in cassette 4 paper f			
			26: Multiple sheets in MP tray paper fee 30: Misfeed in registration/transfer section			
			31: Misfeed round the transfer belt			
			40: Misfeed in fuser section (MP tray) 41: Misfeed in fuser section (cassette 1))		
			42: Misfeed in fuser section (cassette 2))		
			 43: Misfeed in fuser section (cassette 3) 44: Misfeed in fuser section (cassette 4) 			
			45: Misfeed in fuser section (3000-shee	t paper feeder)		
			46: Misfeed in fuser section (duplex sec 50: Misfeed in eject section	tion)		
			51: Misfeed in job separator eject section	n		
			52: Misfeed in feedshift section 60: Misfeed in duplex paper conveying s	action 1		
			61: Misfeed in duplex paper conveying s			
			70: No original feed			
			71: An original jam in the original feed s 72: An original jam in the original conver			
			73: An original jam in the original registr	ation section		
			74: An original jam in the original feed s 75: An original jam in the original conve			
			76: An original jam in the original switch	back section 1		
			77: An original jam in the original switch	back section 2		

Maintenance item No.	Description						
U000	No. Items Description						
	(8) cont.	Items Paper Jam Log	 85: Jam in eject section 87: Jam in eject section 88: Jam in eject section 89: Jam in center-folding 89: Jam in center-folding 90: Jam in mailbox (300) 91: Finisher cover open 92: Eject paper sensor n 93: Reverse sensor jam 	e original eject section isher and machine non arrival jam n of right sub tray (3000-shee of left sub tray (3000-shee of inner tray 2 (3000-shee of main tray (3000-sheet o g unit (3000-sheet docume g unit (3000-sheet docume o-sheet document finisher	et document finisher) t document finisher) document finisher) ent finisher) ent finisher)) finisher)		
			95: Paper conveying sensor jam (document finisher) (b) Detail of paper source (Hexadecimal) 00: MP tray 01: Cassette 1 02: Cassette 2 03: Cassette 3 (paper feeder) 04: Cassette 4 (paper feeder) 08: 3000-sheet paper feeder 05/06/07/09: Reserved				
			(c) Detail of paper size (l	Hevadecimal)			
			 (c) Detail of paper size (1) 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 88: A4E 09: B5R 89: B5E 0A: A3 	0B: B4 0C: Ledger 0D: A5R 0E: A6 0F: B6 10: Commercial #9 11: Commercial #6 12: ISO B5 13: Custom size 1E: C4 1F: Postcard 20: Reply-paid postcard 21: Oficio II 22: Special 1	 23: Special 2 24: A3 wide 25: Ledger wide 26: Full bleed paper (12 × 8) 27: 8K 28: 16K-R A8: 16K-E 32: Statement-R B2: Statement-R B2: Statement-E 33: Folio 34: Western type 2 35: Western type 4 		
			(d) Detail of paper type (,			
			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		

tenance n No.	Description				
000	lo.	Items		Descriptio	on
	-		(e) Detail of paper exit l	_	
	8) ont.	Paper Jam Log	 01: Face down (FD) 02: Face up (FU)/Document finisher face up (FU)/ 3000-sheet document finisher left sub tray (FU) 03: Document finisher face down (FD) 05: Job separator tray 06: 3000-sheet document finisher right sub tray (FU) 07: 3000-sheet document finisher left sub tray (FD) 09: 3000-sheet document finisher right sub tray (FD) 09: 3000-sheet document finisher right sub tray (FD) 04: Center-folding unit tray 08: Mailbox tray 1 (FD) 00: Mailbox tray 2 (FD) 16: Mailbox tray 2 (FD) 16: Mailbox tray 3 (FD) 20: Mailbox tray 4 (FD) 24: Mailbox tray 4 (FD) 24: Mailbox tray 5 (FD) 30: Mailbox tray 5 (FD) 30: Mailbox tray 6 (FD) 		
			3E: Mailbox tray 6 (FU) 47: Mailbox tray 7 (FD) 48: Mailbox tray 7 (FU) 04/0D/0E: Reserved		
	9)	Service Call Log	# Remembers 1 to 8 of occurrence of self diagnostics error. If the occurrence of the previous diagnostics error is less than 8, all of the diagnostics errors are logged.	Count. The total page count at the time of the self diag- nostics error.	Service Code Self diagnostic error code (See page 1-4-26) Example: 01.6000 01: Self diagnostic error 6000: Self diagnostic error code number
(1	10)	Maintenance Log	#	Count.	Item
			Remembers 1 to 8 of occurrence of replacement. If the occurrence of the pre- vious replacement of toner container is less than 8, all of the occurrences of replacement are logged.	The total page count at the time of the replace- ment of the toner container.	Code of maintenance replacing item (1 byte, 2 categories) First byte (Replacing item) 01: Toner container Second byte (Type of replacing item) 00: Black 01: Cyan 02: Magenta 03: Yellow First byte (Replacing item) 02: Maintenance kit Second byte (Type of replacing item) 01: MK-856A 02: MK-856B

Maintenance item No.	Description				
U000	No. Items Description				
	(11)	Unknown Toner	#	Count.	Item
		Log	Remembers 1 to 5 of occurrence of unknown toner detec- tion. If the occurrence of the previous unknown toner detec- tion 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.	Unkown toner log code (1 byte, 2 categories) First byte 01: Toner container (Fixed) Second byte 00: Black 01: Cyan 02: Magenta 03: Yellow
	(12)	Counter Log	(f) Paper jam	(g) Self diagnos- tic error	(h) Maintenance item replacing
		Comprised of three log counters includ- ing paper jams, self diagnostics errors, and replacement of the toner con- tainer.	Indicates the log counter of paper jams depending on loca- tion. Refer to Paper Jam Log. All instances including those are not occurred are dis- played.	Indicates the log counter of self diagnostics errors depending on cause. (See page 1-4-26) Example: C6000: 4 Self diagnostics error 6000 has happened four times.	Indicates the log counter depend- ing on the maintenance item for maintenance. T: Toner container 00: Black 01: Cyan 02: Magenta 03: Yellow M: Maintenance kit 00: MK-856A 01: MK-856B Example: T00: 1 The (black) toner container has been replaced once.

	Description Service status page (1)					
Service Status Page						
MFP			(2) 27/Oct/2009 08	8:40		
(1) Firmware version 2KY_2000.000.000 2009.10.27		(3) [XXXXXXXX] [XXXXXXX] [XXXXXXX] [XXXXXXX]				
Controller Information						
Memory status	(*	Default Pattern Switch		0 00000		
(8) Date and Time 27/1	10/2008 08:40					
(11) Paper feeder Cas	sette	• • • •				
(13) Mail Box Not (14) Job Sparator Insta (15) Document Guard(A) Insta (16) Internet FAX Kit(A) Insta	alled alled alled					
		- - - -				
(20) Total						
C: 2.20 / 2222222.2 M: 3.30 / 3333333.3	22 33	• • •				
C: 2.20 / 2222222.2 M: 3.30 / 33333333 Y: 4.40 / 4444444.4	22 33					
K: 1.10 / 1111111.1 C: 2.20 / 222222.2 M: 3.30 / 333333.3 Y: 4.40 / 444444.4	22 33	e-MPS error control	Y6	0		
K: 1.10 / 1111111.1 (24) Period (03/11/2005	9 - 27/10/2009 08:40)					
(27) Rings (Normal) 3 (28) Rings (FAX/TEL) 3 (29) Rings (TAD) 3						
			(32) [XXXXXXXXXXXXX	xxx]		
	MFP (1) Firmware version 2KY_2000.00 Controller Information Memory status (6) Total Size 2.0 Time (7) Local Time Zone +01 (8) Date and Time 2777 (9) Time Server 10.7 Installed Options (10) Document Processor Inst (11) Paper feeder Cas (12) Finisher 3000 (13) Mail Box Not (14) Job Sparator Inst (15) Document Guard(A) Inst (16) Internet FAX Kit(A) Inst (17) Security Kit(E) Inst (18) Data Security Kit (E) Sof Digital Dot Coverage (19) Average(%) / Usage Pa (20) Total K: 1.10 / 1111111.1 C: 2.20 / 222222.2 M: 3.30 / 333333.3 Y: 4.40 / 4444444. (21) Copy K: 1.10 / 1111111.1 C: 2.20 / 222222.2 M: 3.30 / 333333.3 Y: 4.40 / 4444444. (22) Printer K: 1.10 / 1111111.1 C: 2.20 / 222222.2 M: 3.30 / 333333.3 Y: 4.40 / 4444444. (22) Printer K: 1.10 / 1111111.1 C: 2.20 / 222222.2 M: 3.30 / 333333.3 Y: 4.40 / 4444444. (23) FAX K: 1.10 / 1111111.1 (24) Period (03/11/2000 (25) Last Page K/C/M/Y(%) 1.11/2 (26) FAX Information Slot1/S (27) Rings (Normal) 3 (29) Rings (TAD) 3	MFP (1) Firmware version 2KY_2000.000.000 2009.10.27 Controller Information Memory status (a) (b) Total Size 2.0 GB Time (7) Local Time Zone +01:00 Tokio (a) Data and Time 27/10/2008 08:40 (a) (b) Data and Time 27/10/2008 08:40 (a) (c) Time Server 10.183.53.13 (c) Installed Options (10) Document Processor Installed (11) Paper feeder Cassette (12) Finisher 3000-Finisher (13) Mail Box Not Installed (14) Job Sparator Installed (15) Document Guard(A) Installed (16) Internet FAX Kit(A) Installed (17) Security Kit (E) Software Type IV Digital Dot Coverage (18) Data Security Kit (E) Software Type IV (2) Total K: 1.10 / 1111111.11 C: 2.20 / 222222.22 M: 3.30 / 3333333.33 Y: 4.40 / 444444.44 (22) Printer X: 1.10 K: 1.10 <td>MFP (1)Firmware version 2KY_2000.000.000 2009.10.27 (3) (1)Firmware version 2KY_2000.000.000 2009.10.27 (2) Controller Information Memory status (a) Time (b) Time Zone + 01:00 Tokio (c) Date and Time 27/10/2008 08:40 (c) Time Server 10.183.53.13 (c) Document Processor Installed (c) Document Out (A) Installed (c) Document Quart(A) Installe</td> <td>MFP (2) 27/02/2009 00 (1) Firmware version 2KY_2000.000 2009.10.27 (2) 200000000000000000000000000000000000</td>	MFP (1)Firmware version 2KY_2000.000.000 2009.10.27 (3) (1)Firmware version 2KY_2000.000.000 2009.10.27 (2) Controller Information Memory status (a) Time (b) Time Zone + 01:00 Tokio (c) Date and Time 27/10/2008 08:40 (c) Time Server 10.183.53.13 (c) Document Processor Installed (c) Document Out (A) Installed (c) Document Quart(A) Installe	MFP (2) 27/02/2009 00 (1) Firmware version 2KY_2000.000 2009.10.27 (2) 200000000000000000000000000000000000		

tem No.	Description			
U000	Service status page (2)			
	Service Statu	s Page		
				27/Oct/2009 08:40
	Firmware version 2KY_2000.00	00.000 2009.10.27	[XXXXXXX] [XXXX	XXXXX] [XXXXXXXX]
	Engine Information		Send Information	ı
	 (33) NVRAM Version (34) Scanner Version (35) FAX Slot1 FAX BOOT Version FAX APL Version FAX IPL Version (36) MAC Address 	_Bb04B29_Bb04B29 2KY_1200.001.089 5JP_5000.001.001 5JP_5100.001.001 5JP_5200.001.001 00:C0:EE:D0:01:0D	(37) Date and Time (38) Address	09/10/27
	F00/U00/0/0/0/30/30/70/70 (43)(44)(45)(46)(47)(48)(49)(5 (56) 0000/0000/0000/0000/0000/000/000/000 0000/0000/0000/0000/0000/00 (57) 0000/0100/500/1000/0000/000000 0000/0100/0500/1000/000000 0000/00000000000000000000000000000000	0000000/0000000/0000000000/ /abcde/1/0 500(51)(52)(53)(54)(55) 5000/0000/0000/0000/0000/ 0000/0000/0	0000/000000000000000000000000000000000	0/ 00000000/ 0000000/ 0000000/ 0000000/ 0000000/ 0000000/ 0000000/ 5678901/0008/00/07 5678901/0008/00/07 5678901/0008/00/07 5678901/0008/00/07 5678901/0008/00/07
		2	[XX.	

Maintenance item No.	Description				
U000	Detail o	f service status page			
	No.	Description	Supplement		
	(1)	System version			
	(2)	System date			
	(3)	Engine soft version			
	(4)	Engine boot version			
	(5)	Operation panel mask version			
	(6)	Total RAM size			
	(7)	Local time zone			
	(8)	Report output date	Day/Month/Year hour:minute		
	(9)	NTP server name			
	(10)	Presence or absence of the optional DP	Installed/Not Installed		
	(11)	Presence or absence of the optional paper feeder	Cassette/LCF/Not Installed		
	(12)	Presence or absence of the optional document finisher	3000-Finisher/1000-Finisher/Not Installed		
	(13)	Presence or absence of the optional mailbox	Installed/Not Installed		
	(14)	Presence or absence of the optional job separator	Installed/Not Installed		
	(15)	Presence or absence of the optional printed document guard kit	Installed/Not Installed		
	(16)	Presence or absence of the optional internet fax kit	Installed/Not Installed		
	(17)	Presence or absence of the optional data security kit	Installed/Not Installed		
	(18)	Data security kit identification name			
	(19)	Page of relation to the A4/Letter			
	(20)	Average coverage for total	Black/Cyan/Magenta/Yellow		
	(21)	Average coverage for copy	Black/Cyan/Magenta/Yellow		
	(22)	Average coverage for printer	Black/Cyan/Magenta/Yellow		
	(23)	Average coverage for fax	Black/Cyan/Magenta/Yellow		
	(24)	Cleared date and output date			
	(25)	Coverage on the final output page			
	(26)	Fax kit information	This item is printed only when the fax kit is installed.		
	(27)	Number of rings	0 to 15		
	(28)	Number of rings before automatic	0 to 15		
	(29)	Number of rings before connecting to answering machine	0 to 15		
	(30)	Optional DIMM size			
	(31)	FRPO setting			
	(32)	Machine serial number			

Maintenance item No.	Description			
U000			1	
	No.	Description	Supplement	
	(33)	NV RAM version	_ Bb 04B29 _ Bb 04B29 (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) 	
	(34)	Scanner firmware version	are identical with (c) and (f).	
	(34)	Fax firmware version	This item is printed only when the fax kit is installed.	
	(35)		This item is printed only when the fax kit is installed.	
	(36)	Mac address		
	(37)	The last sent date and time		
	(38)	Transmission address		
	(39)	Destination information/Area informa- tion		
	(40)	Margin settings	Top margin/Left margin	
	(41)	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	
	(42)	Life counter (The first line)	Machine life counter/MP tray life counter/ Cassette 1 counter/Cassette 2 counter/ Cassette 3 counter/Cassette 4 counter/Duplex counter	
		Life counter (The second line)	Drum unit K counter/Drum unit C counter/ Drum unit M counter/Drum unit Y counter/ Transfer belt unit counter/Developing unit K counter/ Developing unit C counter/Developing unit M counter/ Developing unit Y counter/Maintenance kit A counter/ Maintenance kit B counter	
	(43)	Panel lock information	0: OFF/1: Partial lock/2: Full lock	
	(44)	USB information	0: Not installed/1: Full speed/2: Hi speed	
	(45)	Paper handling information	0: Paper source unit select/1: Paper source unit	
	(46)	Color 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) 	
	(47)	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) 	

No. 0			escription
	No.	Description	Supplement
	(48)	Billing counting timing	
	(49)	Temperature (machine inside)	
	(50)	Temperature (machine outside)	
	(51)	Relative temperature (machine out- side)	
	(52)	Absolute temperature (machineout- side)	
	(53)	Fixed assets number	
	(54)	Job end judgment time-out time	
	(55)	Job end detection mode	
	(56)	Media type attributes 1 to 28 (Not used: 18, 19, 20)	Weight settings 0: Light/1: Normal 1 / 2: Normal 2 / 3: Normal 3/ 4: Heavy 1 / 5: Heavy 2 / 6: Heavy 3 / 7: Extra Heavy Fuser settings 0: High / 1: Middle / 2: Low / 3: Vellum Duplex settings 0: Disable / 1: Enable
	(57)	Calibration information	
	(58)	Calibration information	
	(59)	Calibration information	
	(60)	Calibration information	
	(61)	Calibration information	
	(62)	Calibration information	
	(63)	Calibration information	
	(64)	Calibration information	
	(65)	Calibration information	
	(66)	Calibration information	
	(67)	RFID information	
	(68)	RFID reader/writer version information	
	(69)	Color table version	
	(70)	Color table 2 version	
	(71)	Maintenance information	
	(72)	Drum serial number	Black/Cyan/Magenta/Yellow

Maintenance item No.		Description		
U001	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. The normal copy mode is entered. Setting the factory default data			
U002	Setting the factory default data Description Restores the machine conditions Purpose To move the mirror frame of the s			
	 Method Press the start key. Press [MODE1(ALL)] Press the start key. 			
	Codes	Description		
	01 to 1F	Counter error		
	20 to 3F	Engine error		
	40 to 5F	Scanner/DP error		
U003	Purpose To set the telephone number to condition Method Press the start key. The currently Setting 1. Press the start key. The keys to enter the numb 2. Enter a telephone number 3. Press the start key. The set Completion	displayed when a service call code is detected. all service when installing the machine. set telephone number is displayed. wer are displayed on the touch panel. (up to 15 digits).		

ntenance m No.	Description			
004	Setting the machine number			
	Description			
	Sets or displays the machine num Purpose	nber.		
	To check or set the machine num	ber.		
	Method			
	 Press the start key. If the machine serial number 	er of engine PWB matches with that of main PWB		
	Display	Operation		
	MACHINE No.	Displays the machine serial number		
	If the machine serial numbe	er of engine PWB does not match with that of main PWB		
	Display	Operation		
	MACHINE No. (MAIN)	Displays the machine serial number of main		
	MACHINE No. (ENGINE)	Displays the machine serial number of engine		
	 Setting Carry out if the machine serial number does not match. 1. Press [EXECUTE]. 2. Press the start key. Writing of serial No. starts. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. 			
	2. Press the start key. Writing Completion	of serial No. starts.		
	2. Press the start key. Writing Completion	of serial No. starts.		

Maintenance item No.		Description		
U019	Displaying the ROM version			
	Description Displays the part number of the ROM fitt	ad to each PW/P		
	Purpose	ed to each PWB.		
	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		
	ENGINE	Engine ROM		
	ENGINE BOOT	Engine booting		
	SCANNER	Scanner ROM		
	BROWSER	Browser ROM		
	OPTION LANGUAGE	Optional language ROM		
	DICTIONARY			
	DBA	- Database connection		
	Solution Framework	Framework		
	COLOR TABLE1	Color table1		
	COLOR TABLE2	Color table2		
	MOTOR CPU	Motor CPU		
	MOTOR CPU BOOT	Motor CPU booting		
	H VLT CPU	High voltage CPU		
	H VLT CPU BOOT	High voltage CPU booting		
	SLEEP CPU	Sleep CPU		
	SLEEP CPU BOOT	Sleep CPU booting		
	DP	Optional DP ROM		
	500x2PF	Optional paper feeder ROM		
	3000PF	Optional 3000-sheet paper feeder ROM		
	1000DF	Optional document finisher ROM		
	3000DF MAIN	Optional 3000-sheet document finisher main ROM		
	3000DF MIDDLE	Optional 3000-sheet document finisher Inner tray ROM		
	MAIL BOX	Optional mailbox ROM		
	BOOKLET	Optional center-folding unit ROM		
	FAX BOOT1	Optional fax control PWB booting (port 1)		
	FAX APL1	Optional fax control PWB APL (port 1)		
	FAX IPL1	Optional fax control PWB IPL (port 1)		
	FAX BOOT2	Fax control PWB booting (port 2: optional dual FAX)		
	FAX APL2	Fax control PWB APL (port 2: optional dual FAX)		
	FAX IPL2	Fax control PWB IPL (port 2: optional dual FAX)		
		··· · /		

2KY

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

2KY

Maintenance item No.		Description		
U021	Memory initializing Description Initializes all settings, except those pertinent to the type of machine, namely each counter, service call history and mode setting. Also initializes backup RAM according to region specification selected in maintenance item U252 Setting the destination. Refer to *1 of the maintenance mode item list about the item initialized. Purpose To return the machine settings to their factory default. Method 1. Press the start key. 2. Press [EXECUTE] on the touch panel.			
	ized based on the desti 4. Turn the main power sv			
	Error codes			
	Codes	Description		
	01	Configuration initialization error		
	02	Counter initialization error		
	20	Engine initialization error		
	40	Scanner initialization error		
	Description Initializes the hard disk. In addition, the following settings are also initialized by initializing the hard disk. System menu (user login administration, job accounting, address book, one-touch keys and document box etc.), shortcuts and panel programs Purpose To initialize the hard disk when replacing the hard disk after shipping. Method 1. Press the start key. 2. Press [EXECUTE] on the touch panel. 3. Press the start key to initialize the hard disk. 4. Turn the main power switch off and on.			

Maintenance item No.	Description		
U030	Checking the operation of the moto	Drs	
	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	Operation	
	Feed Motor	Paper conveying motor (PCM) is turned ON	
	DLP(Bk) Motor	Developing motor K (DEVM-K) is turned ON	
	DLP (Color) Motor	Developing motor MCY (DEVM-MCY) is turned ON	
	Fuser Motor	Fuser motor (FUM) is turned ON	
	Exit Motor(CW)	Eject motor (EM) is turned on clockrwise	
	Exit Motor(CCW)	Eject motor (EM) is turned on counterclockwise	
	Color Release Motor	Color release motor (CRM) is turned ON	
	Guide Motor	Rotary guide motor (RGM) is turned ON	
	DU Motor	Duplex motor (DUM) is turned ON	
	Job Separator Motor	Job eject motor (JEM) is turned ON (option)	
	Regist Motor	Registration motor (RM) is turned ON	

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

2KY

	Description	
Checking switches and sensors for paper conveying Description		
Displays the on-off status of each p	aper detection switch or sensor on the paper path.	
Purpose	r for paper conveying operate correctly.	
Method 1. Press the start key.		
2. Turn each switch or sensor on and off manually to check the status.		
When a switch or sensor is detected to be in the ON position, the display for that switch or sensor will be		
highlighted. Display	Switches and sensors	
MPF Unit	MP tray switch (MPTSW)	
MPF Feed1 JAM	MP paper feed switch (MPPFSW)	
MPF Feed2 JAM	MP paper conveying switch (MPPCSW)	
Cassette1 JAM	Feed switch 1 (FSW1)	
Cassette2 JAM	Feed switch 2 (FSW2)	
Desk/Deck JAM	Feed switch 3 (FSW3)	
Regist Roller JAM	Registration switch (RSW)	
Fuser JAM	Loop sensor (LS)	
Exit JAM	Eject switch (ESW)	
DU Feed1 JAM	Feedshift switch (FSSW)	
DU Feed2 JAM	Duplex switch (DUSW)	
Paper Full	Paper full sensor (PFS)	
JobSepa FIN Exit JAM	Finisher eject switch (FESW) (option)	
JobSepa Inner JAM1	Job eject switch (JESW) (option)	
JobSepa Inner JAM2	Job separator eject switch (JBESW) (option)	

		Description
Desci Turns Purpo		;
Metho 1. 2.	eck the operation of each clutch. od Press the start key. Select the clutch to be operated. Press the start key. The clutch turns	on for 1 s.
	Display	Clutches
	Feed1 Clutch	Paper feed clutch 1 (PFCL1)
	Feed2 Clutch	Paper feed clutch 2(PFCL2)
	MPF Feeder On/Off Clutch	MP paper feed clutch (MPPFCL)
	Vertical CONV. Clutch1	Feed clutch 1 (FCL1)
	MPF Feed Clutch	MP paper conveying clutch (MPPCCL)
	Vertical CONV. Clutch2	Feed clutch 2 (FCL2)
	Fuser Release Clutch	Fuser clutch (FUCL)
	MOTOR ON	The paper conveying motor (PCM) is turned ON.
	To stop motor driving, press [MOTO	R ON] again.
-	bletion the stop key. The screen for selecti	ng a maintenance item No. is displayed.
	king the operation of the solenoic	ls
	ription es current to each solenoid in order t	to check its ON status.
Purpo		
TO CH	eck the operation of each solenoid.	
2.	od Press the start key. Select the solenoid to be operated. Press the start key. The solenoid tu	rns on for 1 s.
	Display	Solenoids
	Eject Branch Solenoid	Job feedshift solenoid (JFSSOL)
	MPT Pick up Solenoid	MP solenoid (MPSOL)
	MOTOR ON	The paper conveying motor (PCM) is turned ON.
	To stop motor driving, press [MOTO	R ON] again.

Completion

U033

Maintenance item No. U032

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

em No.											
U034	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 image and original. Make the adjustment if there is a regular error between the center lines of the copy image and original.										
		od Press the start key Select the item to		d.							
		Display	Description								
		LSUOUT TOP		Leading edge registration ad	justment						
		LSUOUT LEFT		Center line adjustment							
		LSUOUT TOP B/	W	Leading edge registration ad	justment in bl	ack/white r	node				
	1.	stment: Leading e Select [LSUOUT 1 Select the item. When [LSUOUT T	OP] or [L	-							
		Display	Descrip	tion	Setting range	Default setting	Change in value per step				
		LSUOUT TOP MPT (L)		Paper feed from MP tray (when large size paper is used)		0	0.1 mm				
	N L	LSUOUT TOP MPT Half (L)		Paper feed from MP tray (when large size thick paper is used)		0	0.1 mm				
		LSUOUT TOP CAS (L)		ed from cassette irge size paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP CAS Half (L)		eed from cassette Irge size thick paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP DUP (L)		node (second) irge size paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP DUP Half (L)	(when la	node (second) Irge size thick paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP MPT (S)		eed from MP tray mall size paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP MPT Half (S)		eed from MP tray mall size thick paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP CAS (S)	(when s	eed from cassette mall size paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP CAS Half (S)		eed from cassette mall size thick paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP DUP (S)		node (second) mall size paper is used)	-3.0 to 3.0	0	0.1 mm				
		LSUOUT TOP DUP Half (S)		node (second) mall size thick paper is used)	-3.0 to 3.0	0	0.1 mm				
		Large size: 218 m	m or moro	in width of papar	I	1	1				

laintenance tem No.	Description									
J034	When [LSUOUT T	OP B/W] is selected.								
	Display	Description		Setting range	Default setting	Change in value per step				
	LSUOUT TOP MPT (L) B/W	Paper feed from M (when large size p		-3.0 to 3.0	0	0.1 mm				
	LSUOUT TOP CAS (L) B/W	Paper feed from c (when large size p		-3.0 to 3.0	0	0.1 mm				
	LSUOUT TOP DUP (L) B/W	Duplex mode (sec (when large size p		-3.0 to 3.0	0	0.1 mm				
	LSUOUT TOP MPT (S) B/W	Paper feed from M (when small size p		-3.0 to 3.0	0	0.1 mm				
	LSUOUT TOP CAS (S) B/W	Paper feed from c (when small size p		-3.0 to 3.0	0	0.1 mm				
	LSUOUT TOP DUP (S) B/W	Duplex mode (sec (when small size p	,	-3.0 to 3.0	0	0.1 mm				
	 Press the system r Change the setting For output example Leading edge registration (20 ± 1.5 mm) 			mple 2, decrea	se the valu	Je.				
	-	Correct image	Output example 1	Outpu						
			Figure 1-3-4	oxempi						
	7. Press the start key. The value is set.									
,	Remark When changing the setting value of [Large] each item is modified, equal to amount of the value which is changed adds also the value of [Small] each item and is pulled.									
		U066 U	f the image is still i 1071 -3-45)	incorrect, perfo	rm the follo	owing adjustment				

tenance n No.	Description										
034		stment: Center lin Select the item.	e adjustment								
		Display	Description		Setting range	Initial setting	Change in value per step				
		LSUOUT LEFT (MPT)	Paper feed from M	P tray	-3.0 to 3.0	0	0.1 mm				
		LSUOUT LEFT (CAS 1)	Paper feed from ca	assette 1	-3.0 to 3.0	0	0.1 mm				
		LSUOUT LEFT (CAS 2)	Paper feed from cassette 2		-3.0 to 3.0	0	0.1 mm				
		LSUOUT LEFT (CAS 3)	Paper feed from op	otional cassette 3	-3.0 to 3.0	0	0.1 mm				
		LSUOUT LEFT (CAS 4)	Paper feed from optional cassette 4		-3.0 to 3.0	0	0.1 mm				
		LSUOUT LEFT (DUP)	Duplex mode (seco	ond)	-3.0 to 3.0	0	0.1 mm				
			e 1, increase the valu Center line of printing (within ± 0.5 mm)	e. For output exan	nple 2, decreas	se the valu	Je.				
			Correct image	Output example 1	Outr examp						
	6	Droop the start key	. The velue is get	Figure 1-3-5	·						
	 6. Press the start key. The value is set. Remark If the setting value for feeding from the MP tray is changed, the difference from the former value is added to subtracted from the values of other items. Caution Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments maintenance mode.										
	Com	pletion	screen for selecting a	a maintenance item	ו No. is display	ved.					

	Description								
U035	Setting the printing area for folio paper Description Changes the printing area for copying on folio paper. Purpose To prevent cropped images on the trailing edge or left/right side of copy paper by setting the actual printin area for folio paper.								
	2.	ng Press the start key. Select the item to be Change the setting		e +/- keys.					
		Display	Desc	ription	Setting range	Initial setting			
		LENGTH DATA	Lengt	h	330 to 356 mm	330			
		WIDTH DATA	Width		200 to 220 mm	210			
	4.	Press the start key.	The valu	ie is set.					
		pletion s the stop key. The s	creen fo	r selecting a mainten	ance item No. is displayed				
	 To check the operation of the fan motors. Method Press the start key. Select the motor to be operated. Press the start key. The operation starts. 								
	1. 2.	Press the start key. Select the motor to l							
	1. 2.	Press the start key. Select the motor to Press the start key.		ration starts.					
	1. 2.	Press the start key. Select the motor to Press the start key. Display		ration starts. Operation	IEM) is turned on				
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan		ration starts. Deration Fuser fan motor (Fl		irned on			
	1. 2.	Press the start key. Select the motor to Press the start key. Display Fixing Fan Developing Fan		ration starts. Operation Fuser fan motor (Fl Developing fan mot	or 1, 2 (DEVFM1, 2) are tu				
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan		ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o				
	1. 2.	Press the start key. Select the motor to Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on.	n.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor Power source fan n	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur	n.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor Power source fan n	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on.	n.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan motor Transfer fan motor Power source fan motor Container fan moto	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on.	n.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor Power source fan n Container fan moto LSU fan motor (LSI	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on.	n.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F Rotary Guide Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan motor Transfer fan motor Power source fan m Container fan motor LSU fan motor (LSU Rotary fan motor (LF	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on.	n. med on.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F Rotary Guide Fan Loop Sensor Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan motor Transfer fan motor Power source fan m Container fan motor LSU fan motor (LSU Rotary fan motor (LF	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned o 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on. RFM) is turned on. M) is turned on. 2, 3 (TRFM2, 3) is turned o	n. med on.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F Rotary Guide Fan Loop Sensor Fan Mid Transfer Belt F	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan motor Transfer fan motor Power source fan n Container fan motor LSU fan motor (LSU Rotary fan motor (LF Loop fan motor (LF	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned of 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is turn r (CFM) is turned on. JFM) is turned on. RFM) is turned on. 2, 3 (TRFM2, 3) is turned of M) is turned on.	n. med on.			
	1. 2.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F Rotary Guide Fan Loop Sensor Fan Mid Transfer Belt F Eject Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor Power source fan m Container fan motor LSU fan motor (LSU Rotary fan motor (LF Transfer fan motor (LF)	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned of 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on. RFM) is turned on. 2, 3 (TRFM2, 3) is turned of M) is turned on. (SFM) is turned on.	n. med on.			
	1. 2. 3.	Press the start key. Select the motor to I Press the start key. Display Fixing Fan Developing Fan LSU Rear Fan Mid Transfer Fan Power Source Fan CONT Fan POLYGON Motor F Rotary Guide Fan Loop Sensor Fan Mid Transfer Belt F Eject Fan ISU Fan	The ope	ration starts. Operation Fuser fan motor (Fl Developing fan mot Developing fan mot Transfer fan motor Power source fan n Container fan motor LSU fan motor (LSU Rotary fan motor (LF Transfer fan motor Eject fan motor (EF Scanner fan motor All fan motors are ta	or 1, 2 (DEVFM1, 2) are tu or 5 (DEVFM5) is turned of 1 (TRFM1) is turned on. notor 1, 2 (PSFM1, 2) is tur r (CFM) is turned on. JFM) is turned on. RFM) is turned on. 2, 3 (TRFM2, 3) is turned of M) is turned on. (SFM) is turned on.	n. med on.			

tem No.										
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 pairs Z-folded.									
	Method 1. Press the start key 2. Select the item to l									
	Display		Description							
	Paper Loop Amou	unt	Deflection adjustment							
	Paper Loop Amou	Deflection adjustment in			ite mode					
	Adjustment 1. Select the item. When [Paper Loop	-		Setting						
	Display	Description	Description		Initial setting	Change in value per step				
	MPT (Large)		from MP tray e size paper is used)	-30 to 20	-1	1 mm				
	MPT Half (L)		from MP tray size thick paper is used)	-30 to 20	7	1 mm				
	Cassette (L)		from cassette e size paper is used)	-30 to 20	1	1 mm				
	Cassette Half (L)	(when large	from cassette size thick paper is used)	-30 to 20	13	1 mm				
	Duplex (L)	-	e size paper is used)	-30 to 20	-2	1 mm				
	Duplex Half (L)	_	e size thick paper is used)	-30 to 20	8	1 mm				
	MPT (Small)	(when smal	from MP tray I size paper is used)	-30 to 20	-1	1 mm				
	MPT Half (S)	(when smal	from MP tray I size thick paper is used)	-30 to 20	-2	1 mm				
	Cassette (S)	(when smal	from cassette I size paper is used)	-30 to 20	0	1 mm				
	Cassette Half (S)	(when smal	from cassette I size thick paper is used)	-30 to 20	4	1 mm				
	Duplex (S)		l size paper is used)	-30 to 20	-2	1 mm				
	Duplex Half (S)	Duplex mod (when smal	de (second) I size thick paper is used)	-30 to 20	-1	1 mm				
	Large size: 218 mr	m or more in v	width of paper.							

Maintenance item No.	Description									
U051	When [Set Paper Lo	oop Amount BW] is selected			-					
	Display	Description	Setting range	Initial setting	Change in value per step					
	MPT (Large) B/W	Paper feed from MP tray (when large size paper is used)	-30 to 20	-1	1 mm					
	Cassette (L) B/W	Paper feed from cassette (when large size paper is used)	-30 to 20	1	1 mm					
	MPT (Small) B/W	Paper feed from MP tray (when small size paper is used)	-30 to 20	-1	1 mm					
	Cassette (S) B/W	Paper feed from cassette (when small size paper is used)	-30 to 20	0	1 mm					

Large size: 218 mm or more in width of paper.

- 2. Press the system menu key.
- 3. Place an original and press the start key to make a test copy.
- 4. Press the system menu key.

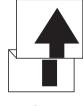
6. Press the start key. The value is set.

 Change the setting value using the +/- 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 deflection.







Copy example 2

Figure 1-3-6

Remark

When changing the setting value of [Large] each item is modified, equal to amount of the value which is changed adds also the value of [Small] each item and is pulled.

Completion

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

				Description			
D E P P	Setting the fuser motor control Description Enters the sensor data values described on the supplied sheet provided when the loop sensor is replaced performs correction processing for the fuser motor. Purpose To perform when replacing the loop sensor or paper conveying unit.						
	l ethod 1. Pre	ess the start key.		for executing each item is displayed.			
		isplay		Description			
	S	et Loop Sensor		Enter the data value for loop sensor			
	Lo	oop Sensor Control		Set the loop sensor detection control			
 Select [Scanning Board2]. Enter the sensor data value of sor +/- keys. Press the start key. The valu Setting: [Loop Sensor Control] 				of supplied sheet DATA2 using the cur- e is set.	$ \begin{array}{c} 4 \\ 5 \\ 6 \\ 7 \\ 9 \\ 0 \\ \hline 3 \\ 6 \\ 4 \\ \hline 9 \\ 3 \\ 6 \\ 4 \\ \hline 9 \\ 6 \\ \hline 9 $		
		lect the item.					
		lect ON or OFF.					
	D	isplay		escription	Initial setting		
	D		Se	escription ensor detection ON/OFF setting at 125 to 250 mm om the top of paper	Initial setting		
	D To	isplay	Se fro Se	ensor detection ON/OFF setting at 125 to 250 mm	_		
	D To To	isplay op 125mm	Se fro Se fro Se	ensor detection ON/OFF setting at 125 to 250 mm om the top of paper ensor detection ON/OFF setting at 250 to 290 mm	OFF		
	D Тс Тс	isplay op 125mm op 250mm	See fro See fro See fro See	ensor detection ON/OFF setting at 125 to 250 mm om the top of paper ensor detection ON/OFF setting at 250 to 290 mm om the top of paper ensor detection ON/OFF setting at 300 to 330 mm	OFF		
	D דמ דמ דמ	isplay op 125mm op 250mm op 300mm	Se fro Se fro Se fro Se fro	ensor detection ON/OFF setting at 125 to 250 mm om the top of paper ensor detection ON/OFF setting at 250 to 290 mm om the top of paper ensor detection ON/OFF setting at 300 to 330 mm om the top of paper ensor detection ON/OFF setting at 350 to 370 mm om the top of paper	OFF ON ON		

em No.	Description								
U053	Setting the adjustment of Description Performs fine adjustment Purpose								
	Basically, the setting need not be changed. Modify settings by interlock setting only if faulty images occur.								
	Method 1. Press the start key.								
	2. Select the item to be	e adjuste	d.						
	Display		Description						
	Set MOTOR1		Adjustment of drum motor M, C, Y	K speeds					
	Set MOTOR2		Adjustment of developing motor K motor, polygon motor, middle motor						
	Set MOTOR3		Adjustment of MP motor, eject mot duplex motor speeds	or, job eject motor,	fuser motor and				
	Set MOTOR4		Drum motor K speed adjustment in	n black/white mode	9				
	Set MOTOR5		Adjustment of developing motor K middle motor and registration motor						
	Set MOTOR6		Adjustment of MP motor, eject motor, job eject motor, fuser motor and duplex motor speeds in black/white mode						
	Setting: [Set MOTOR1] 1. Select the item to be adjusted.								
	Display	Descr	iption	Setting range	Initial setting				
	Drum C (Full)	Drum	motor C (DRM-C) full speed	-500 to 500	9				
	Drum M (Full)	Drum	motor M (DRM-M) full speed	-500 to 500	9				
		Drum	motor Y (DRM-Y) full speed	-500 to 500	9				
	Drum Y (Full)								
	Drum Y (Full) Drum K (Full)		motor K (DRM-K) full speed	-500 to 500	9				
		Drum	motor K (DRM-K) full speed motor C (DRM-C) half speed	-500 to 500 -500 to 500	9 47				
	Drum K (Full)	Drum Drum							
	Drum K (Full) Drum C (Half)	Drum Drum Drum	motor C (DRM-C) half speed	-500 to 500	47				
	Drum K (Full) Drum C (Half) Drum M (Half)	Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed	-500 to 500 -500 to 500	47 47				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half)	Drum Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed	-500 to 500 -500 to 500 -500 to 500	47 47 47				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2]	Drum Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed	-500 to 500 -500 to 500 -500 to 500	47 47 47				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be	Drum Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d.	-500 to 500 -500 to 500 -500 to 500 -500 to 500	47 47 47 47				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be Display	Drum Drum Drum Drum Drum e adjuste Descr	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d.	-500 to 500 -500 to 500 -500 to 500 -500 to 500 Setting range	47 47 47 47 Initial setting				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be Display Dev K	Drum Drum Drum Drum Drum e adjuste Develo Develo	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d. iption oping motor K (DEVM-K)	-500 to 500 -500 to 500 -500 to 500 -500 to 500 Setting range -500 to 500	47 47 47 47 Initial setting 0				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be Display Dev K Dev MCY	Drum Drum Drum Drum Drum e adjuste Develo Develo Transt	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d. iption oping motor K (DEVM-K) oping motor MCY (DEVM-MCY)	-500 to 500 -500 to 500 -500 to 500 -500 to 500 -500 to 500 -500 to 500 -500 to 500	47 47 47 47 Initial setting 0 0				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be Display Dev K Dev MCY TC Motor(Full)	Drum Drum Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d. ciption oping motor K (DEVM-K) oping motor MCY (DEVM-MCY) fer motor (TRM) full speed	-500 to 500 -500 to 500	47 47 47 47 Initial setting 0 0 0				
	Drum K (Full) Drum C (Half) Drum M (Half) Drum Y (Half) Drum K (Half) Setting: [Set MOTOR2] 1. Select the item to be Display Dev K Dev MCY TC Motor(Full) TC Motor(Half)	Drum Drum Drum Drum Drum Drum Drum Drum	motor C (DRM-C) half speed motor M (DRM-M) half speed motor Y (DRM-Y) half speed motor K (DRM-K) half speed d. iption oping motor K (DEVM-K) oping motor MCY (DEVM-MCY) fer motor (TRM) full speed fer motor (TRM) half speed	-500 to 500 -500 to 500	47 47 47 47 47 Initial setting 0 0 0 0				

nance No.		Description		
53	Setting: [Set MOTOR3]			
	1. Select the item to be	,		
	Display	Description	Setting range	Initial setting
	MPF	MP motor (MPM)	-500 to 500	0
	Eject Motor	Eject motor (EM)	-500 to 500	0
	OPT Eject	Job eject motor (JEM) (option)	-500 to 500	0
	Fixing Motor	Fuser motor (FUM)	-500 to 500	80
	Duplex Motor	Duplex motor (DUM)	-500 to 500	0
	Feed Motor	Paper conveying motor (PCM)	-500 to 500	0
	Setting: [Set MOTOR4] 1. Select the item to be	adjusted.		
	Display	Description	Setting range	Initial setting
	Drum K(Full) BW	Drum motor K (DRM-K) full speed	-500 to 500	21
	Setting: [Set MOTOR5] 1. Select the item to be	adjusted.		
	Display	Description	Setting range	Initial setting
	Dev K(BW Convey)	Developing motor K (DEVM-K)	-500 to 500	0
	TC Motor (F) BW	Transfer motor (TRM) full speed	-500 to 500	0
	MID Roller Motor B	W Middle motor (MM)	-500 to 500	0
	Regist Motor BW	Registration motor (RM)	-500 to 500	0
	Polygon (F) BW	Polygon motor (PM) full speed	-500 to 500	0
	Setting: [Set MOTOR6] 1. Select the item to be	adjusted.		
	Display	Description	Setting range	Initial setting
	MPT BW	MP motor (MPM)	-500 to 500	0
	Eject Motor BW	Eject motor (EM)	-500 to 500	0
	OPT Eject BW	Job eject motor (JEM) (option)	-500 to 500	0
	Fixing Motor BW	Fuser motor (FUM)	-500 to 500	50
	Duplex Motor BW	Duplex motor (DUM)	-500 to 500	0
	Adjustment 1. Press the system me 2. Press the start key to	o output an A3/Ledger test pattern.	alues for an A3/Le	edger output are
			± 0.5 mm	
		Figure 1-3-7		

item No.		Description							
U053	 Select [transfe Change the se Increasing the se makes the image B: Magnification i Select [polygo Change the se Increasing the se the image longer Press the start ke After adjustment, power switch off, 	n the auxil r motor]. tting value tting make shorter in n the main n motor]. tting value tting make in the mai run the mai run the mai then on ag	iary scanning direction using the +/- or numeric keys. s the image longer in the auxiliary so the auxiliary scanning direction. s scanning direction using the +/- or numeric keys. s the image shorter in the main scan n scanning direction. ue is set. aintenance item U001 to exit the main gain.	ning direction, and	decreasing it make				
	Press the stop key. The indication for selecting a maintenance item No. appears. Setting fan mode								
	Purpose Change mode to MODI size paper or when prir	E2 of opera ting using ature at wh	ng fan motors during conveying pape ation mode if paper crease occurs w B4 size paper. If the sound of the mo nich the fans operate to limit operatio	nen simplex-printin otor is disagreeable					
			Description						
	Display Set Operation M	ode	Sets operation mode of paper conveying fan motors.						
	Set Timing	ouc	Sets timings to activate paper conveying fan motors.						
	Set FAN Mode		Sets temperature at which paper conveying fan motors operate.						
	Adjust Cooling N	lode	Sets temperature at which the paper conveying fan motors are switched for controlling.						
	Setting: [Set Operation Mode] 1. Select the mode.								
	Display		ription						
	OFF		ot drive paper conveying fan motor.						
	MODE1	per is used or ng duplex-print-							
		ing.							
	MODE2	Drive	s paper conveying fan motors only w paper is used.	hen A4/Letter, A3/	Ledger and B4				
	MODE2 Initial setting: MO 2. Press the start ke	Drive size p	oaper is used.	hen A4/Letter, A3/	Ledger and B4				
	Initial setting: MO	Drive size p DE1 y. The sett	paper is used.	hen A4/Letter, A3/	Ledger and B4				
	Initial setting: MO 2. Press the start ke Setting: [Set Timing]	Drive size p DE1 y. The sett g value us Desc	paper is used.	hen A4/Letter, A3/	Ledger and B4				

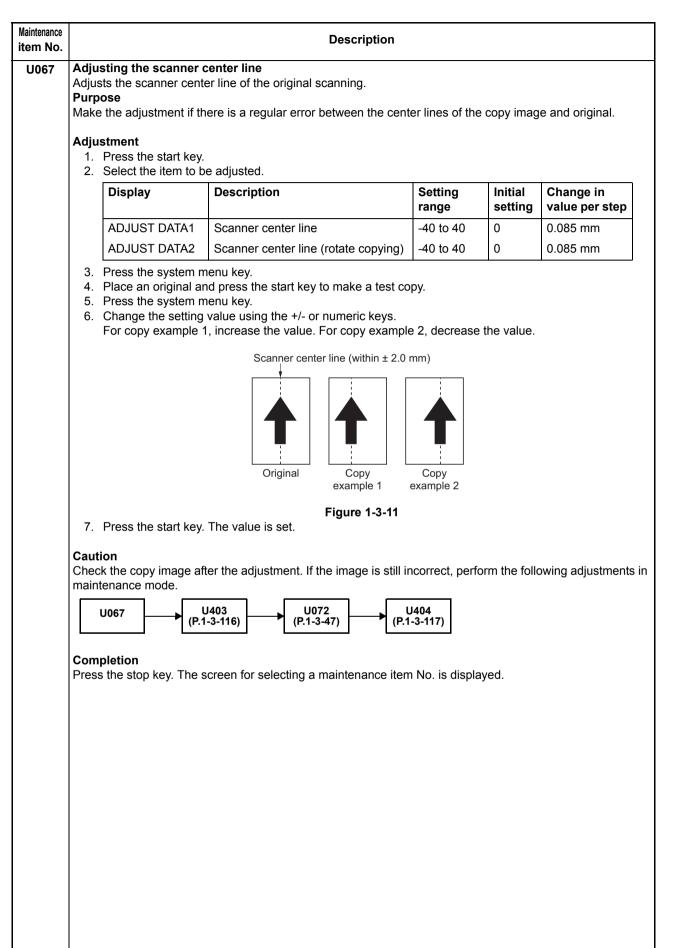
2. Press the start key. The value is set.

Maintenance item No.	Description									
U059		ng: [Set FAN M Select the mod								
		Display	Desc	ription						
	MODE1 Temperature at which paper conveying fan motors operate: High									
		MODE2	Temp	erature at which paper conveying fan mo	otors operate: Nor	mal				
		,								
		from sleep mode, an 38 °C.	and switches to							
	2.	Initial setting: M Press the start		setting is set.						
	Setting: [Adjust Coolir 1. Change the setting			g Mode] y value using the +/- keys.						
		Display		escription	Setting range	Initial setting				
		Adjust Cooling Mode		mount of shift from the initial standard mperature	-3 to 3 (°C)	0				
	2.	Setting a highe Press the start		creases the internal temperature, decreative value is set.	asing the longevity	of the developer.				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.									
		od Press the start Select the item	•							
		Display		Description						
		CCD		The exposure lamp lights						
		CIS		The CIS lights (when dual scan DP	is installed)					
	 Press the start key. The lamp lights. To turn the lamp off, press the stop key. 									
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.									

aintenance em No.			Desc	ription		
U063	Desci Chang Purpo Used This is	ese when the white lin s due to flaws or st	position osition of the scanner. e continue to appear longitudi ains inside the shading plate. g is possible without being affe	To prevent this problen	n, the shadir	
		Press the start key	/. g using the +/- or numeric keys).		
		Display	Description	Setting range	Initial setting	Change in value per step
		ADJUST DATA	Shading position	0 to 24	0	0.085 mm
		position toward the	ue moves the shading position e machine right. v. The value is set.		ent, and deci	
	While		item is being executed, copyin ressing the system menu key).		ailable in int	errupt copying mo
		letion	scroop for colocting a mainter	vanco itom No, is displ	aved	
	Press	the stop key. The	screen for selecting a mainter	iance item No. is displ	ayed.	

itenance n No.	Description							
U065	Adjusting the scanner magnificationDescriptionAdjusts the magnification of the original scanning.PurposeMake the adjustment if the magnification in the main scanning direction is incorrect.Make the adjustment if the magnification in the auxiliary scanning direction is incorrect.							
	Caut Adjus		of the scanner in the following order.					
		U053 1-3-35) → (ma d	U065 in scanning lirection) U065 (auxiliary scanning direction)	g → (P.1	J067 I-3-42)	U070 (P.1-3-44)		
		od Press the start key. Select the item to be	e adjusted.					
		Display	Description	Setting range	Initial setting	Change in value per step		
		MAIN SCAN ADJ	Scanner magnification in the main scanning direction	-15 to 15	0	0.1 %		
		SUB SCAN ADJ	Scanner magnification in the auxil- iary scanning direction	-25 to 25	0	0.1 %		
			value using the +/- or numeric keys. , increase the value. For copy example Original Copy example 1 ex Figure 1-3-8	e 2, decrease	the value.			
	5.	Press the start key.	-					
		stment: [SUB SCAN Press the system m						
	2. 3.	Place an original an Press the system m Change the setting	d press the start key to make a test co		the value.			
	2. 3.	Place an original an Press the system m Change the setting	d press the start key to make a test co enu key. value using the +/- or numeric keys.		the value.			
	2. 3.	Place an original an Press the system m Change the setting	d press the start key to make a test co enu key. value using the +/- or numeric keys. , increase the value. For copy example $\qquad \qquad $	e 2, decrease	the value.			

ntenance m No.			Description			
066	Desc Adjus Purp	sts the scanner lead ose	leading edge registration ling edge registration of the original sc here is a regular error between the lea	-	the copy im	age and original.
	1.	stment Press the start key Select the item to				
		Display	Description	Setting range	Initial setting	Change in value per step
		ADJUST DATA1	Scanner leading edge registration	-60 to 60	0	0.085 mm
		ADJUST DATA2	Scanner leading edge registration (rotate copying)	-60 to 60	0	0.085 mm
	4. 5.	Press the system i Change the setting	nd press the start key to make a test o		the value.	
			Scanner leading edge registration (within ± 2.5 mm)	
			Original Copy example 1	Copy example 2		
	7.	Press the start key	Figure 1-3-10 The value is set.			
	main	tenance mode.	fter the adjustment. If the image is still U403 1-3-116) U071 (P.1-3-45) (P.	incorrect, perfe U404 1-3-117)	orm the follo	owing adjustment
		pletion s the stop key. The	screen for selecting a maintenance ite	m No. is displa	ayed.	



Maintenance tem No.			Description			
U068	Desc Adjus after Purp Used	r iption sts the position for s adjusting. ose when the image fo	g position for originals from the DP ecanning originals from the DP. Perform gging occurs because the scanning po g of DP leading edge when the scannin	sition is not p	roper when	
	Setti 1.	ng Press the start key	:			
		Display	Description	Setting range	Initial setting	Change in value per step
		ADJUST DATA	Starting position adjustment for scanning originals	-70 to 70	0	0.085 mm
		TEST POSITION	Scanning position for the test copy originals	0 to 3	0	-
	5. 6. 7. 8. 9. 10.	Select the scanning Press the start key Set the original (the for the test copy m Press the start key Perform the test co black line appears pletion	ITION] of the screen for selecting an ite g position using the +/- or numeric keys . The value is set. e one which density is known) in the DF	s. P and press th setting value f	rom 0 to 3 a	-

Adj	usting the DP mag	Inification							
	Description								
	usts the DP original pose	scanning speed.							
		the magnification is incorrect in the auxil	iary scanning	g direction w	hen the DP is u				
۸di	ustment								
	Press the start ke	ły.							
2.	Select the item to	be adjusted.							
	Display	Description	Setting range	Initial setting	Change in value per ste				
	CONVEY SPEED1	Magnification in the auxiliary scanning direction of CCD (first side)	-25 to 25	0	0.1 %				
	CONVEY SPEED2	Magnification in the auxiliary scanning direction of CCD (second side)	-25 to 25	0	0.1 %				
	CIS MAIN ADJ*	Magnification in the main scanning direction of CIS	-20 to 20	0	0.1 %				
	CIS SUB ADJ*	Magnification in the auxiliary scanning direction of CIS	-50 to 50	0	0.05 %				
	Press the system								
		ng value using the +/- or numeric keys. a 1, increase the value. For copy example Image: Second Se	e 2, decrease	e the value.					
	For copy example	e 1, increase the value. For copy example original Copy example 1 e Figure 1-3-12	Сору	e the value.					
7.	For copy example	e 1, increase the value. For copy example original Copy example 1 e Figure 1-3-12	Сору	e the value.					
7. Cau Che	For copy example	I, increase the value. For copy example Image: state of the value is set. Figure 1-3-12 Set the value is set.	Copy example 2		owing adjustmer				
7. Cau Che	For copy example Press the start ke ition eck the copy image ntenance mode.	original Copy example 1, increase the value. For copy example for a copy example 1 e Figure 1-3-12	Copy example 2		owing adjustmer				
7. Cau Che maii	For copy example Press the start kention teck the copy image ntenance mode.	I, increase the value. For copy example Image: state of the value is set. Original Original Copy example 1 Copy example 1 Figure 1-3-12 example 1 Image: still in the image is still	Copy example 2	orm the follo	owing adjustmer				
7. Cau Che maii	For copy example Press the start kention teck the copy image ntenance mode.	e 1, increase the value. For copy example f increase the value. For copy example f increase the value. For copy example f increase the value is copy f increase the value is set. f increase the value is set.	Copy example 2	orm the follo	owing adjustmer				
7. Cau Che maii	For copy example Press the start kention teck the copy image ntenance mode.	e 1, increase the value. For copy example f increase the value. For copy example f increase the value. For copy example f increase the value is copy f increase the value is set. f increase the value is set.	Copy example 2	orm the follo	owing adjustmer				
7. Cau Che maii	For copy example Press the start kention teck the copy image ntenance mode.	e 1, increase the value. For copy example f increase the value. For copy example f increase the value. For copy example f increase the value is copy f increase the value is set. f increase the value is set.	Copy example 2	orm the follo	owing adjustmer				

	Descriptio	on					
Adjusting the DP scanning timing Description Adjusts the DP original scanning timing. Purpose Make the adjustment if there is a regular error between the leading or trailing edges of the original and the copy image when the DP is used.							
Method 1. Press the start 2. Select the item							
Display	Description	Setting range	Initial setting	Change in value per step			
ADJUST DATA1	Leading edge registration of CCD (first side)	-32 to 32	0	0.174 mm			
ADJUST DATA2	Trailing edge registration of CCD (first side)	-32 to 28	0	0.174 mm			
ADJUST DATA3	Leading edge registration of CCD (second side)	-32 to 32	0	0.174 mm			
ADJUST DATA4	Trailing edge registration of CCD (second side)	-32 to 32	0	0.174 mm			
ADJUST DATA5*	Leading edge registration of CIS	-45 to 45	0	0.174 mm			
ADJUST DATA6*	Trailing edge registration of CIS	-45 to 45	0	0.174 mm			
 Press the systematical systemat	nal on the DP and press the start key to em menu key. tting value using the +/- or numeric ke uple 1, increase the value. For copy ex	ys.					
	Original Copy example						
C. Droce the start	example Figure 1-3	e 1 example 2					
 Press the start Caution 	example	e 1 example 2					

Maintenance item No.	Description
U071	 Adjustment: Trailing edge registration Press the system menu key. Place an original on the DP and press the start key to make a test copy. Press the system menu key. Change the setting value using the +/- or numeric keys. For copy example 1, increase the value. For copy example 2, decrease the value.
	example 1 example 2 Figure 1-3-14
	5. Press the start key. The value is set.
	If the CCD first side is adjusted, check the CCD second side and if adjustment is required, carry out the adjustment. Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments in maintenance mode. U071 (P.1-3-117) Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

Maintenance item No.			Description			
U072	Desc Adjus Purp Make	ose	· line t position for the DP original. ere is a regular error between the cente	ers of the origi	nal and th	e copy image when
	1.	stment Press the start key. Select the item to be	e adjusted.			
		Display	Description	Setting range	Initial setting	Change in value per step
		ADJUST DATA1 ADJUST DATA2	DP center line of CCD (first side) DP center line of CCD (second side)	-40 to 40 -40 to 40	0 0	0.085 mm 0.085 mm
		ADJUST DATA3* *: Dual scan DP onl	DP center line of CIS y.	-39 to 39	0	0.085 mm
	4. 5.	Press the system m Place an original on Press the system m Change the setting	enu key. the DP and press the start key to mak		he value.	
			Original Copy example 1	Copy example 2		
			Figure 1-3-15			
	7.	Press the start key.	The value is set.			
	adjus Chec main	CCD first side is adj stment. k the copy image aft tenance mode. U072 (P.1 pletion	usted, check the CCD second side and er the adjustment. If the image is still in 1404 -3-117) creen for selecting a maintenance item	correct, perfo	rm the follo	-

itenance m No.			Descrij	otion				
073	Checking the scanner of Description Simulates the scanner op Purpose To check the scanner ope	eration under th	e arbitrary con	ditions.				
	Start1. Press the start key.2. Select the item to be operated.							
	Display		ription					
	SCANNER MOTO		ner operation					
	HOME POSITION		position opera	tion				
	DUST CHECK			operation with la	imp on			
	DP READING		anning positior	-				
	Setting: [SCANNER MO 1. Select [SCANNER I 2. Select the item. 3. Change the setting	MOTOR].	ys.					
	Display		Operating co	onditions		Setting range		
	ZOOM		Magnification			25 to 400 %		
	SIZE	SIZE		Original size		See below.		
	LAMP		On and off of	the exposure lam	р	0 (off) or 1 (on)		
	Original sizes for ea	Original sizes for each setting in SIZE						
	Setting	Paper s	ize	Setting		aper size		
	5000	A4		5000	A	5R		
	4300	B5		7800	Fo	olio		
	5100	11" x 8 1	/2"	10200		" x 17"		
	10000	A3		9000		" x 15"		
	8600	B4		8400		1/2" x 14"		
	7100	A4R		6600		1/2" x 11"		
	6100	B5R		5100	5	1/2" x 8 1/2"		
	 Press the start key. To stop operation, p 			cted conditions.				
	Method: [HOME POSITION 1. Select [HOME POS 2. Press the start key. The mirror frame of	ITION].	oves to the hom	e position.				
	Method: [DUST CHECK] 1. Select [DUST CHEC 2. Press the start key. 3. To turn the exposure	CK]. The exposure la						
	Method: [DP READING] 1. Select [DP READIN 2. Press the start key. The mirror frame of	-	oves to the read	ling position.				
	Completion Press the stop key when	scanning stops	The screen for	^r selecting a main	tenance ite	m No. is displayed		

Maintenance item No.			Description				
U074	Desc Sets Purp	ose	ight luminosity ction for scanning originals from the DP. a spotted background appears when a bluis	h original is scanne	d from the DP.		
	 Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. 						
		Display	Description	Setting range	Initial setting		
		INPUT DATA	DP input light luminosity correction	0 to 3	0		
	3.	Settings 0: No corre Press the start key.	ection / 1: Slight correction / 2: Medium corre	ection / 3: Strong co	rrection		
	While		em is being executed, copying from an origir ssing the system menu key).	nal is available in int	errupt copying mode		
	Press	pletion s the stop key. The s ng the economy mo	creen for selecting a maintenance item No.	is displayed.			
U080	Sets Purp To ind	crease or decrease t	omy mode. he image density in the eco-print mode.				
		Select the item to be	e set.				
		Display	Description	Setting range	Initial setting		
		ADJUST DATA1	For full color and 2 color copy mode	0 to 100	60		
		ADJUST DATA2	For black/white and single color mode	0 to 100	60		
			value using the +/- or numeric keys. ng makes the image darker; decreasing it m The value is set.	akes the image ligh	iter.		
	While		em is being executed, copying from an origir ssing the system menu key).	nal is available in int	errupt copying mode		
		pletion s the stop key. The s	creen for selecting a maintenance item No.	is displayed.			

tenance n No.		Description		
081	Adjusting the correct Description Adjusts the correct ex Purpose To be executed as rec	posure in text and photo mode, text mode or photo	to mode.	
	Setting 1. Press the start 2. Select the item			
	Display	Description	Setting range	Initial setting
	MIX ADJ (FULL)	Adjusts the correct exposure in full color text and photo mode	-3 to 3	0
	TEXT ADJ (FULL)	Adjusts the correct exposure in full color text mode	-3 to 3	0
	PHOTO ADJ (FULL)	Adjusts the correct exposure in full color photo mode	-3 to 3	0
	MIX ADJ (MONO)	Adjusts the correct exposure in black/white text and photo mode	-3 to 3	0
	TEXT ADJ (MONO)	Adjusts the correct exposure in black/white text mode	-3 to 3	0
	PHOTO ADJ (MONO)	Adjusts the correct exposure in black/white photo mode	-3 to 3	0
	Increasing the s	ting using the +/- or numeric keys. Netting makes the image darker; decreasing it mak Netting the value is set.	es the image ligh	iter.
		ce item is being executed, copying from an original pressing the system menu key).	l is available in inf	terrupt copying mo
	Completion Press the stop key. T	he screen for selecting a maintenance item No. is	displayed.	

2KY

Maintenance Description item No. U087 Setting DP reading position modification operation Description The presence or absence of dust is determined by comparing the scan data of the original trailing 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. Purpose When using DP, to solve the problem when black lines occurs due to the dust with respect to original reading position. Method 1. Press the start key. 2. Select the item to be set. Display Description CCD Setting of standard data when dust is detected. **BLACK LINE** Initialization of original reading position. Setting: [CCD] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range Initial setting Display Description CCD R Lowest density of the R regard as the dust 0 to 255 145 CCD G 0 to 255 Lowest density of the G regard as the dust 145 CCD B Lowest density of the B regard as the dust 0 to 255 145 3. Press the start key. The value is set. Method: [BLACK LINE] 1. Select [CLEAR]. 2. Press the start key. The setting is cleared. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

No.		Description	ו
39	Purpose	P-PG pattern created by the mac	hine. image printing, using MIP-PG pattern output
	(without scanning).	ier than scanner when adjusting	image printing, using MIP-PG pattern output
	Method 1. Press the start key.		
		tern to be output and press the	-
	Display	Description	Purpose
	256GRADATION	256-gradation PG	To check the gradation reproducibility
	COLOR BELT	Four color belts PG	To check the developing state and the engine section ID
	GRAY(C)	Cyan PG	To check the drum quality
	GRAY(M)	Magenta PG	To check the drum quality
	GRAY(Y)	Yellow PG	To check the drum quality
	GRAY(K)	Black PG	To check the drum quality
	WHITE	Blank paper PG	To check the drum quality
	GRADATION GRAY	5-graduation gray PG	To check for vertical lines on the laser scanner unit
	3. Press the system mer		
	4. Press the start key. A	MIP-PG pattern is output.	
	Press the stop key. The scre	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
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	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.
	Press the stop key. The scr	een for selecting a maintenance	item No. is displayed.

Maintenance item No.				Description					
U091		ng the white lin	e correction						
	Description Sets the error detection threshold value for white line correction and displays the count result of abnormal pix Purpose								
	To perform when replacing the CIS, DP driver PWB or CIS roller.								
	1. 2.	od: white line c Press the start I Press [EXECU]	key. TE].						
				white reference data is sta bixels is displayed.	rted.				
		Display		Description					
		Calculation(R)		Abnormal pixel count result	for colo	r R			
		Calculation(G)		Abnormal pixel count result	for colo	r G			
		Calculation(B)	1	Abnormal pixel count result	for colo	rВ			
	6. 7.	The paper shou Press the start I Two test pattern If no vertical line If vertical black	ginal on the D ld be the same key. a sheets will be es appear on e lines appear o	P with the gray side down. I e size as the original. e printed. (1st sheet: blank s ither sheet, the setting has n the blank sheet and vertion oller and the CIS class and	sheet, 2r been co cal white	nd sheet: Approx. Impleted normally lines appear in th	60 mm black band) ne black band in the		
		same position, clean the CIS roller and the CIS glass and then repeat white line correction. If vertical black lines or vertical white lines appear on both sheets, white line correction has been com- pleted normally. However, the cause of the vertical lines lies in the engine, and thus the engine must be checked. How to view test copies							
		blank sheet	black band	Causes	Correc	ctive measures			
		No lines	No lines	-	Comple	mplete			
		Black lines	White lines	ite lines Dirty CIS roller or CIS Clean CIS roller glass perform U091 a		CIS roller or CIS g า U091 again	plass and then		
		Black lines	No lines	Engine side	U091 e	91 ends, check engine			
		No lines	White lines	Engine side	U091 e	nds, check engin	e		
\$	Setti 1. 2.								
		Display	Descript	ion		Setting range	Initial setting		
		Threshold(R)	threshold	g of abnormal pixel detection value for color R		-	-		
		Threshold(G)		Displaying of abnormal pixel detection threshold value for color G		-	-		
		Threshold(Con		Setting of abnormal pixel detection thresh- old value for color		0 to 1023	112		
		Abnorm Pixel Threshold	Abnorma	l pixel threshold value setti	ng	0 to 8191	75		
		MODE	Switching mode ON	g between white line correct I/OFF	tion	0: OFF/1: ON/ 2: Test mode	0		
		If white lines If fine lines in	appear even tl some original	m) value should not be cha hough the CIS roller and gla s disappear, lower the set v 00. (If set outside this range	ass are r alue.	not dirty, raise the	set value.		

modes. Purpose To set how the image density is altered by a change of one step in the manual density adjustment for respective image quality modes. Also used to make copy images darker or lighter. Method 1. Press the start key. 2. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text mode MIXED Density in modes other than the text mode or the text and photo mode OTHER Density in the text in fax mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description TEXT F/C Change in density when manual density is DARKER set dark (full color mode) TEXT F/C Change in density when manual density is DARKER set light (full color mode) TEXT MONO Change in density when manual density is DARKER set light (single color mode) TEXT MONO Change in density when manual density is	 4. After changing the Threshold(Com) value, turn the main power switch off and on. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U093 Adjusting the exposure density gradient Changes the exposure density gradient in the manual density mode, depending on respective image qualit modes. Purpose To set how the image density is altered by a change of one step in the manual density adjustment for respective image quality modes. Also used to make copy images darker or lighter. Method Press the start key. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text and photo mode OTHER Density in the text and photo mode OTHER Density in the text and photo mode OTHER Density in the text in fax mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Select the item to be set. Change the setting value using the +/- or numeric keys. Display Description TEXT F/C Change in density when manual density is DARKER set dark (full color mode) TEXT F/C Change in density when manual density is DARKER set dark (full color mode) TEXT HONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set dark (single color mode) TEXT MONO Change in density when manual density is DARKER set	item No.				Description			
Description Changes the exposure density gradient in the manual density mode, depending on respective image quality modes. Purpose To set how the image density is altered by a change of one step in the manual density adjustment for respective image quality modes. Also used to make copy images darker or lighter. Method 1. Press the start key. 2. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in the text in fax mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) TEXT F/C Change in density when manual density is 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 0 0 TEXT F/C Change in density when manual density is 0 to 3 0 0 0	Description Changes the exposure density gradient in the manual density mode, depending on respective image qualit modes. Purpose To set how the image density is altered by a change of one step in the manual density adjustment for respective image quality modes. Also used to make copy images darker or lighter. Method 1. Press the start key. 2. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in the text in fax mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] . Setect the item to be set. . Change the setting value using the +/- or numeric keys. Display Description TEXT F/C Change in density when manual density is DARKER 0 to 3 0 IGHTER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is DARKER 0 to 3 0 TEXT F/C Change in density when manual density is DARKER 0 to 3 0 TEXT MONO Change in density when manual density i	U091	 After changing the Threshold(Com) value, turn the main power switch off and on. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. 						
1. Press the start key. 2. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 DARKER set dark (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color m	1. Press the start key. 2. Select the image quality mode. The setting screen for the selected item is displayed. Display Description TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 1 text 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 LIGHTER set light (full color mode) 1 text 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 0 TEXT MONO Change in density when manual density is 0 to 3 0 0 TEXT MONO Change in density when manual density is	U093	Descrip Change modes. Purpose To set h	ition s the exposure d e ow the image de	lensity nsity i	gradient in the manual density mode, de s altered by a change of one step in the	manual density a		
TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (si	TEXT Density in the text mode MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (si		1. Pr	ess the start key		mode. The setting screen for the selecte	d item is displaye	d.	
MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] Density in the photo in fax mode 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (single color mode) 0	MIXED Density in the text and photo mode OTHER Density in modes other than the text mode or the text and photo mode FAX TEXT Density in the text in fax mode FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DIGHTER set light (single color mode) 0 to 3 0		D	isplay		Description			
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FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Setting range Initial setting Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (single color mode) 0 to 3 0 IGHTER set light (single color mode) 0 to 3	FAX PHOTO Density in the photo in fax mode Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Setting range Initial setting Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 IGHTER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set light (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (single color mode) 0 to 3 0 ILGHTER set light (single color mode) 0 to 3 0 ILGHTER set light (single color mode) 0 to 3 0		C	THER		Density in modes other than the text mo	ode or the text an	d photo mode	
Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 IGHTER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (single color mode) 0 to 3 0 ILGHTER set light (single color mode) 0 to 3 0 Increasing the setting makes the change in density larger, and decreasing it makes the change small	Setting: [TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting TEXT F/C Change in density when manual density is 0 to 3 0 DARKER set dark (full color mode) 0 to 3 0 TEXT F/C Change in density when manual density is 0 to 3 0 IGHTER set light (full color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 DARKER set dark (single color mode) 0 to 3 0 TEXT MONO Change in density when manual density is 0 to 3 0 IGHTER set light (single color mode) 0 to 3 0 ILGHTER set light (single color mode) 0 to 3 0 Increasing the setting makes the change in density larger, and decreasing it makes the change small		E	AX TEXT		Density in the text in fax mode			
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TEXT F/C LIGHTERChange in density when manual density is set light (full color mode)0 to 30TEXT MONO DARKERChange in density when manual density is set dark (single color mode)0 to 30TEXT MONO LIGHTERChange in density when manual density is set light (single color mode)0 to 30Increasing the setting makes the change in density larger, and decreasing it makes the change small	TEXT F/C LIGHTERChange in density when manual density is set light (full color mode)0 to 30TEXT MONO DARKERChange in density when manual density is set dark (single color mode)0 to 30TEXT MONO LIGHTERChange in density when manual density is set light (single color mode)0 to 30Increasing the setting makes the change in density larger, and decreasing it makes the change small		Т	EXT F/C	Cha	inge in density when manual density is			
TEXT MONO DARKERChange in density when manual density is set dark (single color mode)0 to 30TEXT MONO LIGHTERChange in density when manual density is set light (single color mode)0 to 30Increasing the setting makes the change in density larger, and decreasing it makes the change small	TEXT MONO DARKERChange in density when manual density is set dark (single color mode)0 to 30TEXT MONO LIGHTERChange in density when manual density is set light (single color mode)0 to 30Increasing the setting makes the change in density larger, and decreasing it makes the change small		D T	ARKER EXT F/C	set Cha	dark (full color mode) inge in density when manual density is			
LIGHTER set light (single color mode) Increasing the setting makes the change in density larger, and decreasing it makes the change small	LIGHTER set light (single color mode) Increasing the setting makes the change in density larger, and decreasing it makes the change smaller		-		Cha	inge in density when manual density is	0 to 3	0	
					set				
			D T	ARKER EXT MONO	Cha	inge in density when manual density is	0 to 3	0	
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			
			D T L	ARKER EXT MONO IGHTER creasing the sett	Cha set ing ma	inge in density when manual density is light (single color mode) akes the change in density larger, and de			

ance No.			Description						
3	Setting: [MIXED] 1. Select the item to be set.								
			value using the +/- or numeric keys.						
		Display	Description	Setting range	Initial setting				
		MIXED F/C DARKER	Change in density when manual density is set dark (full color mode)	0 to 3	0				
		MIXED F/C LIGHTER	Change in density when manual density is set light (full color mode)	0 to 3	0				
		MIXED MONO DARKER	Change in density when manual density is set dark (single color mode)	0 to 3	0				
		MIXED MONO LIGHTER	Change in density when manual density is set light (single color mode)	0 to 3	0				
		Increasing the settin Press the start key.	ng makes the change in density larger, and de The value is set.	ecreasing it makes	s the change sm				
	1.	Select the item to b Change the setting							
		Display	Description	Setting range	Initial setting				
		OTHER F/C DARKER	Change in density when manual density is set dark (full color mode)	0 to 3	0				
		OTHER F/C LIGHTER	Change in density when manual density is set light (full color mode)	0 to 3	0				
		OTHER MONO DARKER	Change in density when manual density is set dark (single color mode)	0 to 3	0				
		OTHER MONO LIGHTER	Change in density when manual density is set light (single color mode)	0 to 3	0				
	3.	Increasing the setting makes the change in density larger, and decreasing it makes the change small 3. Press the start key. The value is set.							
	 Setting: [FAX TEXT] 1. Select the item to be set. 2. Change the setting value using the +/- or numeric keys. 								
		Display	Description	Setting range	Initial setting				
		FAX TEXT DARKE	ER Gradient for darker setting	0 to 3	0				
3.		FAX TEXT LIGHT	ER Gradient for lighter setting	0 to 3	0				
	3.	Increasing the setting makes the change in density larger, and decreasing it makes the change sma 3. Press the start key. The value is set.							
	1.	ng: [FAX PHOTO] Select the item to b Change the setting	e set. value using the +/- or numeric keys.						
		Display	Description	Setting range	Initial setting				
		FAX PHOTO DAR	KER Gradient for darker setting	0 to 3	0				
		FAX PHOTO LIGH	· · ·	0 to 3	0				
		Increasing the setting	ng makes the change in density larger, and de	ecreasing it makes	the change sm				
	3.	Press the start key.		C C	· ·				

Adj	Adjusting original size detection									
Des	Description									
		e origin	al size sensor and sets the sensing	threshold v	alue.					
To a	Purpose To adjust the sensitiveness of the sensor and size judgement time if the original size sensor malfunctions									
que	quently due to incident light or the like.									
Met										
	Press the start key.	oroon	for evenuting each item is displayed							
2.	Select the item. The screen f			1.						
	DATA1		Displaying original size sensor trai	nsmission d	lata					
	B/W LEVEL1		B/W LEVEL setting original size set							
			Setting original size judgment time							
	DATA2		Displaying original size sensor trai installed)	nsmission c	lata (when D)P is				
	hod: [DATA/DATA2]									
1.	 Place the original and played. 	l close	the original cover or DP. The detect	ion sensor	transmissior	n data is dis				
	Display		Description							
	ORIGINAL AREA R		Detected original width size (R)							
	ORIGINAL AREA G		Detected original width size (G)							
	ORIGINAL AREA B		Detected original width size (B)							
			Detected original width size							
	ORIGINAL AREA		Detected original width size							
	ORIGINAL AREA SIZE SW L		Detected original width size Displays the original size sensor (OSS) ON/C	FF					
			-	OSS) ON/C	FF					
	SIZE SW L		-	OSS) ON/C	FF					
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s		Displays the original size sensor (OSS) ON/C	FF					
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va	alue us	Displays the original size sensor (1					
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s	alue us	Displays the original size sensor (OSS) ON/C Setting range	1	setting				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va	alue us Desci	Displays the original size sensor (Setting	1	-				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display	alue us Desci Origin	Displays the original size sensor (ing the +/- or numeric keys.	Setting range	Initial	50/50/50				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3	Desci Origin Origin	Displays the original size sensor (ing the +/- or numeric keys. ription nal threshold value for color R	Setting range 0 to 255	Initial 40/30/20	50/50/50 50/50/50				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3	Desci Desci Origin Origin Origin	Displays the original size sensor (ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G	Setting range 0 to 255 0 to 255	Initial 40/30/20 40/30/20	50/50/50 50/50/50				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3	Desci Desci Origin Origin Origin Light s	Displays the original size sensor (i ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G nal threshold value for color B	Setting range 0 to 255 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20	50/50/50 50/50/50 50/50/50				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R	Desci Origin Origin Origin Light s	Displays the original size sensor (ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G nal threshold value for color B source threshold value for color R	Setting range 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19	50/50/50 50/50/50 50/50/50 49*				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R LIGHT SOURCE G	Desci Origin Origin Origin Light s Light s Light s	Displays the original size sensor (i ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G nal threshold value for color B source threshold value for color R source threshold value for color G source threshold value for color B from activation of the original	Setting range 0 to 255 0 to 255 0 to 255 0 to 255 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19 19	50/50/50 50/50/50 50/50/50 49* 49*				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R LIGHT SOURCE G LIGHT SOURCE B	Desci Origin Origin Origin Light s Light s Light s	Displays the original size sensor (i ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G hal threshold value for color B source threshold value for color R source threshold value for color G source threshold value for color B from activation of the original tion switch (ODSW) to original size	Setting range 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19 19 19	50/50/50 50/50/50 50/50/50 49* 49* 49*				
1.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R LIGHT SOURCE G LIGHT SOURCE B	Desci Origin Origin Origin Light s Light s Light s Time f detect judgm	Displays the original size sensor (i ing the +/- or numeric keys. ription nal threshold value for color R nal threshold value for color G hal threshold value for color B source threshold value for color R source threshold value for color G source threshold value for color B from activation of the original tion switch (ODSW) to original size	Setting range 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19 19 19	50/50/50 50/50/50 50/50/50 49* 49* 49*				
1.2.	SIZE SW L ting: [B/W LEVEL1] Select an item to be setting vantum Change the setting vantum Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R LIGHT SOURCE G LIGHT SOURCE B WAIT TIME	Desci Origin Origin Origin Light s Light s Light s Light s detect judgm	Displays the original size sensor (i ing the +/- or numeric keys. ription hal threshold value for color R hal threshold value for color G hal threshold value for color B source threshold value for color R source threshold value for color G source threshold value for color B from activation of the original tion switch (ODSW) to original size hent	Setting range 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19 19 19	50/50/50 50/50/50 50/50/50 49* 49* 49*				
1. 2. 3.	SIZE SW L ting: [B/W LEVEL1] Select an item to be s Change the setting va Display ORIGINAL R1 - 3 ORIGINAL G1 - 3 ORIGINAL B1 - 3 LIGHT SOURCE R LIGHT SOURCE G LIGHT SOURCE B WAIT TIME *: When DP is installed	Desci Origin Origin Origin Light s Light s Light s Light s detect judgm	Displays the original size sensor (i ing the +/- or numeric keys. ription hal threshold value for color R hal threshold value for color G hal threshold value for color B source threshold value for color R source threshold value for color G source threshold value for color B from activation of the original tion switch (ODSW) to original size hent	Setting range 0 to 255 0 to 255	Initial 40/30/20 40/30/20 40/30/20 19 19 19	50/50/50 50/50/50 50/50/50 49* 49* 49*				

tenance n No.		Description							
100	Adjusting main high voltage								
	Description Controls the charger roller voltage to optimize the surface potential.								
	Purpose								
	To change the setting value to adjust the image if an image failure (background blur, etc.) occurs.								
	 Method 1. Press the start key. 2. Select an item and press the start key. The screen for executing each item is displayed. 								
	Display		Description						
	Adjust MC AC Bias		Main charger AC bias for each color						
	AC Auto Adjustment		Setting the AC bias auto adjustment						
	Set DC1		Main charger DC bias for each color						
	Adjust DC2		Additional surface potential						
	Adjust DC2(B/W)		Additional surface potential in black and white mod	le					
	Low Temp. Setting (I	Drum)	Pre-charge time at power supply ON						
	Set Charger Freq		Setting the main charger frequency						
			l						
	Setting: [Adjust MC AC B 1. Change the value using Increasing the setting The values set vary d	ng the makes	s the image lighter; decreasing it makes the image d	arker.					
	Display	De	escription	Setting range					
	MC AC Bias(C)	M	ain charger AC bias for cyan	0 to 255					
	MC AC Bias(M)	M	ain charger AC bias for magenta	0 to 255					
	MC AC Bias(Y)	M	ain charger AC bias for yellow	0 to 255 0 to 255					
	MC AC Bias(K)	M	lain charger AC bias for black						
	MC AC Bias(K)BW	Ma	ain charger AC bias for black in black/white mode 0 to 255						
	2. Press the start key. The value is set.								
	Setting: [AC Auto Adjustr 1. Select ON or OFF.	nent]							
	Display		Description						
	ON		Turns auto adjustment ON						
	OFF		Turns auto adjustment OFF						
	Initial setting: ON 2. Press the start key. Th	Initial setting: ON Press the start key. The setting is set.							
	,		0						

nce Io.				Description					
0		aying: [Set DC1 The current setti		ed.					
		Display		Description					
		Bias1 C(Full)		Main charger DC bias for cyan (full s		speed)			
		Bias1 M(Full)		Main charger DC bias for m	nagenta ((full speed)			
		Bias1 Y(Full)		Main charger DC bias for yellow (full speed)					
		Bias1 K(Full)		Main charger DC bias for black (full speed)					
		Bias1 C(Half)		Main charger DC bias for cyan (half speed)					
		Bias1 M(Half)		Main charger DC bias for m	nagenta ((half speed)			
		Bias1 Y(Half)		Main charger DC bias for y	ellow (ha	lf speed)			
		Bias1 K(Half)		Main charger DC bias for b	lack (hal [:]	f speed)			
		Bias1 K(B/W)		Main charger DC bias for b	lack in bl	ack/white mo	de		
		Increasing the se	e using the	+/- or numeric keys. s the image lighter; decreasir	ng it mak	es the image	darł	ker.	
		Display	Descriptio	on		Setting ran	ge	Initial setting	
		Bias2C Full	Main charg	ger DC bias for cyan (full spe	ed)	-128 to 127		0	
		Bias2M Full	Main charg	ger DC bias for magenta (full	speed)	-128 to 127		0	
		Bias2Y Full	Main char	ger DC bias for yellow (full sp	eed)	-128 to 127		0	
		Bias2K Full	Main char	ger DC bias for black (full spe	ed)	-128 to 127		0	
		Bias2C Half	Main char	ger DC bias for cyan (half spe	ed)	-128 to 127		0	
		Bias2M Half	Main char	in charger DC bias for magenta (half speed)		-128 to 127		0	
		Bias2Y Half	Main charg	arger DC bias for yellow (half speed)		-128 to 127		0	
		Bias2K Half	Main charg	ger DC bias for black (half sp	eed)	-128 to 127		0	
	Setti	Increasing the se	(B/W)] e using the	+/- or numeric keys. s the image lighter; decreasir	ng it mak			1	
		Display	Descri	ption		Setting ran	ge	Initial setting	
		Bias2K (BW)	Main c white n	harger DC bias for black in bl node	ack/	-128 to 127		0	
	2. Press the start key. The value is set. Setting: [Low Temp. Setting(Drum)]								
		Change the valu	• •	e +/- or numeric keys.					
		Description			_	g range		tial setting	
		Pre-charge time	e at power s	upply ON	0 to 6		1		
	2.	Press the start k	ey. The valu	ie is set.					

Maintenance item No.	Description							
U100	 Setting: [Set Charger Freq] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. 							
		Display	Description	Setting range	Initial setting			
		Charger Freq	Main charger frequency	0 to 65535	31449			
		Charger Freq B/W	Main charger frequency in black/white mode	0 to 65535	28544			
	3.	Press the start key.	The value is set.					
	While (whic	h is activated by pre pletion	em is being executed, copying from an original ssing the system menu key). creen for maintenance item No. is displayed.	is available in inte	errupt copying mod			
	Purp	ose	or the primary transfer. en any density problems, such as too dark or li	ght, occur.				
	2.	Press the start key. Select the item to be						
	1. 2.	Press the start key. Select the item to be Change the value u	sing the +/- or numeric keys.	Setting range	Initial setting			
	1. 2.	Press the start key. Select the item to be		Setting range 0 to 255	Initial setting			
	1. 2.	Press the start key. Select the item to be Change the value u Display	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta					
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta	0 to 255	116			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta	0 to 255 0 to 255	116 90			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode	0 to 255 0 to 255 0 to 255	116 90 120			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M) Add Color (C)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode Addition value (cyan)	0 to 255 0 to 255 0 to 255 -127 to 127	116 90 120 5			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M) Add Color (C) Add Color (Y)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode Addition value (cyan) Addition value (yellow)	0 to 255 0 to 255 0 to 255 -127 to 127 -127 to 127	116 90 120 5 5			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M) Add Color (C) Add Color (Y) Add Color (K)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode Addition value (cyan) Addition value (yellow) Addition value (black)	0 to 255 0 to 255 0 to 255 -127 to 127 -127 to 127 -127 to 127 -127 to 127 -127 to 127	116 90 120 5 5 5 20			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M) Add Color (C) Add Color (Y) Add Color (K) Add Color 2nd(C)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode Addition value (cyan) Addition value (yellow) Addition value (black) Addition value for the second side (cyan)	0 to 255 0 to 255 0 to 255 -127 to 127 -127 to 127 -127 to 127 -127 to 127 -127 to 127	116 90 120 5 5 5 20 0			
	1. 2.	Press the start key. Select the item to be Change the value u Display Normal (Full M) Normal (Half M) Reverse (B/W M) Add Color (C) Add Color (Y) Add Color (K) Add Color 2nd(C)	sing the +/- or numeric keys. Description Primary transfer positive voltage for magenta (full speed) Primary transfer positive voltage for magenta (half speed) Primary transfer reverse voltage for magenta in black/white mode Addition value (cyan) Addition value (yellow) Addition value (black) Addition value for the second side (cyan) Addition value for the second side (magenta)	0 to 255 0 to 255 0 to 255 -127 to 127 -127 to 127 -127 to 127 -127 to 127 -127 to 127 -127 to 127	116 90 120 5 5 5 20 0 -5			

Supplement While this maintenance item is being executed, copying from an original is available in interrupt copying mode (which is activated by pressing the system menu key).

Completion

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

aintenance em No.	Description							
U106	Desc Sets Purp To ch Meth 1.	Retting the voltage for the secondary transfer Description Sets the control voltage for the secondary transfer depending on each paper type. Purpose To change the setting when any density problems, such as too dark or light, occur. Itethod 1. Press the start key.						
	2.	Select the item to be set. The Display	e screen for executing each item is displayed. Description					
		Light/Normal 1 Full Front	Control voltage for the transfer bias for the first side on paper with thickness 60 g/m ² to 64 g/m ² and 60 g/m ² to 75 g/m ²					
		Normal 2/3 Full Front	Control voltage for the transfer bias for the first side on paper with thickness 75 g/m ² to 105 g/m ²					
		Light/Normal 1 Full Back	Control voltage for the transfer bias for the second side on paper with thickness 60 g/m ² to 64 g/m ² and 60 g/m ² to 75 g/m ²					
		Normal 2/3 Full Back	Control voltage for the transfer bias for the second side on paper with thickness 75 g/m ² to 105 g/m ²					
		Light Normal1(F)Front BW	Control voltage for the transfer bias for the first side on paper with thickness 60 g/m ² to 64 g/m ² and 60 g/m ² to 75 g/m ² (in black and white mode)					
		Normal 2/3(F)Front BW	Control voltage for the transfer bias for the first side on paper with thickness 75 g/m ² to 105 g/m ² (in black and white mode)					
		Light/Normal1(F)Back BW	Control voltage for the transfer bias for the second side on paper with thickness 60 g/m ² to 64 g/m ² and 60 g/m ² to 75 g/m ² (in black and white mode)					
		Normal 2/3(F)Back BW	Control voltage for the transfer bias for the second side on paper with thickness 75 g/m ² to 105 g/m ² (in black and white mode)					
		Heavy 1 - 3 (H)Front	Control voltage for the transfer bias for the first side on paper with thickness 105 g/m ² to 220 g/m ²					
		Heavy 1 - 3 (H)Back	Control voltage for the transfer bias for the second side on paper with thickness 105 g/m² to 220 g/m²					
		OHP	Control voltage for the transfer bias for transparencies					
		Bias	Transfer bias value					

Setting: [Light/Normal 1 Full Front] 1. Change the value using the +/- or numeric keys.

Display	Description	Setting range	Initial setting
Width<160	Small sizes (under 160 mm wide)	0 to 255	160
160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	140
220<=Width<260	Large sizes (more than 220 to under 260 mm wide)	0 to 255	120
260<=Width	Large sizes (more than 260 mm wide)	0 to 255	110

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

	Description						
	ting: [Normal 2/3 Full Change the value us	Front] sing the +/- or numeric keys.					
	Display	Description	Setting range	Initial setting			
	Width<160	Small sizes (under 160 mm wide)	0 to 255	180			
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	150			
	220<=Width	Large sizes (more than 220 mm wide)	0 to 255	120			
2.	Press the start key.	The value is set.					
	ting: [Light/Normal 1 Change the value us	Full Back] sing the +/- or numeric keys.					
	Display	Description	Setting range	Initial setting			
	Width<160	Small sizes (under 160 mm wide)	0 to 255	180			
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	120			
	220<=Width<260	Large sizes (more than 220 to under 260 mm wide)	0 to 255	95			
	260<=Width	Large sizes (more than 260 mm wide)	0 to 255	75			
2.	Press the start key.	The value is set.					
Cott	ing, Marmal 2/2 Full	Pook1					
	ting: [Normal 2/3 Full Change the value us Display	Back] sing the +/- or numeric keys. Description	Setting range	Initial setting			
	Change the value us	sing the +/- or numeric keys.	Setting range 0 to 255	Initial setting			
	Change the value us Display	sing the +/- or numeric keys. Description					
1.	Change the value us Display Width<160 160<=Width<220 220<=Width	Sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide)	0 to 255	150			
1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us	Sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BWJ sing the +/- or numeric keys.	0 to 255 0 to 255 0 to 255	150 130 90			
1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display	sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description	0 to 255 0 to 255 0 to 255 Setting range	150 130 90 Initial setting			
1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us	Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (under 160 mm wide)	0 to 255 0 to 255 0 to 255	150 130 90			
1. 2. Sett	Change the value us Display Width<160	Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide)	0 to 255 0 to 255 0 to 255 Setting range 0 to 255	150 130 90 Initial setting 180			
1. 2. Sett 1.	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display Width<160 160<=Width<220 220<=Width	Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide)	0 to 255 0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255	150 130 90 Initial setting 180 140			
1. 2. Sett 1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Normal 2/3(F)Fit	Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set.	0 to 255 0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255	150 130 90 Initial setting 180 140			
1. 2. Sett 1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Normal 2/3(F)Fit	Sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set.	0 to 255 0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255	150 130 90 Initial setting 180 140 130			
1. 2. Sett 1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Normal 2/3(F)Fi Change the value us	Sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) Large sizes (more than 220 mm wide) The value is set. ront BW] sing the +/- or numeric keys.	0 to 255 0 to 255	150 130 90 Initial setting 180 140			
1. 2. Sett 1. 2. Sett	Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Light Normal1(Change the value us Display Width<160 160<=Width<220 220<=Width Press the start key. ting: [Normal 2/3(F)Free Change the value us Display	Sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) The value is set. F)Front BW] sing the +/- or numeric keys. Description Small sizes (under 160 mm wide) Medium sizes (more than 160 to under 220 mm wide) Large sizes (more than 220 mm wide) Large sizes (more than 220 mm wide) The value is set. ront BW] sing the +/- or numeric keys. Description	0 to 255 0 to 255	150 130 90 Initial setting 180 140 130 Initial setting			

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

nce Io.	Description								
6 S	etting: [Light/Normal1(1. Change the value us	F)Back BW] sing the +/- or numeric keys.							
	Display	Description	Setting range	Initial setting					
	Width<160	Small sizes (under 160 mm wide)	0 to 255	160*					
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	130					
	220<=Width	Large sizes (more than 220 mm wide)	0 to 255	90					
	2. Press the start key.	The value is set.							
s	etting: [Normal 2/3(F)B 1. Change the value us	ack BW] sing the +/- or numeric keys.							
	Display	Description	Setting range	Initial setting					
	Width<160	Small sizes (under 160 mm wide)	0 to 255	160					
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	130					
	220<=Width	Large sizes (more than 220 mm wide)	0 to 255	90					
2.	2. Press the start key.	The value is set.							
Setting: [Heavy 1 - 3 (H)Front] 1. Change the value using the +/- or numeric keys.									
	Display	Description	Setting range	Initial setting					
	Width<160	Small sizes (under 160 mm wide)	0 to 255	150					
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	90					
	220<=Width	Large sizes (more than 220 mm wide)	0 to 255	70					
	2. Press the start key.	The value is set.							
s	Eetting: [Heavy 1 - 3 (H) 1. Change the value us	Back] sing the +/- or numeric keys.							
	Display	Description	Setting range	Initial setting					
	Width<160	Small sizes (under 160 mm wide)	0 to 255	130					
	160<=Width<220	Medium sizes (more than 160 to under 220 mm wide)	0 to 255	100					
	220<=Width	Large sizes (more than 220 mm wide)	0 to 255	60					
	2. Press the start key. The value is set.								
s	etting: [OHP] 1. Change the value us	sing the +/- or numeric keys.							
	Display	Description	Setting range	Initial setting					
		Small and medium sizes (under 220 mm	0 to 255	123					
	Width<220	wide)							
	Width<220 220<=Width	wide) Large sizes (more than 220 mm wide)	0 to 255	51					
		Large sizes (more than 220 mm wide)	0 to 255	51					

Maintenance item No.	Description							
U106								
	Display	Description	Setting range	Initial setting				
	Reverse(Full)	Transfer bias when plain paper is used	0 to 255	189				
	Reverse(Half)	Transfer bias when thick paper is used	0 to 255	189				
	Cleaning(Full)	Cleaning control value when plain paper is used	0 to 255	34				
	Cleaning(Half)	Cleaning control value when thick paper is used	0 to 255	34				
	Cleaning(BW)	Cleaning control value in black and white mode	0 to 255	34				

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

Supplement

While this maintenance item is being executed, copying from an original is available in interrupt copying mode (which is activated by pressing the system menu key).

Completion

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

ance No.	Description								
)7	Setting the transfer cleaning voltage								
	Description Sets the cleani	ina control v	oltage f	or transfer belt unit.					
	Purpose		onagor						
	Change settings if an offset has occurred due to the failure of cleaning the transfer belt.								
	Method 1. Press the start key. 2. Select the item to be set.								
	Display	,		Description					
	Belt Cle	an A(F)		Transfer belt cleaning voltage (printi	ing)				
	Belt Cle	an A(H)		Transfer belt cleaning voltage (using	g thick paper)				
	Belt Cle	an B		Transfer belt cleaning voltage (pape	er interval)				
	Belt Cle	an A(BW)		Transfer belt cleaning voltage in bla	ck/white mode				
	Setting: [Belt 1. Change f			+/- or numeric keys.					
	Display		-	ription	Setting range	Initial setting			
				sizes (under 160 mm wide)	0 to 255	93			
	160~-14	/idth<220	Mediu	im sizes (160 to under 220 mm	0 to 255	93			
	100 - 1		wide)						
	220<=W	/idth	,	sizes (more than 220 mm wide)	0 to 255	93			
			Large		0 to 255	93			
	220<=W 2. Press the Setting: [Belt 1. Change t	e start key. T Clean A(H) the value us	Large The valu	e is set. +/- or numeric keys.		1			
	220<=W 2. Press the Setting: [Belt 1. Change to Display	e start key. T Clean A(H) the value us	Large he valu ing the Descr	+/- or numeric keys.	Setting range	Initial setting			
	220<=W 2. Press the Setting: [Belt 1. Change t	e start key. T Clean A(H) the value us	Large he valu ing the Descr Small	ription sizes (under 160 mm wide)		Initial setting			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1	e start key. T Clean A(H) the value us	Large he valu ing the Descr Small	+/- or numeric keys.	Setting range	Initial setting			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1	e start key. T Clean A(H) the value us 60 /idth<220	Large he value ing the Descr Small Mediu wide)	ription sizes (under 160 mm wide)	Setting range 0 to 255	Initial setting			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W	e start key. T Clean A(H) the value us 60 /idth<220 /idth	Large he valu ing the Descr Small Mediu wide) Large	+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide)	Setting range 0 to 255 0 to 255	Initial setting 62 62			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B]	Large he value ing the Descr Small Mediue wide) Large he value	+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide)	Setting range 0 to 255 0 to 255	Initial setting 62 62			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us	Large he value ing the Descr Small Mediue wide) Large he value	+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set.	Setting range 0 to 255 0 to 255	Initial setting 62 62 62			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change t	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us	Large he value ing the Descri Small Mediue wide) Large he value ing the Descri	+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys.	Setting range 0 to 255 0 to 255 0 to 255	Initial setting 62 62 62			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change t Display	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F)	Large he value ing the Descr Small Mediue wide) Large he value ing the Descr Transi	+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick	Setting range 0 to 255 0 to 255 0 to 255 0 to 255 Setting range	Initial setting 62 62 62 1nitial setting			
	220<=W 2. Press the Setting: [Belt 1. Change f Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change f Display Belt Cle Belt Cle	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F)	Large The value ing the Descr Small Mediu wide) Large The value ing the Descr Transi paper	<pre>+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) ue is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick) fer belt cleaning voltage in black and</pre>	Setting range 0 to 255 0 to 255 0 to 255 0 to 255 Setting range 0 to 255	Initial setting 62 62 62 150			
	220<=W 2. Press the Setting: [Belt 1. Change f Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change f Display Belt Cle Belt Cle	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F) an B(F) an B(H) an B(BW)	Large he value ing the Descr Small Mediue wide) Large he value ing the Descr Transe paper Transe white	<pre>+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick) fer belt cleaning voltage in black and mode</pre>	Setting range 0 to 255 0 to 255	Initial setting 62 62 62 120			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change t Display Belt Cle Belt Cle	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F) an B(F) an B(H) an B(BW)	Large he value ing the Descr Small Mediue wide) Large he value ing the Descr Transe paper Transe white	<pre>+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick) fer belt cleaning voltage in black and mode</pre>	Setting range 0 to 255 0 to 255	Initial setting 62 62 62 120			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change t Display Belt Cle Belt Cle	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F) an B(F) an B(H) an B(BW)	Large he value ing the Descr Small Mediue wide) Large he value ing the Descr Transe paper Transe white	<pre>+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick) fer belt cleaning voltage in black and mode</pre>	Setting range 0 to 255 0 to 255	Initial setting 62 62 62 120			
	220<=W 2. Press the Setting: [Belt 1. Change t Display Width<1 160<=W 220<=W 2. Press the Setting: [Belt 1. Change t Display Belt Cle Belt Cle	e start key. T Clean A(H) the value us 60 /idth<220 /idth e start key. T Clean B] the value us an B(F) an B(F) an B(H) an B(BW)	Large he value ing the Descr Small Mediue wide) Large he value ing the Descr Transe paper Transe white	<pre>+/- or numeric keys. ription sizes (under 160 mm wide) um sizes (160 to under 220 mm sizes (more than 220 mm wide) le is set. +/- or numeric keys. ription fer belt cleaning voltage fer belt cleaning voltage (using thick) fer belt cleaning voltage in black and mode</pre>	Setting range 0 to 255 0 to 255	Initial setting 62 62 62 120			

Maintenance tem No.									
U107		ng: [Belt Clean A(B) Change the value us	N)] sing the +/- or numeric keys.						
	Display		Description	Setting range Initial setting					
	Width<160		Small sizes (under 160 mm wide)	0 to 255	120				
		160<=Width<220	Medium sizes (160 to under 220 mm wide)	0 to 255	120				
		220<=Width Large sizes (more than 220 mm wide)		0 to 255	120				
	2.	Press the start key.	The value is set.						
	While		m is being executed, copying from an origin ssing the system menu key).	al is available in int	errupt copying mo				
		pletion s the stop key. The so	creen for selecting a maintenance item No. i	s displayed.					

ance No.			Description				
)8	Setting separation shift bias Description Adjusts output of separation shift bias and ON/OFF timing. Purpose To set when the separated malfunction of the paper occurs.						
	Method 1. Press the start k 2. Select the item i	isplayed					
	Display		e set. The screen for executing each item is displayed. Description				
	Set Output Valu	le	The paper of the paper thick or the s ment with type	separatio	n shift bia	as output adjust	
	Set Timing		ON/OFF timing adjustment with pap	er positio	n		
	Setting: [Set Output 1. Change the sett		sing the +/- or numeric key.				
	Display Description					Initial setting	
	Light Full 1st		Separation shift bias for the first side on paper with thickness 60 to 64 g/m ²		0 to 25	5 85	
	Light Full 2nd		Separation shift bias for the second side on paper with thickness 60 to 64 g/m^2		0 to 25	5 60	
	Normal Full 1st		n shift bias for the first side on paper v 60 to 105 g/m²	shift bias for the first side on paper with $50\ to\ 105\ g/m^2$		5 52	
	Normal Full 2nd		n shift bias for the second side on pap 60 to 105 g/m²	per with	0 to 25	5 60	
	Normal Lead edge		n shift bias for the leading edge on pa 60 to 105 g/m²	per with	-127 to 127	8	
	Heavy/OHP	Separatio 105 to 22	n shift bias for transparencies with thio 0 g/m²	ckness	0 to 25	5 26	
	Light Full 1st B/W*		Separation shift bias for the first side on paper with thickness 60 to 64 g/m² (black/white mode)		0 to 25	5 85	
	Light Full 2nd B/W*		Separation shift bias for the second side on paper with thickness 60 to 64 g/m ² (black/white mode)		0 to 25	5 60	
	Normal Full 1st B/W*		Separation shift bias for the first side on paper with thickness 60 to 105 g/m ² (black/white mode)		0 to 25	5 52	
	Normal Full 2nd B/W		n shift bias for the second side on pap 60 to 105 g/m² (black/white mode)	per with	0 to 25	5 60	
	 Press the start key. The value is set. 						
	Setting: [Set Timing] 1. Change the sett		sing the +/- or numeric key.				
	Display	Desc	ription	Setting	range	Initial setting	
	ON Timing Lea		ration shift bias ON timing at leading of paper	-200 to	200	-150	
	ON Timing Cer	iter Sepa of pa	ration shift bias ON timing at center per	-200 to	200	0	
	OFF Timing	Sepa	ration shift bias OFF timing	-200 to	200	40	
	2. Press the start k Completion	ey. The valu	ue is set.				

king the drum type ription ays the drum sensitivity data ose eck the drum sensitivity data od Press the start key. Select the item. Display CYAN(Dark) MAGENTA(Dark) YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light) The drum sensitivity data is		
Press the start key. Select the item. Display CYAN(Dark) MAGENTA(Dark) YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for cyan (dark potential) Drum sensitivity data for magenta (dark potential) Drum sensitivity data for yellow (dark potential) Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
CYAN(Dark) MAGENTA(Dark) YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for cyan (dark potential) Drum sensitivity data for magenta (dark potential) Drum sensitivity data for yellow (dark potential) Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
MAGENTA(Dark) YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for magenta (dark potential) Drum sensitivity data for yellow (dark potential) Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for yellow (dark potential) Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
YELLOW(Dark) BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for yellow (dark potential) Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
BLACK(Dark) CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for black (dark potential) Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
CYAN(Light) MAGENTA(Light) YELLOW(Light) BLACK(Light)	Drum sensitivity data for cyan (light potential) Drum sensitivity data for magenta (light potential) Drum sensitivity data for yellow (light potential)	
YELLOW(Light) BLACK(Light)	Drum sensitivity data for yellow (light potential)	
BLACK(Light)		
	Drum sensitivity data for black (light potential)	
The drum sensitivity data is		
	displayed.	J
Display	Description	
DATA1 - DATA11	Drum sensitivity data	
	r selecting a maintenance item No. is displayed.	
ription	sking.	
od Press the start key. The curr	ent drum counts is displayed.	
Display	Description	
Drum counter (CYAN)	Cyan drum count value	
Drum counter (MAGENTA)	Magenta drum count value	
Drum counter (YELLOW)	Yellow drum count value	
Drum counter (BLACK)	Black drum count value	
	the stop key. The screen for king the drum count ription ays the drum counts for chec ose eck the drum status. od Press the start key. The curr Display Drum counter (CYAN) Drum counter (MAGENTA) Drum counter (YELLOW)	the stop key. The screen for selecting a maintenance item No. is displayed. king the drum count ription ays the drum counts for checking. ose eck the drum status. od Press the start key. The current drum counts is displayed. Display Description Drum counter (CYAN) Cyan drum count value Drum counter (MAGENTA) Magenta drum count value Drum counter (YELLOW) Yellow drum count value Drum counter (BLACK) Black drum count value

Maintenance item No.	o. Description							
U111	Checking the drum drive time Description Displays the drum drive time for checking a figure, which is used as a reference when correcting the high volt- age based on time. Purpose To check the drum status.							
	Method 1. Press the start key. The drum drive time is displayed.							
	Display	Description						
	C TIME(min)	Cyan drum drive time						
	M TIME(min)	Magenta drum drive time						
	Y TIME(min)	Yellow drum drive time						
	K TIME(min)	Black drum drive time						
	Completion Press the stop key. The scre	een for selecting a maintenance item No. is displayed.						
U117	Checking the drum number Description Displays the drum number. Purpose To check the drum number.	er						
	Method 1. Press the start key. The drum number is displayed.							
	Display	Description						
	Drum No.(C)	Cyan drum number						
	Drum No.(M)	Magenta drum number						
	Drum No.(Y)	Yellow drum number						
	Drum No.(K)	Black drum number						
	Completion Press the stop key. The scre	een for selecting a maintenance item No. is displayed.						

Maintenance item No.	Description						
U118	Displaying the drum history Description Displays the past record of machine number and the drum counter. Purpose To check the count value of machine number and the drum counter.						
	Method Press the start key. Select the color to check. 						
	Display		Description				
	Drum	history (C)	Cyan drum past record				
	Drum	history (M)	Magenta drum past record				
	Drum	history (Y)	Yellow drum past record				
	Drum	history (K)	Black drum past record				
	The his	story of a machine nu	mber and a drum counter for each color is displayed by three cases.				
	Displa	ay	Description				
	MACH	HINE HISTORY 1 - 3	Historical records of the machine number				
	COUN	NT HISTORY 1 - 3	Historical records of drum counter				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.						
U122	 Setting the drum Description Sets drum sensitivity. Purpose To set the drum after replacing the drum unit or laser scanner unit. Method Press the start key. Press [Execute]. Press the start key. Drum setup is commenced. Turn the main power switch off and on. 						
	Checking the transfer belt unit number Description Displays the number of the transfer belt unit for checking. Purpose To check the number of the transfer belt. Method						
			ent number of the transfer belt is displayed.				
	Displa		Description				
	Middle	e Transfer Unit	Number of the transfer belt unit				
	Completion Press the sto		r selecting a maintenance item No. is displayed.				

Maintenance item No.		Description					
U123	Displaying the transfer belt unit history Description Displays the past record of machine number and the transfer belt unit counter. Purpose To check the count value of machine number and the transfer counter.						
	 Method 1. Press the start key. The history of a machine number and a transfer belt unit counter for each color is displayed by three cases. 						
	Display	Description					
	MACHINE HISTORY 1 -	3 Historical records of the machine number					
	COUNT HISTORY 1 - 3	Historical records of transfer belt unit counter					
	Completion Press the stop key. The screen	for selecting a maintenance item No. is displayed.					
U127	Checking/clearing the transfer count Description Displays and clears the counts of the transfer counter. Purpose To check the count after replacement of the transfer belt unit or transfer roller. Also to clear the counts after replacing transfer roller.						
	Method1. Press the start key. The current counts of the transfer counter is displayed.						
	Display	Description					
	Mid Transfer Unit Count	Transfer belt unit counter value					
	2nd Transfer Unit Count	Transfer roller counter value					
	Clearing1. Press [Clear Counter].2. Press the start key. Transfer roller counter value is cleared.						
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.						

intenance em No.	Description							
J128	Setting transfer high-voltage timing Description Adjusts the ON/OFF timing of transfer high-voltage output. Purpose Basically, the setting need not be changed. If any problem such as faulty images or dirt on the back surface occurs, change the setting.							
	2.	Press the start key. Select the item to set	ing the +/- or numeric keys.					
		Display	Setting range	Initial setting				
		Trans ON Timing1	Transfer ON timing adjustment value (first side)	-200 to 200	-54			
		Trans ON Timing2	Transfer ON timing adjustment value (second side)	-200 to 200	-54			
		Trans OFF Timing	Transfer OFF timing adjustment value	-200 to 200	10			

No.							
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 developing unit failure, etc., use n ual adjustment and obtain a temporary control value.						
		nod Press the start key. Select the item to b		lisplaved.			
		Display		Description			
		Manual Adjustmen	nt	Toner sensor control voltage ma	nual adjustment		
		Auto Adjustment		Toner sensor control voltage aut	-		
		Set Operation Mod	de	Switching the manual adjustmen	-	nt	
		ing: [Manual Adjust					
		Select the item to b Change the value u		+/- or numeric keys.			
		Display	-	ription	Setting range	Initial setting	
		CONTROL C		control voltage for cyan	0 to 255	116	
				control voltage for magenta	0 to 255	116	
				control voltage for yellow	0 to 255	116	
					0 to 255	116	
		CONTROL K	Toner	control voltage for black	0 to 255	116	
	3.		Toner	control voltage for black	0 to 255	116	
	Disp	CONTROL K	Toner The valu	control voltage for black le is set.	0 to 255	116	
	Disp	CONTROL K Press the start key.	Toner The valu	control voltage for black le is set.	0 to 255	116	
	Disp	CONTROL K Press the start key. Alaying: [Auto Adjus The current setting	Toner The valu	control voltage for black le is set. /ed.		116	
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display	Toner The valu	control voltage for black le is set. /ed. Description	ol voltage for cyan		
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner contro	ol voltage for cyan		
	Disp	CONTROL K Press the start key. Daying: [Auto Adjust The current setting Display Default (C) Default (M)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control	ol voltage for cyan ol voltage for magenta ol voltage for yellow		
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner contro Reference value for toner contro Reference value for toner contro	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black		
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y) Default (K)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan		
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (C) Default (M) Default (Y) Default (K) Control (C)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta		
	Disp	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y) Default (K) Control (C) Control (M)	Toner The valu	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow		
	Disp 1.	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y) Default (Y) Control (C) Control (M) Control (Y)	Toner The valu stment] is display	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct Toner control voltage after correct	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow		
	Disp 1.	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y) Default (Y) Default (K) Control (C) Control (M) Control (Y) Control (K)	Toner The valu stment] is display	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct Toner control voltage after correct	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow		
	Disp 1.	CONTROL K Press the start key. Diaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (M) Default (K) Control (C) Control (M) Control (Y) Control (K)	Toner The value is display Mode] e set.	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct Toner control voltage after correct Toner control voltage after correct	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow ction for black		
	Disp 1.	CONTROL K Press the start key. Ilaying: [Auto Adjus The current setting Display Default (C) Default (M) Default (Y) Default (Y) Default (K) Control (C) Control (C) Control (M) Control (Y) Control (K) ing: [Set Operation Select the item to b Display	Toner The value is display Mode] e set.	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct Toner control voltage after correct Toner control voltage after correct Toner control voltage after correct Toner control voltage after correct Description	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow ction for black		
	Disp 1. Setti 1.	CONTROL K Press the start key. Press the start key. Display Default (C) Default (M) Default (M) Default (K) Control (C) Control (M) Control (Y) Control (K) ing: [Set Operation Select the item to b Display Manual Adjustmen	Toner The value stment] is display Mode] e set. nt	control voltage for black le is set. //ed. Description Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Reference value for toner control Toner control voltage after correct Toner sensor control voltage ma Toner sensor control voltage aut	ol voltage for cyan ol voltage for magenta ol voltage for yellow ol voltage for black ction for cyan ction for magenta ction for yellow ction for black		

Maintenance item No.	Description							
U132	Replenishing toner forcibly Description Replenishes toner forcibly until the toner sensor output value reaches the toner feed start level. Purpose Used when the toner empty is detected frequently.							
	 Method 1. Press the start key. The screen for executing is displayed. 2. Press the start key. Toner is replenished until the toner sensor output value reaches the toner feed start level. 							
	Display	Descr	iption	ך				
	Toner Supply (C)	Toner	feed start level (cyan)	-				
	Toner Supply (M)	Toner	feed start level (magenta)					
	Toner Supply (Y)	Toner	feed start level (yellow)					
	Toner Supply (K)	Toner	feed start level (black)					
	Toner Sensor (C)	Toner	sensor output value (cyan)					
	Toner Sensor (M)	Toner	sensor output value (magenta)					
	Toner Sensor (Y)	Toner	Toner sensor output value (yellow)					
	Toner Sensor (K)	Toner Sensor (K)Toner sensor output value (black)						
	3. To stop operation, pres	3. To stop operation, press the stop key.						
	Completion							
U135	Press the stop key. The screen for selecting a maintenance item No. is displayed. Checking toner motor operation							
	Description Drives toner motors. Purpose To check the operation of to Remarks When driving the toner moto locked. Method 1. Press the start key. 2. Select the motor to be	ors long time o	or several times, developing section becomes the toner full and	is				
	3. Press the start key. Th		arts.					
	Display		Operation	7				
	Toner Feed Motor		Toner motor (TM) is turned on					
	Container Motor (CW	')	Toner container motor (TCM) is turned on counterclockwise					
	Container Motor (CC)	W)	Toner container motor (TCM) is turned on clockrwise					
	4. To stop the operation,	press the sto	o key.	-				
	Completion Press the stop key after operation stops. The screen for selecting a maintenance item No. is displayed.							

	Description							
U136	Desc Sets toner Purp To ch	empty. ose	cates the n	n umber of sheets that can be printed from detection of near end if the interval from				
	 Setting Press the start key. Select the item to be set. Change the value using the +/- or numeric keys. 							
		Display	Descript	ion	Setting range	Initial setting		
		ВК	Setting th	ne level of black toner	0 to 9	3		
		CMY	Setting th	ne level of cyan/magenta/yellow toner	0 to 9	3		
	4.	Decreasing the s	etting make	es the interval from toner near end to toner empty longer. tes the interval from toner near end to toner empty shorter. ill not be detected. ue is set.				
		pletion s the stop key. Th	e screen fo	r selecting a maintenance item No. is dis	played.			
	 Purpose To check the temperature and humidity outside the machine. Method Press the start key. The detected temperature and humidity are displayed. 							
		Display		Description				
		Display External Tempe	rature	Description External temperature (°C)				
				-				
		External Tempe	ity	External temperature (°C)	canner unit (°C)		
		External Tempe External Humidi	ity	External temperature (°C) External humidity (%)	-	5)		
		External Tempe External Humidi Internal Temp1	ity	External temperature (°C) External humidity (%) Internal temperature around the laser s	r section (°C)			

U140 Displaying developing bias Description Displays various developing bias value. Purpose To check the developing bias value. Method 1. Press the start key. 2. Select the item to be set or displayed. Display Description Dev Roll2 DC Developing sleeve roller DC bias Dev Roll2 DC Developing magnet roller DC bias (toner thick layer calibration Dev Roll2 AC Dev Roll10C Developing magnet roller DC bias Dev Roll10C Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll1AC Developing magnet roller frequency DEV Roll IPreq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 DUty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93 Dev Roll2 DC (C) Developing sleeve roller DC bias for magenta 0 to 255 93
1. Press the start key. 2. Select the item to be set or displayed. Display Description Dev Roll2 DC Developing sleeve roller DC bias Dev Roll1(Calib)DC Developing magnet roller DC bias (toner thick layer calibration Dev Roll2 AC Dev Roll1DC Developing magnet roller DC bias Dev Roll1DC Developing magnet roller DC bias Roll1 DC Int Developing magnet roller paper interval DC bias DeV Roll1AC Developing magnet roller AC bias DEV Roll Treq Developing magnet roller frequency DEV Roll Preq Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255
Display Description Dev Roll2 DC Developing sleeve roller DC bias Dev Roll1(Calib)DC Developing magnet roller DC bias (toner thick layer calibration Dev Roll2 AC Dev Roll1DC Developing sleeve roller AC bias Dev Roll1DC Developing magnet roller DC bias Roll1 DC Int Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan
Dev Roll2 DC Developing sleeve roller DC bias Dev Roll1(Calib)DC Developing magnet roller DC bias (toner thick layer calibration Dev Roll2 AC Dev Roll1DC Developing sleeve roller AC bias Dev Roll1DC Developing magnet roller DC bias Roll1 DC Int Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll1(Calib)DC Developing magnet roller DC bias (toner thick layer calibration Developing sleeve roller AC bias Dev Roll2 AC Developing sleeve roller AC bias Dev Roll1DC Developing magnet roller DC bias Roll1 DC Int Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll1DC Developing magnet roller DC bias Roll1 DC Int Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Roll1 DC Int Developing magnet roller paper interval DC bias Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll1AC Developing magnet roller AC bias DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
DEV Roll Freq Developing magnet roller frequency DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Developing sleeve roller DC bias for cyan 0 to 255 93
DEV Roll Duty Developing magnet roller duty Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range In set range Display Description Setting range In set range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll2 Duty Developing sleeve roller duty Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Setting range In setting range Display Description Setting range In setting range Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Setting: [Dev Roll2 DC] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Setting range In set Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
1. Select the item to be set. 2. Change the value using the +/- or numeric keys. Display Description Setting range In set Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll2 DC (C) Developing sleeve roller DC bias for cyan 0 to 255 93
Dev Roll2 DC (Y) Developing sleeve roller DC bias for yellow 0 to 255 93
Dev Roll2 DC (K) Developing sleeve roller DC bias for black 0 to 255 93
Dev Roll2 DC (BW) Developing sleeve roller DC bias in black/white 0 to 255 10 mode
3. Press the start key. The value is set.
5. Fless the start key. The value is set.

aintenance em No.	Description									
U140	Setting: [Dev Roll1(Calib)DC]									
	 Select the item to be set. Change the value using the +/- or numeric keys. 									
		Display	Description	Setting range	Initial setting					
		DEV Roll1 DC1 (K)	Developing magnet roller DC1 bias for black	0 to 255	112					
		DEV Roll1 DC2 (K)	Developing magnet roller DC2 bias for black	0 to 255	142					
		DEV Roll1 DC3 (K)	Developing magnet roller DC3 bias for black	0 to 255	173					
		DEV Roll1 DC4 (K)	Developing magnet roller DC4 bias for black	0 to 255	204					
		DEV Roll1 DC1 (CMY)	Developing magnet roller DC1 bias for cyan/ magenta/yellow	0 to 255	112					
		DEV Roll1 DC2 (CMY)	Developing magnet roller DC2 bias for cyan/ magenta/yellow	0 to 255	142					
		DEV Roll1 DC3 (CMY)	Developing magnet roller DC3 bias for cyan/ magenta/yellow	0 to 255	173					
		DEV Roll1 DC4 (CMY)	Developing magnet roller DC4 bias for cyan/ magenta/yellow	0 to 255	204					
	3.	Press the start key. T	he value is set.		•					
	2.	Change the value usi	ng the +/- or numeric keys. Description	Setting range	Initial setting					
		Dev Roll2 AC (C)	Developing sleeve roller AC bias for cyan	0 to 255	174					
			Developing sleeve roller AC bias for magenta	0 to 255	174					
		Dev Roll2 AC (M)		0 10 200						
		Dev Roll2 AC (M) Dev Roll2 AC (Y)	Developing sleeve roller AC bias for magenta Developing sleeve roller AC bias for yellow	0 to 255	174					
		. ,								
		Dev Roll2 AC (Y)	Developing sleeve roller AC bias for yellow	0 to 255	174					
	3.	Dev Roll2 AC (Y) Dev Roll2 AC (K)	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode	0 to 255 0 to 255	174 174					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set.	0 to 255 0 to 255 0 to 255 Setting	174 174 174 174					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be Change the value usi Display	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set. set. ng the +/- or numeric keys. Description	0 to 255 0 to 255 0 to 255 Setting range	174 174 174 174					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be Change the value usi Display Dev Roll1 DC (C)	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set. set. ng the +/- or numeric keys. Description Developing magnet roller DC bias for cyan	0 to 255 0 to 255 0 to 255 Setting range 0 to 255	174 174 174 174					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be Change the value usi Display Dev Roll1 DC (C) Dev Roll1 DC (M)	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set. set. ng the +/- or numeric keys. Description Developing magnet roller DC bias for cyan Developing magnet roller DC bias for magenta	0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255 0 to 255	174 174 174 174 Initial setting 162 162					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be Change the value usi Display Dev Roll1 DC (C) Dev Roll1 DC (M) Dev Roll1 DC (Y)	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set. set. ng the +/- or numeric keys. Description Developing magnet roller DC bias for cyan Developing magnet roller DC bias for magenta Developing magnet roller DC bias for yellow	0 to 255 0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255 0 to 255 0 to 255	174 174 174 174 174 162 162 162 162					
	Settin 1.	Dev Roll2 AC (Y) Dev Roll2 AC (K) Dev Roll2 AC (BW) Press the start key. T ng: [Dev Roll1DC] Select the item to be Change the value usi Display Dev Roll1 DC (C) Dev Roll1 DC (M)	Developing sleeve roller AC bias for yellow Developing sleeve roller AC bias for black Developing sleeve roller AC bias in black/white mode he value is set. set. ng the +/- or numeric keys. Description Developing magnet roller DC bias for cyan Developing magnet roller DC bias for magenta	0 to 255 0 to 255 0 to 255 Setting range 0 to 255 0 to 255 0 to 255	174 174 174 174 Initial setting 162 162					

0	1.	etting: [Roll1 DC Int] 1. Select the item to be set. 2. Change the value using the +/- or numeric keys.							
	Ζ.	Display	Description	Setting range	Initial setting				
		Roll1 DC (C) Int	Developing magnet roller paper interval DC bias for cyan	0 to 255	1				
		Roll1 DC (M) Int	Developing magnet roller paper interval DC bias for magenta	0 to 255	64				
		Roll1 DC (Y) Int	Developing magnet roller paper interval DC bias for yellow	0 to 255	64				
		Roll1 DC (K) Int	Developing magnet roller paper interval DC bias for black	0 to 255	64				
		Roll1 DC (BW) Int	Developing magnet roller paper interval DC bias in black/white mode	0 to 255	1				
	3.	Press the start key. T	he value is set.	L	<u> </u>				
	1.	ng: [Dev Roll1AC] Select the item to be Change the value usi	set. ing the +/- or numeric keys.						
		Display	Description	Setting range	Initial setting				
		Dev Roll1 AC (C)	Developing magnet roller AC bias for cyan	0 to 255	255				
		Dev Roll1 AC (M)	Developing magnet roller AC bias for magenta	0 to 255	255				
		Dev Roll1 AC (Y)	Developing magnet roller AC bias for yellow	0 to 255	255				
		Dev Roll1 AC (K)	Developing magnet roller AC bias for black	0 to 255	255				
		Dev Roll1 AC (BW)	Developing magnet roller AC bias in black/white mode	0 to 255	255				
	3.	3. Press the start key. The value is set.							
	1.	ng: [DEV Roll Freq] Select the item to be Change the value usi	set. ing the +/- or numeric keys.						
		Display	Description	Setting range	Initial setting				
		Dev Roll1 Freq C	Developing magnet roller frequency for cyan	0 to 5000	858				
		Dev Roll1 Freq M	Developing magnet roller frequency for magenta	0 to 5000	858				
		Dev Roll1 Freq Y	Developing magnet roller frequency for yellow	0 to 5000	858				
		Dev Roll1 Freq B	Developing magnet roller frequency for black	0 to 5000	858				
		Dev Roll1 Freq BW	Developing magnet roller frequency in black/white mode	0 to 5000	858				
	3.	Press the start key. T	he value is set.						

nce O.	Description								
) S	Setting: [DEV Roll Duty] 1. Select the item to be set.								
	 Select the item to be set. Change the value using the +/- or numeric keys. 								
		Display	Description	Setting range	Initial setting				
		Dev Roll1 Duty C	Developing magnet roller Duty for cyan	0 to 5000	592				
		Dev Roll1 Duty M	Developing magnet roller Duty for magenta	0 to 5000	592				
		Dev Roll1 Duty Y	Developing magnet roller Duty for yellow	0 to 5000	592				
		Dev Roll1 Duty B	Developing magnet roller Duty for black	0 to 5000	592				
		Dev Roll1 Duty BW	Developing magnet roller Duty in black/white mode	0 to 5000	592				
	3.	Press the start key. T	he value is set.	I					
s		ng: [Dev Roll2 Duty] Select the item to be	set						
			ng the +/- or numeric keys.						
		Display	Description	Setting range	Initial setting				
		Dev Roll2 Duty C	Developing sleeve roller Duty for cyan	0 to 5000	373				
		Dev Roll2 Duty M	Developing sleeve roller Duty for magenta	0 to 5000	373				
		Dev Roll2 Duty Y	Developing sleeve roller Duty for yellow	0 to 5000	373				
				0.1. 5000	373				
		Dev Roll2 Duty B	Developing sleeve roller Duty for black	0 to 5000	313				
		-		0 to 5000 0 to 5000	373				
		Dev Roll2 Duty BW Press the start key. T	Developing sleeve roller Duty in black/white mode						
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					
	Comj	Dev Roll2 Duty BW Press the start key. The pletion	Developing sleeve roller Duty in black/white mode he value is set.	0 to 5000					

If47 Setting for toner applying operation Description Sets the mode for removing charged toner in the developing unit (T7 control: Toner applying operation). Purpose Charaging settings are not required. However, when the documents with lower print density (e.g. less than 2% should customarity printed in a great volume, mode must be changed. If the charged toner stays indice the developing unit, density decreases. Method 1. Press the start key. 2. Select the item to be set. The setting screen for the selected item is displayed. Display Description Transition Time Duration of toner applying operation Upper Limit Upper limit printing ratio of toner applying quantity with each mode Settings for doner applying operation (T7 control) Set Durm Cleaning Mode Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Transition Time Duration of toner applying 1. Setect the item to be set. Setting: for operation Mode] 1. Setect the item to be set. Setting: Set Operation Mode] 1. Select the item to be set. Display Description OFF Do not applying the toner operation MODE1 NODE1 Normal mode MODE1 <th>tenance n No.</th> <th></th> <th></th> <th>Description</th> <th></th> <th></th>	tenance n No.			Description					
should customarily printed in a great volume, mode must be changed. If the charged toner stays inside the developing unit, density decreases. Method 1. Press the start key. 2. Select the item to be set. The setting screen for the selected item is displayed. Display Description Transition Time Duration of toner applying operation Upper Limit Upper limit printing ratio of toner applying quantity with each mode Steve Cleaning Toner collection operational interval on developing sleeve after the toner applying operation (T7 control) Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Transition Time Duration of toner applying 0 to 255 (s) 2. Press the stark key. The value is set. Setting: [Set Operation Mode] 1. Select the item to be set. Display Description OFF D on to applying the toner operation MODE1 Normal mode MODE1 Normal mode MODE1 Normal is set. Setting: [Upper Limit]	147	Description Sets the mode for removing charged toner in the developing unit (T7 control: Toner applying operation).							
1. Press the start key. 2. Select the item to be set. The setting screen for the selected item is displayed. Display Description Transition Time Duration of toner applying operation Upper Limit Upper limit printing ratio of toner applying quantity with each mode Steeve Cleaning Toner collection operation (T control) Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Set Minimum Value Toner layer width when [Set Drum Cleaning Mode] is selected Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Setting range Transition Time Duration of toner applying 0 to 255 (s) 2. Press the start key. The value is set. Setting: [Set Operation Mode] 3. Setting: [Set Operation Mode] Normal mode MODE1 Normal mode MODE2 Toner consumption mode Initial setting value using the +/- keys. Display Description Setting: [Upper Limit] 1. Select the item to be set. Display Description mode Initial setting value using the +/- keys. Display Description mode		should customarily printe	d in a gre	at volume, mode must be changed.	-	ty (e.g. less than 2%)			
Display Description Transition Time Duration of toner applying operation Upper Limit Upper limit printing ratio of toner applying quantity with each mode Sleeve Cleaning Toner collection operational interval on developing sleeve after the toner applying operation (T7 control) Set Unum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Set Minimum Value Toner layer width when [Set Drum Cleaning Mode] is selected Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Setting range Transition Time Duration of toner applying 1. Change the setting value using the +/- or numeric keys. Display Description Transition Time Duration of toner applying 1. Change the setting value using the toner operation MODE1 Normal mode MODE2 Toner consumption mode Initial setting value using the +/- keys. Display Description QFF Do not applying the toner applying 1. Change the setting value using the +/- keys.		1. Press the start key.		e setting screen for the selected item	is displayed.				
Set Operation Mode Settings for toner applying operation Upper Limit Upper limit printing ratio of toner applying quantity with each mode Sleeve Cleaning Toner collection operational interval on developing sleeve after the toner applying operation (T7 control) Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Set Minimum Value Toner layer width when [Set Drum Cleaning Mode] is selected Setting: [Transition Time] 1. 1. Change the setting value using the +/- or numeric keys. Display Description Setting range Transition Time Duration of toner applying 0 to 255 (s) 50 2. Press the start key. The value is set. Setting: [Set Operation Mode] 1. Select the item to be set. Display Description OFF Do not applying the toner operation MODE1 Normal mode MODE2 Toner consumption mode Initial setting value using the +/- keys. Display Description Quere Limit Upper limit prin				-					
Upper Limit Upper limit printing ratio of toner applying quantity with each mode Steeve Cleaning Toner collection operational interval on developing sleeve after the toner applying operation (17 control) Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Setting range Initial setting Transition Time Duration of toner applying 0 to 255 (s) 50 2. Press the start key. The value is set. Setting: [Set Operation Mode] Setting: Setting: [Set Operation Mode] 0 not applying the toner operation MODE1 Normal mode MODE1 Normal mode MODE2 Toner consumption mode Initial setting Initial setting: MODE1 2. Press the start key. The setting is set. Setting range Initial setting Upper Limit Upper limit printing ratio of toner applying 0 to 10 (%) 5 (%) 1. Change the setting value using the +/- keys. Setting range Initial setting Upper Limit Upper limit printing ratio of toner applying 0 to 10 (%) 5 (%) 2. Press the start key. The value is set. Setting range		Transition Time		Duration of toner applying					
Steeve Cleaning Toner collection operational interval on developing sleeve after the toner applying operation (T7 control) Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Set Minimum Value Toner layer width when [Set Drum Cleaning Mode] is selected Setting: [Transition Time] 1. 1. Change the setting value using the +/- or numeric keys. Setting range Initial setting Transition Time Description Setting range Initial setting Transition Time Duration of toner applying 0 to 255 (s) 50 2. Press the start key. The value is set. Setting: [Set Operation Mode] 1. Select the item to be set. Display Description OFF 0 OFF Do not applying the toner operation MODE1 Normal mode MODE1 Normal mode Initial setting; MODE1 Press the start key. The setting is set. Setting: [Upper Limit] 1. Change the setting value using the +/- keys. Display Description Setting range Initial setting Upper Limit Upper limit printing ratio of toner applying 0 to 10 (%) 5 (%) 1 1. Change the setting value using the +/- keys. Setting range I		Set Operation Mo	de	Settings for toner applying operation	ı				
Set Drum Cleaning Mode Settings for developing the toner layer in accordance with coverage ratio Toner layer width when [Set Drum Cleaning Mode] is selected Setting: [Transition Time] 1. Change the setting value using the +/- or numeric keys. Display Description Setting: [Set Operation Mode] 1. Select the item to be set. Setting: [Set Operation Mode] 1. Select the item to be set. Display Description OFF Do not applying the toner operation MODE1 Normal mode MODE2 Toner consumption mode Initial setting; MODE1 Press the start key. The setting is set. Setting: [Upper Limit] 1. Change the setting value using the +/- keys. Display Description Upper Limit Upper limit printing ratio of toner applying 1. Change the setting value using the +/- keys. Setting: [Sleeve Cleaning] 1. Change the setting value using the +/- keys. Display Description Quantity with each mode Upper Limit Upper limit printing ratio of toner applying 0 to 10 (%) 5 (%) 2. Press the start key. The value is set.		Upper Limit		Upper limit printing ratio of toner ap	olying quantity wi	th each mode			
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Display Description Setting range Initial setting Upper Limit Upper limit printing ratio of toner applying quantity with each mode 0 to 10 (%) 5 (%) 2. Press the start key. The value is set. Setting: [Sleeve Cleaning] 1. Change the setting value using the +/- keys. Display Description Setting: applied to the setting value using the +/- keys. Display Description Setting range Initial setting Sleeve Clean Int Toner collection operational interval on developing sleeve after the toner applying operation (T7 control) 10 to 300 (s) 60 (s)		2. Press the start key. The setting is set.							
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2. Press the start key. The value is set. Setting: [Sleeve Cleaning] 1. Change the setting value using the +/- keys. Display Description Sleeve Clean Int Toner collection operational interval on developing sleeve after the toner applying operation (T7 control)									
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Sleeve Clean IntToner collection operational interval on developing sleeve after the toner applying operation (T7 control)10 to 300 (s)60 (s)		Setting: [Sleeve Cleani	ng]						
developing sleeve after the toner applying operation (T7 control)		Display	Desci	iption	Setting range	Initial setting			
2. Press the start key. The value is set.		Sleeve Clean Int	develo	oping sleeve after the toner applying	10 to 300 (s)	60 (s)			
		2. Press the start key	The valu	e is set.		1			

Minimum Value Toner layer width (mm) 0 to 30 (mm) MO	ial setting
MODE1 Constitutes a toner layer if the print coverage is less than 2%. (excludes the maximum paper width A3/A4) MODE2 Apply toner regardless of the current print coverage. Initial setting: MODE1 Press the start key. The setting is set. Setting: [Set Minimum Value] 1. Change the setting value using the +/- keys. Display Description Setting range Minimum Value Toner layer width (mm) 0 to 30 (mm) MODE The initial setting value depends on the setting of [Set Drum Cleaning Mode]. 2. Press the start key. The value is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U148 Setting drum refresh mode Description Seteting Selects the mode used in drum refreshing Purpose Change settings when drum refreshing is too frequently executed. Setting 1. Press the start key. 2. Select ON or OFF. Drum refreshing is not performed OFF Drum refreshing is performed Initial setting: ON 3. Press the start key. The setting is set.	al setting
Image: main start in the setting is set. Image: main start is set in the setting is set. Setting: [Set Minimum Value] 1. Change the setting value using the +/- keys. Image: main start is set. Setting: [Set Minimum Value] 1. Change the setting value using the +/- keys. Image: main start is set. Setting: range Image: main start is set. Setting: main start is set. Image: main start is set. Image: main start is set. Setting: main start is set. Image: main start is set. Image: main start is set. Completion Press the start key. The value is set. Completion Press the start key. The screen for selecting a maintenance item No. is displayed. U148 Setting drum refresh mode Description Selects the mode used in drum refreshing Purpose Change settings when drum refreshing is too frequently executed. Setting 1. Press the start key. 2. Select ON or OFF. Display Description OFF Drum refreshing is not performed ON Drum r	al setting
Initial setting: MODE1 2. Press the start key. The setting is set. Setting: [Set Minimum Value] 1. Change the setting value using the +/- keys. Display Description Minimum Value Toner layer width (mm) 0 to 30 (mm) MO Momentum Value Toner layer width (mm) 0 to 30 (mm) MO The initial setting value depends on the setting of [Set Drum Cleaning Mode]. 2. Press the start key. The value is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U148 Setting drum refresh mode Description Selects the mode used in drum refreshing Purpose Change settings when drum refreshing is too frequently executed. Setting 1. Press the start key. 2. Select ON or OFF. Display Description OFF Drum refreshing is not performed ON Drum refreshing is performed ON Drum refreshing is performed Initial setting: ON 3. Press the start key. The setting is set.	al setting
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Dress the stop key. The screen for selecting a maintenance item No. is displayed. U148 Setting drum refresh mode Description Selects the mode used in drum refreshing Purpose Change settings when drum refreshing is too frequently executed. Setting 1. Press the start key. 2. Select ON or OFF. Description OFF Display Description Drum refreshing is not performed ON Initial setting: ON 3. Press the start key. The setting is set.	
Description Selects the mode used in drum refreshing Purpose Change settings when drum refreshing is too frequently executed. Setting 1. Press the start key. 2. Select ON or OFF. Display Description OFF Drum refreshing is not performed ON Drum refreshing is performed Initial setting: ON 3. Press the start key. The setting is set.	
OFF Drum refreshing is not performed ON Drum refreshing is performed Initial setting: ON 3. Press the start key. The setting is set.	
ON Drum refreshing is performed Initial setting: ON 3. Press the start key. The setting is set.	
Initial setting: ON 3. Press the start key. The setting is set.	
3. Press the start key. The setting is set.	
Completion	
Press the stop key. The screen for selecting a maintenance item No. is displayed.	

 Description					
Displaying the toner sensor output					
Description Displays the toner sensor output value.					
Purpose					
	ach color when any image problems occur.				
Method					
1. Press the start key.					
	The screen for the selected item is displayed.				
Display	Description				
Overflow	Waste toner sensor				
Toner Sensor	Control voltage value and replenishment level of toner sensor each color				
Displaying: [Overflow]					
1. Select [Overflow]. The cur Display	rrent value is displayed. Description				
Waste Toner Overflow	Waste toner sensor				
Displaying: [Toner Sensor] 1. Select [Toner Sensor]. The current value is displayed.					
Display	Description				
INPUT (C)	Toner sensor C output value				
INPUT (M)	Toner sensor M output value				
INPUT (Y)	Toner sensor Y output value				
INPUT (K)	Toner sensor K output value				
TARGET (C)	Toner replenishment level for cyan				
TARGET (C) TARGET (M)	Toner replenishment level for cyan Toner replenishment level for magenta				
INPUT (C) INPUT (M) INPUT (Y) INPUT (K)	Toner sensor C output value Toner sensor M output value Toner sensor Y output value				

No.	Description								
56	Setting the toner replenishment level								
	Description Sets the toner replenishment level for each color.								
		•	entievei	for each color.					
	Purpose To change settings according to the original image.								
	Method								
		Press the start key. Select the item to be	set.						
		Display		Description					
		Supply Level		Setting the toner replenishment leve	el				
		Empty Level		Setting the toner empty level					
	1.		alue usi	ing the +/- or numeric keys. s the image lighter; decreasing it mak	es the image darl	ker.			
		Display	Desci	iption	Setting range	Initial setting			
		Supply Level (C)	Toner	replenishment level for cyan	0 to 900	502			
		Supply Level (M)	Toner	replenishment level for magenta	0 to 900	502			
		Supply Level (Y)	Toner replenishment level for yellow		0 to 900	502			
		Supply Level (K)	Toner replenishment level for black		0 to 900	502			
		Supply Level (K)BW		replenishment level for black in white mode	0 to 900	502			
	(K)BW black/white mode 3. Press the start key. The value is set.								
	3	Press the start key	The valu	e is set					
			The valu	e is set.	1	1			
	Meth	od: [Empty Level]		e is set.		1			
	Meth 1.	od: [Empty Level] Select the item to be Change the setting v	set. value usi	e is set. ing the +/- or numeric keys. s the image lighter; decreasing it mak	es the image darl	ker.			
	Meth 1.	od: [Empty Level] Select the item to be Change the setting v	set. value usi g makes	ing the +/- or numeric keys.	es the image darl	ker.			
	Meth 1.	od: [Empty Level] Select the item to be Change the setting v Increasing the settin	e set. value usi g makes Desci	ing the +/- or numeric keys. the image lighter; decreasing it mak iption	2				
	Meth 1.	od: [Empty Level] Select the item to be Change the setting Increasing the settin Display	e set. value usi g makes Desci Toner	ing the +/- or numeric keys. the image lighter; decreasing it mak	Setting range	Initial setting			
	Meth 1.	od: [Empty Level]Select the item to be Change the setting v Increasing the settinDisplayEmpty Level (C)	set. value usi g makes Descr Toner Toner	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan	Setting range 1 to 1023	Initial setting			
	Meth 1.	bod: [Empty Level] Select the item to be Change the setting v Increasing the settin Display Empty Level (C) Empty Level (Y)	set. value usi g makes Desci Toner Toner Toner	ing the +/- or numeric keys. s the image lighter; decreasing it mak ription empty level for cyan empty level for magenta	Setting range 1 to 1023 1 to 1023	Initial setting 101 101			
	Meth 1.	od: [Empty Level]Select the item to be Change the setting v Increasing the settingDisplayEmpty Level (C)Empty Level (Y)Empty Level (M)	set. value usi g makes Descr Toner Toner Toner Toner	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow	Setting range 1 to 1023 1 to 1023 1 to 1023 1 to 1023	Initial setting 101 101 101			
	Meth 1. 2.	bod: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level	set. alue usi g makes Descr Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black in black/white	Setting range 1 to 1023	Initial setting 101 101 101 101 101 101			
	Meth 1. 2.	od: [Empty Level] Select the item to be Change the setting of Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. alue usi g makes Descr Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black in black/white	Setting range 1 to 1023	Initial setting 101 101 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black empty level for black in black/white e is set.	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black in black/white	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black empty level for black in black/white e is set.	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black empty level for black in black/white e is set.	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black empty level for black in black/white e is set.	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101 101 101			
	Meth 1. 2. 3. Com	od: [Empty Level] Select the item to be Change the setting v Increasing the setting Display Empty Level (C) Empty Level (Y) Empty Level (M) Empty Level (K) Empty Level (K) Empty Level (K)BW Press the start key.	set. value usi g makes Descr Toner Toner Toner Toner Toner mode	ing the +/- or numeric keys. the image lighter; decreasing it mak iption empty level for cyan empty level for magenta empty level for yellow empty level for black empty level for black empty level for black in black/white e is set.	Setting range 1 to 1023 1 to 1023	Initial setting 101 101 101 101 101 101			

Maintenance item No.		Description					
U157	Checking the developing drive time Description Displays the developing drive time for checking a figure, which is used as a reference when correcting the toner control. Purpose To check the developing drive time after replacing the developing unit.						
	Method 1. Press the start key. The developing drive time of each color is displayed.						
	Display	Description					
	C TIME(min)	Cyan developing drive time					
	M TIME(min)	Magenta developing drive time					
	Y TIME(min)	Yellow developing drive time					
	K TIME(min)	Black developing drive time					
	Completion Press the stop key. The screen	for selecting a maintenance item No. is displayed.					
U158	Checking the developing count Description Displays the developing count for checking. Purpose To check the developing count after replacement of the developing unit. Method						
		current developing counts are displayed for each color.					
	Display	Description					
	Develop Count (C)	Cyan developing count value					
	Develop Count (M)	Magenta developing count value					
	Develop Count (Y)	Yellow developing count value					
	Develop Count (K)	Black developing count value					
	Completion Press the stop key. The screen	for selecting a maintenance item No. is displayed.					

laintenance tem No.	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 paper, or solve a fuser problem on thick paper.								
	Setti 1. 2.	ng Press the start key Select the item to b							
		Display	Description	Setting range	Initial setting				
		Ready Temp.	Standby temperature control	50 to 200	165				
		Stable (Driving)	Stabilized temperature during operation	130 to 200	170				
		Stable (Stop)	Stabilized temperature under suspension	130 to 200	170				
		Temp. Print Full	Temperature control during printing	130 to 200	170				
		Shift Print Dup	Temperature control during duplex-printing	-10 to 0	-5				
		P. Roller Temp.	Press roller control temperature	100 to 160	140				
	4.	Press the start key.	The value is set.	I	J				
		pletion	screen for selecting a maintenance item No. is	displayed					
	 Resetting the fuser problem data Description Resets the detection of a service call code indicating a problem in the fuser section. Purpose To prevent accidents due to an abnormally high fuser temperature. Method Press the start key. Press [Execute]. Press the start key. The fuser problem data is initialized. Turn the main power switch off and on. 								

Maintenance item No.		Description
U167	Checking/clearing the for Description Displays and clears the fu Purpose To check or clear the fuse unit.	
	Method 1. Press the start key.	The fuser count is displayed.
	Display	Description
	Fixing Counter	Fuser count value
	Clearing 1. Press [Clear Counte 2. Press the start key. Completion	
		creen for selecting a maintenance item No. is displayed.
U199	Displaying fuser heater Description Displays the detected fus Purpose To check the fuser tempe	er temperature.
	Method 1. Press the start key.	The current setting is displayed.
	Display	Description
	HEAT EDGE TEM	
	HEAT CENTER TE	
	PRESS TEMP	Press roller center temperature (°C)
		creen for selecting a maintenance mode No. is displayed.
U200		operation panel on. n the operation panel light.
	Method 1. Press the start key. 2. Select [ALL LED ON 3. Press the stop key.	J]. All the LEDs on the operation panel light. The LEDs turns off.
	Completion Press the stop key. The s	creen for selecting a maintenance item No. is displayed.

Maintenance item No.			Description
U201	Description Automatica Purpose	lly correct the position	ns of the X- and Y-axes of the touch panel. lay positions on the touch panel after it is replaced.
		the start key. t the [INITIALIZE] or	ICHECKI.
	Disp		Description
	INITI	IALIZE	Adjusts the display on the panel automatically.
	CHE	СК	Checks the display on the touch panel.
	 Press The to Press 	ouch panel is adjuste the indicated three + the stop key. The sc	eys. Be sure to press three + keys displayed in order. d automatically. · keys, and then check the display. reen for selecting a maintenance item No. is displayed.
	 Press Press When 	the start key. the indicated three + adjusting the display	 keys, and then check the display. y, press [INITIALIZE] to execute the adjustment automatically. reen for selecting a maintenance item No. is displayed.
	Completion Press the s		or selecting a maintenance item No. is displayed.
U202	Description Initializes of	r operates the KMAS ptional device which i	host monitoring system. is currently supported only by Japanese specification machines, so no setting

Maintenance item No.			Description		
U203	Desc Simu Purp To ch Meth 1. 2.	ose leck the DP operat od Press the start ke	onveying operation separately in the DP. ion. y. n the DP if running this simulation with paper.		
		Display	Description	Setting range	Initial setting
		CCD ADP (NON P)	Without paper, single-sided original of CCD (continuous operation)	-	-
		CCD ADP	With paper, single-sided original of CCD	-	-
		CCD RADP (NON P)	Without paper, double-sided original of CCD (continuous operation)	-	-
		CCD RADP	With paper, double-sided original of CCD	-	-
		CIS RADP (NON P)*	Without paper, double-sided original of CIS (continuous operation)	-	-
		CIS RADP*	With paper, double-sided original of CIS	-	-
		SPEED	Switching between normal reading (600 dpi) and high-speed reading	0 (Normal)/ 1 (High-speed)	0

*: Dual scan DP only.
4. Press the start key. The operation starts.
5. To stop continuous operation, press the stop key.

Completion

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

Maintenance item No.		Description
U204	Description Sets the presence or absence Purpose	ence of a key card or key counter e of the optional key card or key counter. if a key card or key counter is installed.
	Method 1. Press the start key. 2. Select the item to be se	t. The setting screen for the selected item is displayed.
	Display	Description
	Device Setting	Sets the presence or absence of the key card or key counter
	Message Setting	Sets the message when optional equipment is not installed
	Setting: [KEY-DEVICE] 1. Select the optional court	ter 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 3. Turn the main power sw Setting: [MESSAGE] 1. Select the [Key Device] 2. Press the start key. The	vitch off and on. or [Coin Vender].
U206	as mode and unit price.	
U207	 Method 1. Press the start key. The 2. COUNT0 is displayed a 3. As the keys lined up in t tom, the figure shown or pressed and if there are LED in that line will light 4. When all the keys on the Completion 	ation panel keys. seys and LEDs on the operation panel. screen for executing is displayed. nd the leftmost LED on the operation panel lights. he same line as the lit indicator are pressed in the order from the top to the bot in the touch panel increases in increments of 1. When all the keys in that line are any LEDs corresponding to the keys in the line on the immediate right, the top the operation panel have been pressed, all the LEDs light for up to 10 seconds.
	Press the stop key. The scree	n for selecting a maintenance item No. is displayed.

Maintenance item No.			Description
U208	Desci Sets t Purpo To cha	ose	he paper feeder n 3000-sheet paper feeder. nstalling the 3000-sheet paper feeder or the size of paper used in the paper
	2.	Press the start key. Select the paper size (/ Initial setting: Letter (In	ch specifications) ic specifications) e setting is set.
U221	Desci Special nize the Purpo	ne device connected to ose ccording to the preferer	nost lock function. Setting this to ON causes the machine to be unable to recog- the USB host.
	1.	Press the start key. Select the item.	
		Display	Description
		g: [USB HOST LOCK] Select ON or OFF.	-
		Display	Description
		ON	USB host lock function ON
		OFF	USB host lock function OFF
	2.	Initial setting: OFF Press the start key. The Turn the main power sv	
U222	Desci Sets t This is	ig the IC card type iption he IC card type. s an optional device whi essary.	ich is currently supported only by Japanese specification machines, so no setting

Maintenance item No.			Description
U223	Desc Sets Purp To re Settin 1.	strict operation in the syst ng Press the start key.	unction to ON or OFF. em menu on the operation panel.
	2.	Select the item.	Description
		Display Unlock	Description
			Release the lock of the operation from the system menu
		Partial Lock Lock	Partially lock the operation from the system menu
	3.	Initial setting: Unlock Press the start key. The s	Entirely lock the operation from the system menu
	Press	pletion s the stop key. The screer I sheet extension	for selecting a maintenance item No. is displayed.
	and t Purp Set a Setti 1. 2. 3. 4. 5.	he message of the service ose ccording to the preference ng Write the image data or t	he message data to the USB memory. SB memory slot of the machine. tch on. em.
	0.	Display	Description
		Install	Installs the image data or the message data
		UnInstall	Restores the original image data or message data
	7.	Select the item.	
		Display	Description
		Opening Img	Startup screen
		Call Img	Service call image
		Call Msg Top	Service call screen 1
		Call Msg Detail	Service call screen 2
			llation or uninstallation is started. d, [COMPLETE] is displayed.
		pletion s the stop key. The screer	for selecting a maintenance item No. is displayed.

		Description
	ng punch destination	
	r iption	of 3000-sheet document finisher.
Purp	•	
		nt punch unit from the destination of the machine.
	ng Press the start key. Select the destination.	
	Display	Description
	AUTO	With no punch unit
	JAPAN METRIC	Metric (Japan) specifications
	INCH	Inch (North America) specifications
	EUROPE METRIC	Metric (Europe) specifications
	Initial setting: INCH (Inch sp Press the start key. The setti Turn the main power switch	•

U237 Setting finisher stack quantity Description

Sets the number of sheets of each stack on the main tray and on the Inner tray in 3000-sheet document fin-

Maintenance

item No. U234

isher. Purpose

To change the setting when a stack malfunction has occurred.

Method

1. Press the start key. 2. Select the item to be set

Select the item to be set.	
Display	Description
MAIN TRAY	Number of sheets of stack on the main tray
MIDDLE TRAY	Number of sheets of stack on the internal tray for staple mode

Setting: [MAIN TRAY]

1. Change the setting using the +/- or numeric keys.

Setting value	Description
0	Number of sheets of stack on the main tray: 3000 sheets
1	Number of sheets of stack on the main tray: 1500 sheets

Initial setting: 0

- 2. Press the start key. The setting is set.
- 3. Turn the main power switch off and on.

Setting: [MIDDLE TRAY]

1. Change the setting using the +/- or numeric keys.

Setting value	Description
0	Number of sheets of stack on the internal tray for staple mode: 50 sheets
1	Number of sheets of stack on the internal tray for staple mode: 30 sheets

Initial setting: 0

Number of sheets of stack on the internal tray for non-staple copying: 10 sheets

- 2. Press the start key. The setting is set.
- 3. Turn the main power switch off and on.

aintenance em No.		Description
U240	Checking the operation of the	finisher
	Description Turns each motor and solenoid o	f 3000-sheet document finisher ON.
	Purpose	
	To check the operation of each m	notor and solenoid of the 3000-sheet document finisher.
	Method	
	 Press the start key. Select the item to be check 	ed
	Display	Description
	FINISHER MOTOR	Checking the motor of the document finisher
	FINISHER SOL	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: [FINISHER MOTOR]	
	 Select the item to be opera Press the start key. The operation 	
	Display	Motor
	FEED IN MOTOR M	Paper entry motor (PEM) is turned on at middle speed
	FEED IN MOTOR L	Paper entry motor (PEM) is turned on at low speed
	CONV MOTOR H	Paper conveying motor (PCM) is turned on at high speed
	CONV MOTOR M	Paper conveying motor (PCM) is turned on at middle speed
	CONV MOTOR L	Paper conveying motor (PCM) is turned on at low speed
	EJECT MOTOR H	Eject motor (EJM) is turned on at high speed
	EJECT MOTOR M	Eject motor (EJM) is turned on at middle speed
	EJECT MOTOR L	Eject motor (EJM) is turned on at low speed
	SUB PATH MOTOR H	Relief path motor (RPM) is turned on counterclockwise
	SUB PATH MOTOR M	Relief path motor (RPM) is turned on clockrwise
	BUNDLE UP MOTOR	Paper conveying belt motor 1 (PCBM1) is turned on
	BUNDLE DOWN MOTOR	Paper conveying belt motor 2 (PCBM2) is turned on
	WIDTH TEST(A3)	Side registration motor 1/2 (SRM1/2) are turned on
	WIDTH TEST(LD)	Side registration motor 1/2 (SRM1/2) are turned on
	STAPLE FR MOTOR	Staple moving motor 1 (STMM1) is turned on
	STAPLE S MOTOR	Staple moving motor 2 (STMM2) is turned on
	STAPLE MOTOR	Staple motor (STM) is turned on
	TRAY MOTOR	Main tray motor (MTM) is turned on
	PUNCH MOTOR	Punch motor (PUNM) is turned on

) Me		Description	
	Method: [FINISHER SOL] 1. Select the item to be operated. 2. Press the start key. The operation starts.		
	Display	Solenoid	
	FEED IN SOL	Paper entry solenoid (PESOL)	
	REAR DOWN SOL 1	Trailing edge holder solenoid 1 (TEHSOL1)	
	REAR DOWN SOL 2	Trailing edge holder solenoid 2 (TEHSOL2)	
	SUB PATH SOL	Relief path solenoid (RPSOL)	
	SUB TRAY R SOL	Feedshift solenoid 1 (FSSOL1)	
	SUB TRAY L SOL	Feedshift solenoid 2 (FSSOL2)	
	BOOKLET SOL	Centerfold feedshift solenoid (CFSSOL)	
	PADDLE SOL	Paddle solenoid (PDSOL)	
	HOLD DOWN SOL	Paper holder solenoid (PHSOL)	
	EJECT SOL	Pressure switching solenoid (PSWSOL)	
	PUNCH SOL	Punch pattern solenoid (PPSOL)	
	ethod: [MAIL BOX] 1. Select the item to be operate 2. Press the start key. The ope		
	1. Select the item to be operate		
	1. Select the item to be operate		
	 Select the item to be operate Press the start key. The operate 	eration starts.	
	 Select the item to be operate Press the start key. The ope Display CARRY ROLL BRANCH ROLL 	eration starts. Motor	
Me	 Select the item to be operate Press the start key. The ope Display CARRY ROLL BRANCH ROLL BRANCH ROLL Select the item to be operate Press the start key. The ope 	eration starts. Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed.	
Me	 Select the item to be operate Press the start key. The ope Display CARRY ROLL BRANCH ROLL ethod: [BOOKLET] Select the item to be operate 	eration starts. Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts.	
Me	 Select the item to be operated. Press the start key. The operated is pressed by the operated operated is pressed by the operated operated. Select the item to be operated. Press the start key. The operated is pressed by the operated operated operated by the operated operated operated operated by the operated op	eration starts. Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts. Motor Centerfold main motor (CMM)	
Me	 Select the item to be operate Press the start key. The ope Display CARRY ROLL BRANCH ROLL ethod: [BOOKLET] Select the item to be operate Press the start key. The ope Display 	Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts. Motor Centerfold main motor (CMM) Blade motor (BLM)	
Me	 Select the item to be operated. Press the start key. The operated is press the start key. The operated is press the start key. The operated is press the item to be operated. Select the item to be operated. Press the start key. The operated is press the start key. The operated is press the start key. The operated is press the start key. The operated is pressed in the start key. The operated in th	eration starts. Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts. Motor Centerfold main motor (CMM) Blade motor (BLM) Centerfold paper conveying belt motor 1 (CPCBM1)	
Me	 Select the item to be operated. Press the start key. The operated is press the start key. The op	Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts. Motor Centerfold main motor (CMM) Blade motor (BLM) Centerfold paper conveying belt motor 1 (CPCBM1) Centerfold paper conveying belt motor 2 (CPCBM2)	
Me	 Select the item to be operated. Press the start key. The operated is press the start key. The operated is press the start key. The operated is press the item to be operated. Select the item to be operated. Press the start key. The operated is press the start key. The operated is press the start key. The operated is press the start key. The operated is pressed in the start key. The operated in th	eration starts. Motor Mailbox drive motor (MBDM) is turned on at paper conveying Mailbox drive motor (MBDM) is turned on at feedshift operation ed. eration starts. Motor Centerfold main motor (CMM) Blade motor (BLM) Centerfold paper conveying belt motor 1 (CPCBM1)	

iintenance em No.	Description		
U241	Checking the operation of the s	witches of the finisher	
	Description Displays the status of each switch	of 3000-sheet document finisher.	
	Purpose		
	To check the operation of each sw	ritch of the 3000-sheet document finisher.	
	Method		
	 Press the start key. Select the item to be checked. 		
	Display Description		
	FINISHER	Checking the switch of the document finisher	
	MAIL BOX	Checking the switch of the mailbox	
	BOOKLET	Checking the switch of the center-folding unit	
	Method: [FINISHER]		
	1. Turn each switch or sensor of	on and off manually to check the status.	
		tch or sensor is detected, that switch or sensor is displayed in reverse.	
		Switches and sensors	
	FRONT COVER SW	Front cover switch (FCSW)	
	TOP COVER SW	Top cover switch (TCSW)	
	RIGHT COVER SW	Sub tray right switch (STRSW)	
	SET SW	Joint switch (JSW)	
	BOOKLET SW	Centerfold set switch (CSSW)	
	PUNCH TANK SW	Punch waste box sensor (PWBS)	
	TRAY L-LIMIT SW	Main tray lower limit detection sensor (MTLLDS)	
	TRAY U-LIMIT SW	Main tray upper limit detection sensor (MTULDS)	
	TRAY MIDDLE SW	Main tray middle position detection sensor (MTMPDS)	
	PAPER HOLD DOWN SW	Paper holder home position sensor (PHHPS)	
	LOAD DET SW	Main tray paper upper surface detection sensor 1,2 (MTPUSDS1,2)	
	HP SW	Paper entry sensor (PES)	
	EJECT SW 1	Eject switch 1 (ESW1)	
	EJECT SW 2	Eject switch 2 (ESW2)	
	EJECT SW 3	Eject switch 3 (ESW3)	
	STAPLE HP SW 1	Staple home position switch 1 (STHPSW1)	
	STAPLE HP SW 2	Staple home position switch 2 (STHPSW2)	
	MIDDLE FEED SW1	Inner tray paper entry sensor 1 (ITPES1)	
	MIDDLE FEED SW2	Inner tray paper entry sensor 2 (ITPES2)	
	BUNDLE DET SW 1	Paper detection sensor 1 (PDS1)	
	BUNDLE DET SW 2	Paper detection sensor 2 (PDS2)	
	BUNDLE UP HP SW	Paper conveying belt home position sensor 1 (PCBHPS1)	
	BUNDLE DOWN HP SW	Paper conveying belt home position sensor 2 (PCBHPS2)	
	WIDTH HP SW 1	Side registration home position sensor 1 (SRHPS1)	
	WIDTH HP SW 2	Side registration home position sensor 2 (SRHPS2)	

No.	Description				
	Method: [MAIL BOX]				
1.	 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 Switches and sensors				
	HP SW	Mail paper entry switch (MPESW)			
	EJECT SW	Tray eject sensor (TEJS)			
	COVER SW	Mailbox cover open/close switch (MCOSW)			
	OVER FLOW SW 1	Tray overflow switch 1 (TOFSW1)			
	OVER FLOW SW 2	Tray overflow switch 2 (TOFSW2)			
	OVER FLOW SW 3 Tray overflow switch 3 (TOFSW3)				
	OVER FLOW SW 4	W 4 Tray overflow switch 4 (TOFSW4)			
	OVER FLOW SW 5	Tray overflow switch 5 (TOFSW5)			
	OVER FLOW SW 6 Tray overflow switch 6 (TOFSW6)				
	OVER FLOW SW 7	Tray overflow switch 7 (TOFSW7)			
	 Method: [BOOKLET] 1. 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	Switches and sensors			
	Display BUNDLE UP HP SW	Switches and sensors Centerfold paper conveying belt sensor 1 (CPCBS1)			
	BUNDLE UP HP SW	Centerfold paper conveying belt sensor 1 (CPCBS1)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW BLADE HP SW	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2) Blade home position sensor (BLHPS)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW BLADE HP SW WIDTH HP SW U	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2) Blade home position sensor (BLHPS) Centerfold side registration sensor 2 (CSRS2)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW BLADE HP SW WIDTH HP SW U WIDTH HP SW L	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2) Blade home position sensor (BLHPS) Centerfold side registration sensor 2 (CSRS2) Centerfold side registration sensor 1 (CSRS1)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW BLADE HP SW WIDTH HP SW U WIDTH HP SW L FEED IN SW	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2) Blade home position sensor (BLHPS) Centerfold side registration sensor 2 (CSRS2) Centerfold side registration sensor 1 (CSRS1) Centerfold paper entry sensor (CPES)			
	BUNDLE UP HP SW BUNDLE DOWN HP SW BLADE HP SW WIDTH HP SW U WIDTH HP SW L FEED IN SW PAPER DET SW	Centerfold paper conveying belt sensor 1 (CPCBS1) Centerfold paper conveying belt sensor 2 (CPCBS2) Blade home position sensor (BLHPS) Centerfold side registration sensor 2 (CSRS2) Centerfold side registration sensor 1 (CSRS1) Centerfold paper entry sensor (CPES) Centerfold paper detection sensor (CPDS)			

tem No.	e Description					
U243	Checking the operation 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 3. Press the start key. The start key.	•				
	Display	Motor and solenoid	Operation			
	DP FEED MOT	Original feed motor (OFM)	In operation			
	DP CON MOT	Original conveying motor (OCM)	In operation			
	DP REV MOT	Original switchback motor (OSBM)	In operation			
	DP LIFT MOT	DP lift motor (DPLM)	In operation			
	DP REV PRS SOL	Switchback pressure solenoid (SBPSOL)	On for 0.5 s			
	DP REV BRCH SOL	Switchback feedshift solenoid (SBFSSOL)	On for 0.5 s			
	CIS FAN*	DP fan motor (DPFM)	In operation			
	*: Dual scan DP only.		L			
	4. To turn each motor off, press the stop key.					
	Completion					
U244	Press the stop key when op Checking the DP switcher Description Displays the status of the re	peration stops. The screen for selecting a maintenance s espective switches in the DP.	e item No. is displayed.			
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective sw	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status.				
U244	Press the stop key when op Checking the DP switcher Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective so If the on-status of a so	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switches Display	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective so If the on-status of a so Display FD SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch Display FD SW REG SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective so If the on-status of a so Display FD SW REG SW TMG SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch Display FD SW REG SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch Display FD SW REG SW TMG SW EJT SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch Method 1. Press the start key. 2. Turn the respective switch Method FD SW REG SW TMG SW EJT SW TRY SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch Display FD SW REG SW TMG SW EJT SW TRY SW SET SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW) Original set switch (OSSW)				
U244	Press the stop key when op Checking the DP switcher Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective so If the on-status of a so Display FD SW REG SW TMG SW EJT SW TRY SW SET SW SZ SW A	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW) Original size length switch (OSLSW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch If the on-status of a switch FD SW REG SW TMG SW EJT SW TRY SW SET SW SZ SW A L F U SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW) Original set switch (OSSW) Original size length switch (OSLSW) Tray upper limit switch (TULSW)				
U244	Press the stop key when op Checking the DP switches Description Displays the status of the re Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch Method 1. Press the start key. 2. Turn the respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch If the on-status of a switch FD SW REG SW TMG SW EJT SW TRY SW SET SW SZ SW A L F U SW L F L SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW) Original size length switch (OSLSW) Tray upper limit switch (TLLSW)				
U244	Press the stop key when op Checking the DP switcher Description Displays the status of the reference Purpose To check if respective switch Method 1. Press the start key. 2. Turn the respective switch Method 1. Press the start key. 2. Turn the respective switch If the on-status of a switch Display FD SW REG SW TMG SW EJT SW TRY SW SET SW SZ SW A L F U SW L F L SW COV OP SW	s espective switches in the DP. hes in the DP operate correctly. witches on and off manually to check the status. witch is detected, the corresponding switch is displaye Description Original feed switch (OFSW) Original registration switch (ORSW) DP timing switch 1 (DPTSW1) Original eject switch (OESW) Switchback tray switch (SBTSW) Original set switch (OSSW) Original size length switch (OSLSW) Tray upper limit switch (TLLSW) DP interlock switch (DPILSW)				

Maintenance 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 Press the start key. Select the item to be displayed. 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. Change the language using the +/- keys.
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

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Maintenance item No.		Description					
U246	Setting the finisher Description						
	Provides various settings for the 3000-sheet document 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						
	To adjust this item when the position of a punch hole is different from the specified one. Adjustment of front/rear side registration home position of Inner tray						
	Provides optimization when paper jam occurs due to an inferior fitting of the Inner tray adjuster guides to paper.						
	Adjusting of front and back/slanted stapling home position Adjusts the stapling position in the staple mode if the position is not proper. Provides adjustment of slanted stapling.						
							Adjustment of upper/lower side Provides optimization when paper ja
	Adjustment of booklet stapling p	osition	-		, , , , , , , , , , , , , , , , , , , ,		
	Adjusts the booklet stapling positio Adjustment of center folding pos		the position is	s not proper.			
	Adjusts the center folding position		e position is r	not proper.			
	Method 1. Press the start key.						
	2. Select the item to set. The so	reen for setting each iter	n is displayed				
	Display Description						
	3000 FINISHER	Adjustment of 3000-she	et document f	inisher			
	BOOKLET FOLDER	Adjustment of center-folding unit					
	Method: [3000 FINISHER] 1. Select the item to set. The screen for setting each item is displayed.						
	Display Description						
	PUNCH REG ADJ	Adjustment of registration stop timing in punch mode					
	PUNCH POSITION ADJAdjustment of the paper stop timing in punch modeWIDTH F HP ADJAdjustment of front side registration home positionWIDTH R HP ADJAdjustment of rear side registration home position						
	STAPLE HP ADJ	Adjustment of front and back stapling home position					
	TURNED STAPLE HP ADJ Adjustment of slanted stapling home position						
	Setting: [PUNCH REG ADJ] 1. Change the setting value using the cursor up/down keys.						
	Description		Setting range	Initial setting	Change in value per step		
	Adjustment of registration st	op timing	-20 to 20	0	1 ms		
	If skewed paper conveying occurs (sample 1), increase the preset value. If the copy paper is Z-folded (sample 2), decrease the preset value.						
		<hr/>					
		0	0				
		0	0				
	Sample 1 Sample 2						
	2. Press the start key. The value	Figure 1-3-16 Press the start key. The value is set.					

Maintenance item No.	Description							
U246	Setting: [PUNCH POSITION ADJ] 1. Change the setting value using the +/- or numeric k	eys.						
	Description	Setting range	Initial setting	Change in value per step				
	Adjustment of the paper stop timing	-10 to 10	0	0.487 mm				
	If the distance of the position of a punch hole is smaller than the specified value A, increase the preset value. If the distance is larger than the value A, decrease the preset value.							
	Figure 1- 2. Press the start key. The value is set.	3-17						
	Setting: [WIDTH F HP ADJ/WIDTH R HP ADJ] 1. Select [WIDTH F HP ADJ] or [WIDTH R HP ADJ].							
	2. Change the setting value using the +/- or numeric k	eys.	1					
	Description	Setting range	Initial setting	Change in value per step				
	Adjustment of front side registration home position	-10 to 10	0	0.314 mm				
	Adjustment of rear side registration home position	-10 to 10	0	0.314 mm				
	 Press the start key. The value is set. Press the stop key. The screen for selecting a main Enter maintenance mode U240 and select FINISHE The width guides of the Inner tray will move to A3-s Pull the Inner tray, insert paper between the guides Repeat the above adjustment until paper is properly Setting: [STAPLE HP ADJ] 	R MOTOR, the ize position. and check that in position.	n WID A3 TE	ST.				
	 Change the setting value using the +/- or numeric k 	-	<u> </u>					
	Description	Setting range	Initial setting	Change in value per step				
	Adjustment of front and back stapling home position	n -10 to 10	0	0.32 mm				
	When staple positions are off toward the front side of the machine (sample 1), increase the prese When staple positions are off toward the rear side of the machine (sample 2), decrease the pres							
		$\langle -$						
	I-		 					
	1							
	Sample 1	Samp	le 2					
	Figure 1- 2. Press the start key. The value is set.	3-18						

laintenance tem No.	Description								
U246	Setting: [TURNED STAPLE HP ADJ] 1. Change the setting value using the +/- or numeric keys.								
		Description	Setting range	Initial setting	Change in value per step				
		Adjustment of slanted stapling he	ome position	-10 to 10	0	0.99°			
	To increase the angle for slanted stapling (sample 1), decrease the preset value. To decreas for slanted stapling (sample 2), increase the preset value.								
					/~				
			Samp	ble 1	Sample 2				
			Figure 1-3-	19					
	2.	Press the start key. The value is s	set.						
		od: [BOOKLET FOLDER] Select the item to set. The screen	n for setting each iter	n is displayed	I.				
		Display	Description						
		WIDTH U HP ADJ Adjustment of upper side registration home position							
		WIDTH L HP ADJ Adjustment of lower side registration home position							
		STAPLE POS ADJ (A4R/LTR) Adjustment of booklet stapling position for A4/Letter size							
		STAPLE POS ADJ (B4R/LGR) Adjustment of booklet stapling position for B4/Legal size							
		STAPLE POS ADJ (A3/LD)		osition for A3/	-				
		SADDLE POS ADJ (A4R/LTR)	Adjustment of center	•					
		SADDLE POS ADJ (B4R/LGR)	Adjustment of center			-			
	SADDLE POS ADJ (A3/LD) Adjustment of center folding position for A3/Ledger size								
	1.	ng: [WIDTH U HP ADJ/WIDTH L Select [WIDTH U HP ADJ] or [WI Change the setting value using th	DTH L HP ADJ].	'S.					
		Description		Setting range	Initial setting	Change in value per step			
		Adjustment of upper side registra	ation home position	-20 to 20	0	0.104 mm			
		Adjustment of lower side registra	ation home position	-46 to 46	0	0.104 mm			
	 Press the start key. The value is set. Press the stop key. The screen for selecting a maintenance item No. is displayed. Enter maintenance mode U240 and select [BOOKLET], then [WID A3 TEST]. The width guides of the center-folding unit will move to A3-size position. Pull the center-folding unit, insert paper between the guides and check that paper is abut the gu Repeat the above adjustment until paper is properly in position. 								

nce IO.	Description								
6 Se	Setting: [STAPLE POS ADJ] 1. Select [STAPLE POS ADJ (A4R/LTR)], [STAPLE POS ADJ (B4R/LGR)] or [STAPLE POS ADJ (A 2. Change the setting value using the +/- or numeric keys.								
	Description	Setting range	Initial setting	Change in value per step					
	Adjustment of booklet stapling position for A4/Letter size	-10 to 10	0	0.55 mm					
	Adjustment of booklet stapling position for B4/Legal size	-10 to 10	0	0.55 mm					
	Adjustment of booklet stapling position for A3/Ledger size	-10 to 10	0	0.55 mm					
	When staples are placed too far right (sample 1), decrease too far left (sample 2), increase the preset value. Reference value: within \pm 2 mm	the preset va	alue. Wher	n staples are plac					
	2 mm		2 mm						
	Sample 1		Sample	2					
	Figure 1-3-20			_					
Se	 Press the start key. The value is set. Select [SADDLE POS ADJ] Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ Change the setting value using the +/- or numeric keys. 	(B4R/LGR)]	or [SADDL	E POS ADJ (A3/I					
Se	 Press the start key. The value is set. Etting: [SADDLE POS ADJ] Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 	(B4R/LGR)] Setting range	or [SADDL	E POS ADJ (A3/I Change in value per step					
Se	 Press the start key. The value is set. Example 1 (SADDLE POS ADJ) Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ Change the setting value using the +/- or numeric keys. 	Setting	Initial	Change in					
Se	 Press the start key. The value is set. Example 1 (SADDLE POS ADJ) Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ Change the setting value using the +/- or numeric keys. Description	Setting range	Initial setting	Change in value per step					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size 	Setting range -10 to 10	Initial setting	Change in value per step 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. a. Select [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. etting: [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. a. Select [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increat position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 3 mm Center line Center line Sample 1 Figure 1-3-21 3. Press the start key. The value is set.	Setting range -10 to 10 -10 to 10 -10 to 10	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					
Se	 3. Press the start key. The value is set. a. Select [SADDLE POS ADJ] 1. Select [SADDLE POS ADJ (A4R/LTR)], [SADDLE POS ADJ 2. Change the setting value using the +/- or numeric keys. Description Adjustment of center folding position for A4/Letter size Adjustment of center folding position for B4/Legal size Adjustment of center folding position for A3/Ledger size When the centerfold position too far right (sample 1), increa position too far left (sample 2), decrease the setting value. Reference value: within ± 3 mm 	Setting range -10 to 10 -10 to 10 -10 to 10 se the prese	Initial setting 0 0 0 t value. W	Change in value per step 0.55 mm 0.55 mm 0.55 mm					

m No.	Description					
U247	Setting the paper feed device Description Turns on motor and clutches of 3000-sheet paper feeder or paper feeder. Purpose To check the operation of motor and clutches of paper feed device.					
	 Method 1. Press the start key. The value varies depending to the option furnished. 2. Select the item to be operated. 3. Press the start key. The operation starts. 					
	3000-sheet paper feed	ler				
	Display	Motor and clutches	Operation			
	LCF FEED	PF conveying motor (PFCM)	In operation			
	CLUTCH B	PF conveying clutch (PFCCL)	On for 1 s			
	CLUTCH P1	PF paper feed clutch 1 (PFPFCL1)	On for 1 s			
	CLUTCH P2	PF paper feed clutch 2 (PFPFCL2)	On for 1 s			
	Paper feeder Display	Motor and clutches	Operation			
	DESK FEED	PF drive motor (PFDM)	In operation			
	CLUTCH FEED	PF feed clutch (PFFCL)	On for 1 s			
	CLUTCH U	PF paper feed clutch 1 (PFPFCL1)	On for 1 s			
	CLUTCH L	PF paper feed clutch 2 (PFPFCL2)	On for 1 s			
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 					
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				
	 To turn each motor off, Completion 	press the stop key.				

Maintenance item No.		Description				
U250	Change the maintenance count pre-set Description					
	Purpose	tenance cycle and automatic grayscale adjustr				
	scale adjustment is periodically					
	1. Press the start key. The cu	urrent pre-set value is displayed.				
	Display	Description	Setting range			
	Maintenance Count A	Preset values for maintenance cycle (Color and black/white print)	0 to 9999999			
	Maintenance Count B	Preset values for maintenance cycle (Color print)	0 to 9999999			
	COUNT GRAY ADJUST*100	Preset values for automatic grayscale adjustment	0 to 99900*			
	*: The setting can be chan	ged by 100 per step.				
	 Enter the setting value usi Press the start key. The set Completion Press the stop key. The screen to 		ed.			

Maintenance item No. Description U251 Checking/clearing the maintenance count Description Displays and clears or changes the maintenance count and automatic grayscale adjustment count. Purpose To verify the maintenance counter count and automatic grayscale count. Also to clear the count during maintenance service. Method Press the start key. The maintenance count is displayed.

Display	Description	Setting range	
Maintenance Count A	Maintenance count (Color and black/white print)	0 to 9999999	
Maintenance Count B	Maintenance count (Color print)	0 to 9999999	
COUNT (GRAY ADJUST)	Automatic grayscale adjustment count	0 to 9999999	

Clearing

1. Select the item to be cleared. To clear all items, select [ALL CLEAR].

2. Press the clear key.

3. Press the start key. The count is cleared.

Setting

- 1. Select the item to be changed.
- 2. Enter the count using the numeric keys.
- 3. Press the start key. The count is set.

Completion

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

item No.	Description				
U252	Setting the destination				
	Description				
	-	screens of the machine according to the destination.			
	Purpose				
	In the executed after initializing or initialization.	ng the backup RAM, in order to return the setting to the value before replacement			
	or millianzation.				
	 Setting Press the start key. Select the destination. 				
	Display	Description			
	JAPAN METRIC	Metric (Japan) specifications			
	EUROPE METRIC	Metric (Europe) specifications			
	INCH	Inch (North America) specifications			
	ASIA PACIFIC	Metric (Asia Pacific) specifications			
	AUSTRALIA	Australia specifications			
		China specifications			

4. Turn the main power switch off and on.

Supplement

The specified initial settings are provided according to the destinations in the maintenance items below. To change the initial settings in those items, be sure to run maintenance item U021 after changing the destination.

Mainte- nance No.	Title	Japan spec.	Inch spec.	Europe/Asia Pacific spec.
208	Setting the paper size for the paper feeder	A4	Letter	A4
253	Switching between double and single counts	Single count	Double count (A3/LEDGER)	Double count (A3/LEDGER)

Maintenance item No.				Description			
U253	Switching between double and single counts Description Switches the count system for the total counter and other counters for every color mode. Purpose Used to select, according to the preference of the user (copy service provider), if A3/Ledger paper is to be counted as one sheet (single count) or two sheets (double count).						
	Setting1. Press the start key.2. Select the item to set. The screen for setting each item is displayed.						
	۷.	Display	Description				
		Full-color	-	of full color mode			
		Mono Color*	-	of single color mode			
		B/W		of black/white mode			
	3.			g the copy count mode) is MODE1.			
		Display		Description			
		ALL SINGLE		Single count for all size paper			
		DOUBLE COUNT(A3/LED	GER)	Double count for A3/Ledger size or larger			
		DOUBLE COUNT(B4)		Double count for B4 size or larger			
		DOUBLE COUNT(FOLIO/LEGAL)		Double count for FOLIO/Legal size or larger			
	Initial setting: DOUBLE COUNT(A3/LEDGER) 4. Press the start key. The setting is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.						
	Chan Purp To be If a p time such If a p coun To pr Setti 1.	e set according to user (copy aper jam occurs frequently in of paper ejection, copies are copying. To prevent this, the aper jam occurs frequently in ted before the paper reaches event this, the copy timing sl ng Press the start key.	service provide the optional doo provided without copy timing sho the paper conv those sections, hould be made la	r) request. cument finisher when the number of copies is counted at the ut copy counts. The copy service provider cannot charge for buld be made earlier. reying or fuser sections when the number of copies is , copying is charged without a copy being made.			
	Ζ.	Select the copy count timing	-				
		Display FEED	Description	ary paper feed starts			
		EJECT	When the pap				
	3.	Initial setting: EJECT Press the start key. The set					
		pletion s the stop key. The screen fo	or selecting a ma	intenance item No. is displayed.			

Maintenance item No.			Description			
U265	Setting OEM purchaser code Description Sets the OEM purchaser code. Purpose Sets the code when replacing the main PWB and the like. Setting 1. Press the start key. 2. Change the preset value using the numeric keys. 3. Press the start key. The setting is set. 4. Turn the main power switch off and on					
U276	Desci Sets t Purpo					
		g Press the start key. Select the mode.				
		Display	Description			
		MODE 0	This lets the full color counter count up in single colo	r		
		MODE 1	This lets the single color counter count up in single c	olor		
	3.	Initial setting: MODE Press the start key. ⁻				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
U278	Desci Enter Purpo					
	2.	Press the start key. Select [TODAY].	The delivery date is set.			
		Select [CLEAR].	The delivery date is cleared.			
		lletion the stop key. The so	reen for selecting a maintenance item No. is displayed.			

Maintenance item No.			Description				
U284	Setting 2 color copy mode Description Sets whether to use 2 color copy mode. Purpose According to user request, changes the setting.						
	Setting Press the start key. Select ON or OFF. 						
		Display	Description				
		ON	2 color copy mode is enabled				
		OFF	2 color copy mode is disabled				
	3.	Initial setting: OFF If ON is selected, 2-colo Press the start key. The	or copy will be displayed on the color function screen. e setting is set.				
		pletion the stop key. The scree	en for selecting a maintenance item No. is displayed.				
U285	Desc Deter Purp		gital dot coverage report on reporting.				
	Setting 1. Press the start key. 2. Press [COVERAGE] and select ON or OFF.						
		Display	Description				
		ON	Displays the digital dot coverage				
		OFF	Not to display the digital dot coverage				
	Initial setting: ON 3. Press the start key. The setting is set.						
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.						
U323	Setting abnormal temperature and humidity warning Description Specify whether or not a notice is displayed on the operation panel when abnormal temperature and humidity is detected. Purpose According to user request, changes the setting.						
	Setting Press the start key. Select ON or OFF. 						
		Display	Description				
		ON	Displays the abnormal temperature and humidity warning				
		OFF	Not to display the abnormal temperature and humidity warning				
	3.	Initial setting: ON Press the start key. The	e setting is set.				
		pletion the stop key. The scree	en for selecting a maintenance item No. is displayed.				

lo.	Description						
-	Setting the paper interval						
	Desc	ription					
		mines the interv coverage.	al between p	bages and the toner reple	nisnment ar	nount when pri	nting pages with r
	Purp	ose					
		fy the settings or coverage.	ly if a spotte	ed background or uneven	density app	ears when prin	ting pages with hi
	Meth	od					
		Press the start k Select the item		creen for setting each iter	m is displaye	ed.	
		Display		Description			
		Paper Interval		Paper interval control O	N/OFF setti	ng	
		Select MODE		Setting mode of the pap	er interval c	ontrol	
	_						
		ng: [Paper Inter Select ON or Of					
		Display		Description			
		ON		Paper interval control is	performed		
			OFF Paper interval control is not performed				
				Paper interval control is	not perform	ed	
			key. The sett		not perform	ed	
	Setti	OFF Initial setting: O Press the start k ng: [Select MOI Change the sett	key. The sett DE] ing value us	ing is set. ing the +/- or numeric key		1	e Initial setting
	Setti	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display	xey. The sett DE] ing value us Descrip	ing is set. ing the +/- or numeric key tion	'S.	Setting rang	
	Setti	OFF Initial setting: O Press the start k ng: [Select MOI Change the sett	xey. The sett DE] ing value us Descrip Paper in	ing is set. ing the +/- or numeric key	'S.	1	e Initial setting
	Setti	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back	xey. The sett DEJ ing value us Descrip Paper in high den <ground app<="" td=""><td>ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages</td><td>vs. printing with high pr</td><td>Setting rang 0 to 5 int coverage, c</td><td>1</td></ground>	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages	vs. printing with high pr	Setting rang 0 to 5 int coverage, c	1
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back	xey. The sett DEJ ing value us Descrip Paper in high den xground app prefer to giv	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages e priority to printing speed	vs. printing with high pr	Setting rang 0 to 5 int coverage, c	1
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you	xey. The sett DEJ ing value us Descrip Paper in high den xground app prefer to giv	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages e priority to printing speed	vs. printing with high pr	Setting rang 0 to 5 int coverage, c	1
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOE Change the sett Display MODE If a spotted back However, if you Press the start k	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages e priority to printing speed	rs. printing with high pr d, change th	Setting rang 0 to 5 int coverage, c	1
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages re priority to printing speed ue is set. value of the sensor to	rs. printing with high pi d, change th Paper int	Setting rang 0 to 5 rint coverage, c e setting to 4.	1 change the setting Toner supply
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode Mode	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when usity original continuously ears when printing pages te priority to printing speed ue is set. value of the sensor to en the paper interval	rs. printing with high pr d, change th Paper int Star	Setting rang 0 to 5 int coverage, c e setting to 4. erval time	1 Change the setting Toner supply amount
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode Mode MODE1	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages re priority to printing speed ue is set. value of the sensor to en the paper interval 550 or more	/s. printing with high pi d, change th Paper int Star Long	Setting rang 0 to 5 int coverage, c e setting to 4. erval time	1 change the setting Toner supply amount Normal
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOE Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode MODE1 MODE1 MODE2	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when usity original continuously ears when printing pages te priority to printing speed ue is set. Evalue of the sensor to Evalue of t	rs. printing with high pr d, change th Paper int Star Long Short	Setting rang 0 to 5 rint coverage, c e setting to 4. erval time ndard (x 1.5)	1 change the setting Toner supply amount Normal Normal
	Setti	OFF Initial setting: OI Press the start k ng: [Select MOI Change the sett Display	xey. The sett DE] ing value us Descrip Paper in	ing is set. ing the +/- or numeric key tion terval control mode when	'S.	Setting rang	
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode	xey. The sett DE] ing value us Descrip Paper in high den xground app prefer to giv xey. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages te priority to printing speed ue is set.	rs. printing with high pr d, change th	Setting rang 0 to 5 rint coverage, c e setting to 4.	1 change the setting
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode Mode	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when usity original continuously ears when printing pages te priority to printing speed ue is set. value of the sensor to en the paper interval	rs. printing with high pi d, change th Paper int	Setting rang 0 to 5 int coverage, c e setting to 4. erval time	1 Change the setting Toner supply amount
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode Mode MODE1	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages re priority to printing speed ue is set. value of the sensor to en the paper interval 550 or more	rs. printing with high pr d, change th Paper int Star	Setting rang 0 to 5 int coverage, c e setting to 4. erval time	1 change the setting Toner supply amount Normal
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOE Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode MODE1 MODE1 MODE2	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages re priority to printing speed ue is set. value of the sensor to en the paper interval 550 or more	/s. printing with high pi d, change th Paper int Star Long	Setting rang 0 to 5 rint coverage, c e setting to 4. erval time ndard (x 1.5)	1 change the setting Toner supply amount Normal Normal
	Settin 1.	OFF Initial setting: OI Press the start k ng: [Select MOE Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode MODE1 MODE1 MODE2	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when usity original continuously ears when printing pages te priority to printing speed ue is set. Evalue of the sensor to Evalue of t	/s. printing with high pi d, change th Paper int Star Long	Setting rang 0 to 5 rint coverage, c e setting to 4. erval time ndard (x 1.5)	1 change the setting Toner supply amount Normal Normal
	Settin 1.	OFF Initial setting: OF Press the start k ng: [Select MOI Change the sett Display MODE If a spotted back However, if you Press the start k Detail of mode MODE1 MODE2 MODE3	xey. The sett DEJ ing value us Descrip Paper in high den kground app prefer to giv key. The valu	ing is set. ing the +/- or numeric key tion terval control mode when isity original continuously ears when printing pages te priority to printing speed a is set. Evalue of the sensor to Evalue of th	rs. printing with high pr d, change th Paper int Star Long Short	Setting rang 0 to 5 rint coverage, c e setting to 4. erval time ndard (x 1.5) (x 0.8)	1 change the setting Toner supply amount Normal Normal Normal

2KY

Maintenance item No.	Description						
U326	Desc Sets Purp Displa	ose	e cleanii lance in l	ng guidance when detecting the blac order to make the call for service with		crease by the rubbist	
		Press the start key.	et. The s	creen for setting each item is display	ed.		
		Display		Description			
		BLACK LINE MOD	E	Black line cleaning guidance ON/O	FF setting		
		BLACK LINE COU	NT	Setting counts of the cleaning guida	-		
		ng: [BLACK LINE M Select ON or OFF.	ODE]				
		Display		Description			
		ON		Displays the cleaning guidance			
		OFF Not to display the cleaning guidance					
	2.	Initial setting: ONSetting count value is displayed only if the setting is ON.Press the start key. The setting is set.					
	Setting: [BLACK LINE COUNT] 1. Change the setting value using the +/- or numeric keys.						
		Display		ription	Setting range	Initial setting	
		COUNT		g counts of the cleaning guidance tion (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.						
		pletion the stop key. The so	creen foi	selecting a maintenance item No. is	displayed.		

1-3-110

Maintenance item No.	Description					
U327	Setting the cassette heater control Description Sets the cassette heater control. Purpose To change the setting according to the machine installation environment.					
	Method 1. Press the start key. 2. Select the item.					
	Display	Description				
	MODE Setting	Setting the cassette heater control				
	Option Heater	Optional cassette heater installed/not Installed setting				
	Setting: [MODE Setting] 1. Select the item.					
	Display	Description				
	OFF	Cassette heater OFF				
	MODE1	Cassette heater ON during sleep mode				
	MODE2	Cassette heater ON during sleep mode and standby				
	Initial setting: OF 2. Press the start k	F ey. The setting is set.				
	Setting: [Option Heater] 1. Select the item.					
	Display	Description				
	NONE	Optional cassette heater not Installed				
	EXISTS	Optional cassette heater installed				
	Initial setting: NO 2. Press the start k	DNE ey. The setting is set.				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
U328	Side ejection setting Description Sets whether to eject t Purpose Set according to the p	to the side of the machine when an optional curl eliminator is installed.				
	Setting 1. Press the start k 2. Select ON or OF					
	Display	Description				
	ON	To eject to the side of the machine				
	OFF	Not to eject to the side of the machine				
		F ey. The setting is set. ower switch off and on.				

U332 Setting the size conversion factor Description Sets the coefficient of nonstandard sizes in relation to the A4/Letter size and to display the result in user simulation. Purpose To set the coefficient for converting the black ratio for nonstandard sizes in relation to the A4/Letter size. Setting 1 Press the start key. 2 Change the setting using the +/- or numeric keys. Display Description Setting range Initial setting Calculation Rate Size parameter 0.1 to 3.0 1.0 3. Press the start key. The value is set. Completion Press the start key. The screen for selecting a maintenance item No. is displayed. U340 Setting Altor and pile mode Description Altor and pile memory allocation if insufficient memory available for the printer to use as a working arc Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1 Press the start key. 2 Change the setting using the +/- or numeric	item No.	Description							
1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Calculation Rate Size parameter 0.1 to 3.0 1.0 3. Press the start key. The value is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U340 Setting the applied mode Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Adj. image. Image Memory Area temporarily used to create output Adj. image. Image Memory Adj. +190 Image Memory Adj. +110 Image Memory Adj. +110 <td< th=""><th>U332</th><th colspan="6">Description Sets the coefficient of nonstandard sizes in relation to the A4/Letter size. The coefficient set here is used to convert the black ratio in relation to the A4/Letter size and to display the result in user simulation. Purpose To set the coefficient for converting the black ratio for nonstandard sizes in relation to the A4/Letter size.</th></td<>	U332	Description Sets the coefficient of nonstandard sizes in relation to the A4/Letter size. The coefficient set here is used to convert the black ratio in relation to the A4/Letter size and to display the result in user simulation. Purpose To set the coefficient for converting the black ratio for nonstandard sizes in relation to the A4/Letter size.							
Calculation Rate Size parameter 0.1 to 3.0 1.0 3. Press the start key. The value is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U340 Setting the applied mode Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Area temporarily used to create output Adj. 0 to 400 (MB) 0 Image Memory Adj. Detail Area temporarily used to hold downloaded Adj. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. ± 190 Image Memory Adj. Detaile : ±1 3. Press the start key. The value is set. 4. Turn the main power switch off and on. Supplement		1.	Press the start key.	sing the +/- or numeric keys.					
 3. Press the start key. The value is set. Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U340 Setting the applied mode Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting Press the start key. Change the setting using the +/- or numeric keys. Display Description Area temporarily used to create output to ta 400 (MB) timage Memory Area temporarily used to hold downloaded to 400 (MB) to 400 (MB) the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. ±+190 Image Memory Adj. ±+190 Image Memory Adj. Detaile :+1 Press the start key. The value is set. Supplement 			Display	Description	Setting range	Initial setting			
Completion Press the stop key. The screen for selecting a maintenance item No. is displayed. U340 Setting the applied mode Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Image Memory Area temporarily used to create output font and other data. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. : +190 Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 3. Press the start key. The value is set. 4. Turn the main power switch off and on. Supplement			Calculation Rate	Size parameter	0.1 to 3.0	1.0			
Dress the stop key. The screen for selecting a maintenance item No. is displayed. U340 Setting the applied mode Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Adj. Image. Image Memory Adj. Area temporarily used to create output font and other data. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. = +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 3. Turm the main power switch off and on. Supplement		3.	Press the start key. 1	he value is set.]			
Description Allocates memory to ensure that there is sufficient memory available for the printer to use as a working are Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occurs Setting 1. Press the start key. 2. Change the setting using the +/- or numeric keys. Display Description Setting Image Memory Area temporarily used to create output on the top of top of the top of top			-	reen for selecting a maintenance item No. is	displayed.				
Display Description Setting range Initial setting Image Memory Area temporarily used to create output image. 0 to 400 (MB) 0 Adj. Image Memory Area temporarily used to hold downloaded font and other data. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 4. Turn the main power switch off and on. Supplement Supplement Supplement Supplement Supplement Supplement		Purpose Modify the memory allocation if insufficient memory for transparency support or XPS direct printing occu Setting							
Image Memory Adj. Area temporarily used to create output image. 0 to 400 (MB) 0 Image Memory Adj. Detail Area temporarily used to hold downloaded font and other data. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 4. Turn the main power switch off and on.		Z.			Sotting range	Initial sotting			
Image Memory Adj. Detail Area temporarily used to hold downloaded font and other data. 0 to 400 (MB) 0 Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 4. Turn the main power switch off and on.				•					
Set the values below in case print failure occurs with the memory shortage. (recommended value) Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 4. Turn the main power switch off and on. Supplement			Image Memory	Area temporarily used to hold downloaded	0 to 400 (MB)	0			
		4. Supp	 Image Memory Adj. : +190 Image Memory Adj. Detaile : +1 3. Press the start key. The value is set. 4. Turn the main power switch off and on. Supplement						

Maintenance item No.		Description
U341	Description Sets a paper feed locatio Purpose To use a paper feed loca	ation setting for printing function n specified for printer output (only if a printer kit is installed). tion only for printer output. ecified for printer output cannot be used for copy output.
		ed location for the printer. tte can be selected.
	Display	Description
	CASSETTE 1	Cassette 1
	CASSETTE 2	Cassette 2
	CASSETTE 3	Cassette 3 (optional paper feeder)
	CASSETTE 4	Cassette 4 (optional paper feeder)
	LCF	Optional 3000-sheet paper feeder
	When an optional p 3. Press the start key.	paper feed device is not installed, the corresponding count is not displayed. The setting is set.
	Completion Press the stop key. The s	screen for selecting a maintenance item No. is displayed.
	Setting 1. Press the start key. 2. Select ON or OFF.	equency 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.	
	Completion Press the stop key. The s	screen for selecting a maintenance item No. is displayed.

laintenance tem No.			Description	
U345	Desc Sets numb Wher count Purp	ription when to display outer of copies the the difference reaches the s ose	or maintenance due indication y a message notifying that the time for maintenance is about to at can be made before the current maintenance cycle ends. between the number of copies of the maintenance cycle and the et value, the message is displayed. for maintenance due indication.	
	Settin 1. 2.	Press the star	t key. etting using the +/- or numeric keys.	
		Display	Description	Setting range
		COUNT	Time for maintenance due indication (Remaining number of copies that can be made before the current maintenance cycle ends)	0 to 9999
	3.	Press the star	t key. The value is set.	

ntenance m No.			Description	n				
J402	Desc Adjus Purp Make	ription sts margins for ose the adjustmer	of image printing image printing. It if margins are incorrect.					
	1.	stment Press the start Select the iten						
		Display	Description	Setting range	Initial setting	Change in value per step		
		LEAD	Printer leading edge margin	0 to 10.0	4.0	0.1 mm		
		A	Printer left margin	0 to 10.0	3.0	0.1 mm		
		С	Printer right margin	0 to 10.0	3.0	0.1 mm		
		TRAIL	Printer trailing edge margin	0 to 10.0	3.9	0.1 mm		
	4. 5.	Press the syst Change the se	t key to output a test pattern. em menu key. etting value using the +/- or numeric keys		es the margin	n narrower.		
	Increasing the value makes the margin wider, and decreasing it makes the margin narrower. Printer leading edge margin (3.0 ± 2.5 mm) Printer left margin (2.0 +2.0/-1.5 mm) Printer trailing edge margin							
	(3.0 ± 2.5 mm) Figure 1.3-22							
	Figure 1-3-22 7. Press the start key. The value is set.							
	Caution Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments in maintenance mode. U402 U403 (P.1-3-116) U404 (P.1-3-117) Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.							

Maintenance item No.



Adjusting margins for scanning an original on the contact glass

Description

Adjusts margins for scanning the original on the contact glass. Purpose

Make the adjustment if margins are incorrect.

Adjustment

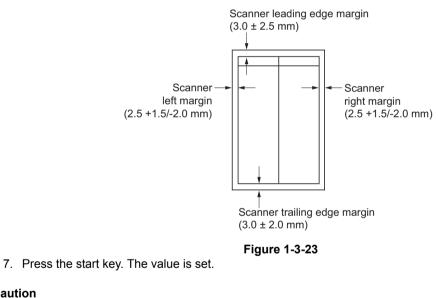
1. Press the start key. 2. Select the item

•							
	Display	Description	Setting range	Initial setting	Change in value per step		
	A MARGIN	Scanner left margin	0 to 10.0	2.0	0.5 mm		
	B MARGIN	Scanner leading edge margin	0 to 10.0	2.0	0.5 mm		
	C MARGIN	Scanner right margin	0 to 10.0	2.0	0.5 mm		
	D MARGIN	Scanner trailing edge margin	0 to 10.0	2.0	0.5 mm		

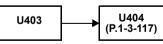
- 3. Press the system menu key.
- 4. Place an original and press the start key to make a test copy.

5. Press the system menu key.

6. Change the setting value using the +/- keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrower.



Check the copy image after the adjustment. If the image is still incorrect, perform the following adjustments in maintenance mode.



Completion

Caution

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

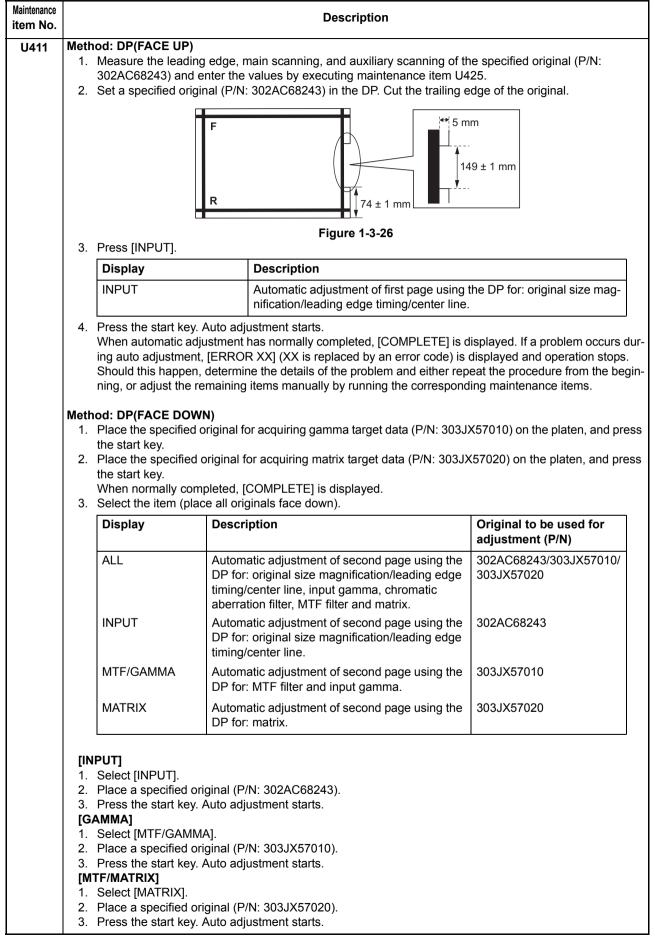
U403

Maintenance tem No.	Description							
U404	Adjusting margins for scanning an original from the DP Description Adjusts margins for scanning the original from the DP.							
	Purpose Make the adjustment	if margins are incorrect.						
	Caution Before making this ac	ljustment, ensure that the following adju	stments have	been made	in maintenance mo			
	U402 (P.1-3-115)	U403 (P.1-3-116) U404						
	Adjustment							
	 Press the start i Select the item. 	key.						
	Display	Description	Setting range	Initial setting	Change in value per step			
	A MARGIN	Left margin	0 to 10.0	3.0	0.5 mm			
	B MARGIN	Leading edge margin	0 to 10.0	2.5	0.5 mm			
	C MARGIN	Right margin	0 to 10.0	3.0	0.5 mm			
	D MARGIN	Trailing edge margin	0 to 10.0	4.0	0.5 mm			
	A MARGIN (BACK)*	Left margin (second side)	0 to 10.0	3.0	0.5 mm			
	B MARGIN (BACK)*	Leading edge margin (second side)	0 to 10.0	2.5	0.5 mm			
	C MARGIN (BACK)*	Right margin (second side)	0 to 10.0	3.0	0.5 mm			
	D MARGIN (BACK)*	Trailing edge margin (second side)	0 to 10.0	4.0	0.5 mm			
	 *: Dual scan DP only. 3. Press the system menu key. 4. Place an original on the DP and press the start key to make a test copy. 5. Press the system menu key. 6. Change the setting value using the +/- keys. Increasing the value makes the margin wider, and decreasing it makes the margin narrower. 							
	Leading edge margin (3.0 ± 1.5 mm)							
		(2.0 ± 1.0 mm)	(2.0 ± 1.0 m	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		Trailing edge mar (2.0 ± 1.0 mm)	rgin					
	7. Press the start I	Figure 1-3-24 key. The value is set.	L					
	Completion Press the stop key. TI	ne screen for selecting a maintenance it	em No. is dis	plaved.				

Maintenance item No.			Description				
U407	Adjusting the leading edge registration for memory image printing Description Adjusts the leading edge registration during memory copying. Purpose Make the following adjustment if there is a regular error between the leading edge of the copy image on the front face and that on the reverse face during duplex switchback copying.						
		e making this adju	U402 P.1-3-115) U066 (P.1-3-41) (P	tments have U403 21-3-116)	e been made U07' (P.1-3-	1	
		U404 1-3-117)	U407				
		stment Press the start ke	ey.				
		Display	Description	Setting range	Initial setting	Change in value per step	
		ADJUST DATA	Leading edge registration for memory image printing	-47 to 47	0	0.1 mm	
			e 1, decrease the value. e 2, increase the value. Image on front face Copy example 1	Copy example 2			
	6.	Press the start ke	Figure 1-3-25 ey. The value is set.				
		pletion s the stop key. The	e screen for selecting a maintenance ite	em No. is dis	played.		

Maintenance item No.	Description			
U410	of the halftone or the ID corre Purpose	data acquisition that is required in order to perform either automatic adjustment ction operation. Also the color table is changed when an offset occurs. f reproduced halftones has dropped. Also when an offset occurs, the setting of		
	Method 1. Press the start key. 2. Select the item.			
	Display	Description		
	Continuous Adjustmen	t Executing the automatic adjustment of the halftone		
	Table Config	Switching the color table		
	 Method: [Continuous Adjustment] Select [Continuous Adjustment]. Press the start key. A test pattern 1 is 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 (first time). A test pattern 2 is outputted. 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 (second time). A test pattern 3 is outputted. Place the output test pattern 3 as the original. Place approximately 20 sheets of white paper on the test pattern 3 as the original. Place approximately 20 sheets of white paper on the test pattern 3 as the original. Place approximately 20 sheets of white paper on the test pattern 3 as the original. Place approximately 20 sheets of white paper on the test pattern 3 and set them. Press the start key. Adjustment is made (second time). A test pattern 3 is outputted. Place the output test pattern 3 as the original. Place approximately 20 sheets of white paper on the test pattern 3 and set them. Press the start key. Adjustment is made (third time). When normally completed, [ALL COMP.] is displayed. If a problem occurs during auto adjustment, error code is displayed. 			
	Codes	Description		
	S01	Order error		
	S02	Patch not detected		
	S03	Original deviation in the main scanning direction		
	S04	Original deviation in the auxiliary scanning direction		
	S05	Original inclination error		
	E01 E02	Engine error Sensor error		
	C01	Controller error		
	C01 C02 (C/M/Y/K)	Adjustment value error		
	C03 (C/M/Y/K)	Adjustment value error		

Maintenance item No.	Description									
U410		Method: [Table Config]								
		Select [Table Config]. Select the item.								
	2.	Display		Description						
		Table1		Normal color table						
		Table2		Color table for offset improvement						
		Initial setting: Table1								
	3.	Press the start key. T	he setti	ng is set.						
		pletion s the stop key. The scr	een for	selecting a maintenance item No. is disp	blayed.					
U411	Desc Uses			c ally matically adjusts the following items in th	e scanner and the DP scanning					
	sections. Purpose To perform automatic adjustment of various items in the scanner and the DP scanning sections.									
		Press the start key.	screen	or executing is displayed.						
		Display	Descr	iption	Original to be used for adjustment (P/N)					
		SCANNER	Autom	atic adjustment in the scanner section	302FZ56990					
		DP(FACE UP)		atic adjustment in the DP scanning n (first page)	302AC68243					
		DP(FACE DOWN)*	Autom	atic adjustment in the DP scanning n (second page)	302AC68243/303JX57010/ 303JX57020					
		*: Dual scan DP only.								
	1. 2.	nance item U425.		a are shown on the specified original (P/N 302FZ56990) on the platen.	I: 302FZ56990) executing maint					
		Display	De	scription						
		ALL		Automatic adjustment using the platen for: original size magnification/ leading edge timing/center line, input gamma, chromatic aberration filter, MTF filter and matrix.						
		INPUT		tomatic adjustment using the platen for: on ading edge timing/center line.	original size magnification/					
		C.A.	Au	tomatic adjustment using the platen for:	chromatic aberration filter.					
		MTF	Au	tomatic adjustment using the platen for: I	MTF filter.					
		GAMMA	Au	tomatic adjustment using the platen for: i	nput gamma.					
		MATRIX		tomatic adjustment using the platen for:						
	4.	during auto adjustment	stment nt, [ERI	ustment starts. has normally completed, [COMPLETE] is ROR XX] (XX is replaced by an error cod etermine the details of the problem and e	e) is displayed and operation					



nance No.		Description
11	When adjusting	selected, the adjustment of [INPUT], [MTF/GAMMA] and [MATRIX] can be executed at once g, place the three specified originals, and then press the start key. 303JX57020, and then place 303JX57010 and 302AC68243 in order on the top of the orig
	ing auto adj Should this	natic adjustment has normally completed, [COMPLETE] is displayed. If a problem occurs du ustment, [ERROR XX] (XX is replaced by an error code) is displayed and operation stops. happen, determine the details of the problem and either repeat the procedure from the begin ust the remaining items manually by running the corresponding maintenance items.
	Error Codes	
	Codes	Description
	ERROR 01	Black band detection error (scanner leading edge registration)
	ERROR 02	Black band detection error (scanner center line)
	ERROR 03	Black band detection error (scanner main scanning direction magnification)
	ERROR 04	Black band is not detected (scanner leading edge registration)
	ERROR 05	Black band is not detected (scanner center line)
	ERROR 06	Black band is not detected (scanner main scanning direction magnification)
	ERROR 07	Black band is not detected (scanner auxiliary scanning direction magnification)
	ERROR 08	Black band is not detected (DP main scanning direction magnification far end)
	ERROR 09	Black band is not detected (DP main scanning direction magnification near end)
	ERROR 0a	Black band is not detected (DP auxiliary scanning direction magnification leading edge)
	ERROR 0b	Black band is not detected (DP auxiliary scanning direction magnification leading edge
	ERROR 0c	Black band is not detected (DP auxiliary scanning direction trailing edge)
	ERROR 0d	Black band is not detected (DP auxiliary scanning direction trailing edge 2)
	ERROR 0e	DMA time out
	ERROR 0f	Auxiliary scanning direction magnification error
	ERROR 10	Auxiliary scanning direction leading edge detection error
	ERROR 11	Auxiliary scanning direction trailing edge detection error
	ERROR 12	Auxiliary scanning direction skew 1.5 error
	ERROR 13	Maintenance request error
	ERROR 14	Main scanning direction center line error
	ERROR 15	Main scanning direction skew 1.5 error
	ERROR 16	Main scanning direction magnification error
	ERROR 17	Service call error
	ERROR 18	DP paper misfeed error
	ERROR 19	PWB replacement error
	ERROR 1a	Original error

Maintenance item No.			Description	
U412		developing/trar	nsfer density in the drum axis direction by Inner and adjusting LSU light quantity.	scanning directly the density di
	Purpose		m unit or laser scanner unit.	
	Method 1. Press the start			
		n. The screen f	or executing is displayed.	
	Display	- Danaita	Description	
	Adjust Uneve	-	Executing the uneven density correction	
	ON/OFF Cont	lig	Uneven density correction ON/OFF settin	g
	 Place approxin Press the start A test pattern i Place approxin Press the start Place approxin Press the start Press the start 	Uneven Densit Value]. s outputted wit nately 20 shee key. A test par s outputted wit nately 20 shee key. A test par nately 20 shee key.		n and place as the original. Test pattern by 20%. In and place as the original.
	sheet) A test pattern i 10. Place approxin 11. Press the start 12. Place approxin 13. Press the start The correction Retry (2nd time) 14. If the correction sheet) A test pattern i 15. Place approxin 16. Press the start 17. Place approxin 18. Press the start The correction If a problem of	s outputted wit nately 20 shee key. A test par nately 20 shee key. result is check n is not comple s outputted wit nately 20 shee key. A test par nately 20 shee key. result is check cours during au	eted normally, [Retry] is displayed and a ter th light quantity setting lower than the 3rd + ts of white paper on the output test pattern ttern is outputted. (5th sheet) ts of white paper on the output test pattern eted. When normally completed, [COMPLE eted normally, [Retry] is displayed and a ter th light quantity setting lower than the 5th t ts of white paper on the output test pattern tern is outputted. (7th sheet) ts of white paper on the output test pattern tern is outputted. (7th sheet) ts of white paper on the output test pattern eted. When normally completed, [COMPLE to correction, error code is displayed. of an engine error.	test pattern by 20%. In and place as the original. In and place as the original. ITE] is displayed. Itest pattern is outputted. (6th test pattern by 20%. In and place as the original.
	Error codes	,		
	Codes	Descriptio	on	Corrective measures
	S01	Order erro		Check the original
	S02	Patch not	detected	Check the original
	S03		eviation in the main scanning direction	Check the original
		_		
	S04	Original de	eviation in the auxiliary scanning direction	Check the original

Maintenance item No.			Description	
U412		ng: [ON/OFF Config] Select ON or OFF.		
		Display	Description	
		ON	Uneven density correction	n is enabled
		OFF	Uneven density correction	n is disabled
	2.	ON is automatically set Press the start key. The	after the correction is complete. e value is set.	
		pletion s the stop key. The scree	en for selecting a maintenance it	em No. is displayed.
U425	Desc Enter enter Purp Perfo	s the measurement valu ose rms data input in order	ue of the chart (P/N: 302AC68243	t (P/N: 302FZ56990) used for adjustment. Also 3) used for adjustment. nals during automatic adjustment.
		od Press the start key. Select the item to be se	et.	
		Display	Description	
		CCD	Entering the target values adjustment	of the chart (P/N: 302FZ56990) used for
		DP	Entering the measuremen used for adjustment	t value of the chart (P/N: 302AC68243)
		CIS	Execution is not required	
		ng: [CCD] Select the item to be se Display	et. Description	
		N875	-	r the original for adjustment
		N475		r the original for adjustment
		N125	v .	r the original for adjustment
		CYAN		the original for adjustment
		MAGENTA		n for the original for adjustment
		YELLOW	0 0 1	or the original for adjustment
		RED	Setting the red patch for the	
		GREEN		r the original for adjustment
		BLUE		the original for adjustment
		ADJUST ORIGINAL	Setting the main and auxil	liary scanning directions
	2.	Select the item to be se	et.	
		Display	Description	Setting range
		L	Setting the L value	0.0 to 100.0
		А	Setting the A value	-200.0 to 200.0
		В	Setting the B value	-200.0 to 200.0
		Enters the value that is Press the start key. The	indicated on the back of the cha e value is set.	Int using the +/- or numeric keys.

Maintenance item No.	Description
U425	 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
	Left edge 30 mm 148.5 mm 267 mm 4 Black belt (b) 10 mm Black belt (a) 10 mm Black belt (a) 10 mm Black belt (a) Corginal for adjustment (P/N: 302FZ56990) Figure 1-3-27

Maintenance item No.	Description
U425	 Setting: [DP] Measure the distance from the leading edge to the black belt (inside) of the original at A. Enter the measured value using the +/- keys in [LEAD]. Measure the distance from the left edge to the black belt (inside) of the original at B. Enter the measured value using the +/- keys in [MAIN SCAN]. Measure the distance from the black belt of leading edge (inside) to the black belt of trailing edge (inside) of the original at C. Enter the measured value using the +/- keys in [SUB SCAN]. Press the start key. The value is set.
	Original for adjustment (P/N: 302AC68243) Figure 1-3-28
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.

	Description		alance						
	To change the balance	Description Displays and changes the density for each color during copying in the various image quality modes.							
	Method 1. Press the start ke 2. Select the image		de. The setting screen for the sele	cted item is displaye	d.				
	Display		Description						
	Text + Photo		Density of each color in the text &	& photo mode					
	Photo		Density of each color in the photo	o mode					
	Printed photo		Density of each color in the printed photo mode Density of each color in the text mode Density of each color in the map mode						
	Text								
	Мар								
	Printed Documer	nt	Density of each color in the ptinted document mode						
	Display		iption	Setting range	Initial setting				
	CYAN		of the cyan setting	-5 to 5	0				
	MAGENTA YELLOW		of the magenta setting	-5 to 5 -5 to 5	0				
	BLACK		of the yellow setting of the black setting	-5 to 5	0				
			_		0				
	 Increasing the value darkens the density and decreasing it lightens the density. Press the start key. The value is set. 								
,	Supplement While this maintenance item is being executed, copying from an original is available in interrupt copying (which is activated by pressing the system menu key).								
	Completion Press the stop key. The	screen foi	selecting a maintenance item No	. is displayed.					

the value for the e processing is per ose ccording to the pre od Press the start key Select the item to Display Full Color Mono Color	r the setting exposure c formed as eference of y. be set. Th lity mode. g value us Desci	ng data for exposure centering adjust centering adjustment is set to -1 and s though the exposure centering ad of the user. The setting screen for the selected ite Description Exposure offset setting for the ful Exposure offset setting for the black	d you change the of justment setting is + em is displayed. I color mode	ifset value to +2, +1.
Select the item to Display Full Color Mono Color Pg Select image qual Change the setting Display Text Text + Photo	lity mode. g value us Offset	Description Exposure offset setting for the full Exposure offset setting for the black sing the +/- or numeric keys. cription	I color mode ack and white mode Setting range	Initial setting
Full Color Mono Color Select image qual Change the setting Display Text Text + Photo	g value us Desci Offset	Exposure offset setting for the ful Exposure offset setting for the bla sing the +/- or numeric keys.	ack and white mode	Initial setting
Mono Color Ig Select image qual Change the setting Display Text Text + Photo	g value us Desci Offset	Exposure offset setting for the blassing the +/- or numeric keys.	ack and white mode	Initial setting
Ig Select image qual Change the setting Display Text Text + Photo	g value us Desci Offset	sing the +/- or numeric keys.	Setting range	Initial setting
Select image qual Change the setting Display Text Text + Photo	g value us Desci Offset	sing the +/- or numeric keys.		
Text Text + Photo	Offset	•		
Text + Photo				
		et value for the text & photo mode	-3 to 3	0
		et value for other modes	-3 to 3	0
If the setting value Press the start key lement this maintenance n is activated by pr bletion	e is decrea y. The valu item is bei ressing the	ing executed, copying from an origi e system menu key).	ering adjustment va nal is available in inf	lue, images is ligh
ו ר	this maintenance is activated by p letion	this maintenance item is be is activated by pressing th letion	this maintenance item is being executed, copying from an origi is activated by pressing the system menu key). Ietion	this maintenance item is being executed, copying from an original is available in in is activated by pressing the system menu key).

Maintenance item No.		Description
U464	calibration during printing. A tings. Purpose To restrict calibration when by enabling custom settings preferences. Performs AC calibration wh Supplement	tion) on or off. Also, this determines the duration of calibration and the timing of also, this allows individual settings for calibration operation by enabling custom set poor image quality is generated. Also, this allows individual settings for calibration in setting the calibration cycle under the machine defaults depending on the use en replacing the developing or drum unit. Set the [Set Custom] setting to ON and select [System Menu] \rightarrow [Adjustment/
	1. Press the start key.	set. The setting screen for the selected item is displayed.
	Display	Description
	Permission	Setting to turn calibration on/off
	Set Time Interval	Setting the interval time of calibration after printing
	Set Sleep Period for Calib	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.
	Permission Act.(50sheets)	Turning paper interval calibration on/off after continuously printing 50 pages
	Permission (ON/Sleep out)	Setting execution parameters for calibration when powered up or reverted from auto-sleep
	Permission (AP/NE)	Paper interval calibration ON/OFF setting at the time of calibration/near end after toner feed
	SetCalib Timing duringPrint	Setting the standard time for judging whether or not to carry out calibration based on the continuous print driving time during printing.
	Set Interval CalibDriveTime	Setting the standard time for judging whether or not to carry out paper inter- val calibration based on the driving time during printing.
	Set Interval CalibPrint Rate	Setting the standard printing ratio for judging whether or not to carry out cal- ibration based on the printing ratio when printing the tenth sheet.
	Set Custom	Turning custom settings on/off in setting the calibration cycle under the system menu
	AC Calibration	Executing the AC calibration
	Target Value	Setting the sensor target values for toner thick layer calibration and light amount calibration
	PrintRate(B/W)	Setting the proportion of black/white printing at which black/white calibra- tion is executed during color printing.
	AC Calib Magnification	AC calibration target bias value setting
	SetInt.Calib PrintRate(H)	Setting the standard printing ratio for judging whether or not to carry out cal- ibration based on the printing ratio when printing the tenth sheet (half speed).
	Set Calib TimingduringPrint(H)	Setting the standard time for judging whether or not to carry out calibration based on the continuous print driving time during printing (half speed).
	AC Calib Type	Mode setting for AC calibration bias control

110.	o. Description							
64		Setting: [Permission] 1. Select ON or OFF.						
		Display		Description				
		ON		Turns calibration ON				
		OFF		Turns calibration OFF				
	2.	Initial setting: ON Press the start ke	y. The setti	ng is set.				
		ng: [Set Time Inte Change the settin		ing the +/- or numeric keys.				
		Display	Des	cription	Setting range	Initial setting		
		COUNT	Setti	ng the interval time of calibration	0 to 9999 (s)	480		
	2.	Press the start key	y. The valu	e is set.		1		
		ng: [Set Sleep Pe Change the settin		alib] ing the +/- or numeric keys.	-			
		Display	Des	cription	Setting range	Initial setting		
		Time(min)	Setti	ng the standard time of sleep mode	0 to 480 (min)	60		
	2.	Press the start key. The value is set.						
		Setting: [Permission Act.(50sheets)] 1. Select ON or OFF.						
		Display		Description				
		ON		Enables permission to execute at co		-		
		OFF		Disables permission to execute at c	ontinuously 50 pa	iges		
	2.	Initial setting: ON 2. Press the start key. The setting is set.						
	Setting: [Permission (ON/Sleep out)] 1. Select ON or OFF.							
		Select ON or OFF						
				Description				
		Select ON or OFF				50°C/122°F at		
		Select ON or OFF Display		Description Executes calibration if fuser temperation	ep mode			
	1.	Select ON or OFF Display ON		Description Executes calibration if fuser tempera power-up or recovery from auto slee Executes calibration regardless of fu recovery from auto sleep mode	ep mode			
	1. 2. Setti	Select ON or OFF Display ON OFF Initial setting: ON	y. The setti	Description Executes calibration if fuser tempera power-up or recovery from auto slee Executes calibration regardless of fu recovery from auto sleep mode	ep mode			
	1. 2. Setti	Select ON or OFF Display ON OFF Initial setting: ON Press the start key ng: [Permission (y. The setti	Description Executes calibration if fuser tempera power-up or recovery from auto slee Executes calibration regardless of fu recovery from auto sleep mode	ep mode			
	1. 2. Setti	Select ON or OFF Display ON OFF Initial setting: ON Press the start key ng: [Permission (Select ON or OFF	y. The setti	Description Executes calibration if fuser tempera power-up or recovery from auto slee Executes calibration regardless of fu recovery from auto sleep mode ng is set.	ep mode user temperature	at power-up or		
	1. 2. Setti	Select ON or OFF Display ON OFF Initial setting: ON Press the start key ng: [Permission (A Select ON or OFF Display	y. The setti	Description Executes calibration if fuser temperation power-up or recovery from auto sleet Executes calibration regardless of furecovery from auto sleep mode ng is set. Description Paper interval calibration at the time	ep mode user temperature	at power-up or		
	1. 2. Setti	Select ON or OFF Display ON OFF Initial setting: ON Press the start key ng: [Permission (Select ON or OFF Display ON	y. The setti	Description Executes calibration if fuser temperation or recovery from auto sleet Executes calibration regardless of furecovery from auto sleep mode ng is set. Description Paper interval calibration at the time toner feed is carried out Paper interval calibration at the time	ep mode user temperature	at power-up or		

Display Fiming(sec) Fress the start ress the start (intervention) Fime(sec) Fime(sc) Fim(sc) Fime(sc) Fime(sc) Fime(sc) Fime(sc) Fim(sc) Fime(sc) Fim	key. Th al Calib they. Th key. Th al Calib they they wel(%)	ue using the +/- keys. Description Setting the drive standard time of continuous print e value is set. DriveTime] ue using the +/- keys. Description Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	Setting range 300 to 3600 (s) Setting range 300 to 3000 (s) Setting range	Initial setting 1800 Initial setting 600 Initial setting				
Fiming(sec) ress the start p: [Set Interv hange the se Display Fime(sec) ress the start p: [Set Interv hange the se Display Fhreshold Lev ress the start	al Calib etting val key. Th al Calib etting val	Setting the drive standard time of contin- uous print e value is set. DriveTime] ue using the +/- keys. Description Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	300 to 3600 (s) Setting range 300 to 3000 (s) Setting range	1800 Initial setting 600				
ress the start : [Set Interv hange the se Display Fime(sec) ress the start : [Set Interv hange the se Display Fhreshold Lev ress the start	al Calib etting val key. Th al Calib etting val	uous print e value is set. DriveTime] ue using the +/- keys. Description Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	Setting range 300 to 3000 (s) Setting range	Initial setting 600				
: [Set Interv hange the se Display Time(sec) ress the start : [Set Interv hange the se Display Threshold Lev ress the start	al Calib etting val key. Th al Calib etting val	DriveTime] ue using the +/- keys. Description Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	300 to 3000 (s) Setting range	600				
hange the se Display Fime(sec) ress the start p: [Set Interv hange the se Display Fhreshold Lev ress the start	tting val key. Th al Calib tting val vel(%)	ue using the +/- keys. Description Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	300 to 3000 (s) Setting range	600				
Fime(sec) ress the start : [Set Interv hange the se Display Threshold Lev ress the start	al Calib etting val	Setting the drive standard time e value is set. PrintRate] ue using the +/- or numeric keys. Description	300 to 3000 (s) Setting range	600				
ress the start : [Set Interv hange the se Display Fhreshold Lev ress the start	al Calib etting val	e value is set. PrintRate] ue using the +/- or numeric keys. Description	Setting range					
j: [Set Interv hange the se Display Threshold Lev ress the start	al Calib etting val	PrintRate] ue using the +/- or numeric keys. Description		Initial setting				
Display Threshold Lev ress the start	vel(%)	Description		Initial setting				
Threshold Lev ress the start		•		initial setting				
ress the start		Sotting the standard printing ratio	0 to 100 (%)	20				
		Setting the standard printing ratio		20				
 Press the start key. The value is set. Setting: [Set Custom] Select ON or OFF. 								
Display	Descri	ption						
NC	Set to c	custom settings in setting the calibration cyo	cle under the syst	em menu				
OFF	Set to s	standard settings in setting the calibration c	vcle under the sy	stem menu				
Initial setting: OFF 2. Press the start key. The setting is set. Setting: [AC Calibration] 1. Select the color of the replaced developing unit or drum unit.								
		-						
ress ON/OFF the machine ress the start /hen normally /hen an error	is install key. AC comple occurs,	led at high altitude, select [High Altitude]. calibration is executed. ated, [Complete] is displayed. an error code is displayed.	-					
	DFF itial setting: (ress the start clect the color Display CYAN AGENTA FELLOW BLACK ligh Altitude ress ON/OFF the machine ress the start hen normally hen an error	OFF Set to s itial setting: OFF ress the start key. Th : [AC Calibration] elect the color of the Display CYAN MAGENTA 'ELLOW BLACK ligh Altitude ress ON/OFF. the machine is instal ress the start key. AC hen normally comple hen an error occurs,	OFF Set to standard settings in setting the calibration c itial setting: OFF ress the start key. The setting is set. : [AC Calibration] replaced developing unit or drum unit. Display Description CYAN Developing unit C or drum unit C MAGENTA Developing unit M or drum unit M YELLOW Developing unit Y or drum unit Y BLACK Developing unit K or drum unit K ligh Altitude Overall setting for installation at high altitude	OFF Set to standard settings in setting the calibration cycle under the synthial setting: OFF ress the start key. The setting is set. : [AC Calibration] elect the color of the replaced developing unit or drum unit. Display Description CYAN Developing unit C or drum unit C MAGENTA Developing unit M or drum unit M YELLOW Developing unit Y or drum unit Y BLACK Developing unit K or drum unit K Overall setting for installation at high altitude ress ON/OFF. the machine is installed at high altitude, select [High Altitude]. ress the start key. AC calibration is executed. hen normally completed, [Complete] is displayed. hen an error occurs, an error code is displayed.				

же Э.			Description					
	Error codes							
	Codes	Des	scription					
	1	Cov	Cover open detection					
	2	2 Toner empty detection						
	3	Wa	Waste toner full detection					
	11/12/13/14	Coi	nnector removed or failure of PWB (cyan /	yellow / magenta	/ black)			
	15/16/17/18	For	eign matter in developing unit (cyan / yello	ı / yellow / magenta / black)				
	19/20/21/22	Dis	charging of developing bias is not detected	d (cyan / yellow / n	nagenta / black)			
	etting: [Target Value 1. Select the item. 2. Change the setti	-	lue using the +/- keys.					
	Display		Description	Setting range	Initial setting			
	Thickness Calib	o C	Toner thick layer calibration (cyan)	0 to 1000	500			
	Thickness Calib	М	Toner thick layer calibration (magenta)	0 to 1000	500			
	Thickness Calib	γ	Toner thick layer calibration (yellow)	0 to 1000	500			
	Thickness Calib Addition Bias K		Bias for addition in toner thick layer calibration (black)	-100 to +100	10			
	Gamma Calib C	;	Light amount calibration (cyan)	0 to 500	300			
	Gamma Calib M	/	Light amount calibration (magenta)	0 to 500	300			
	Gamma Calib Y	/	Light amount calibration (yellow)	0 to 500	300			
	Gamma Calib K	(Light amount calibration (black)	0 to 500	300			
Se	 Press the start key. The value is set. ting: [PrintRate(B/W)] Change the setting value using the +/- or numeric keys. 							
	Display		Description	Setting range	Initial setting			
	Threshold Leve	l(%)	Proportion of black/white printing	0 to 100 (%)	50			
	2. Press the start key. The value is set.							
	etting: [AC Calib Magnification] 1. Select the item. 2. Change the setting value using the +/- keys.							
	Display		Description	Setting range	Initial setting			
	CYAN		Target bias value (cyan)	-10 to 5	0			
	MAGENTA		Target bias value (magenta)	-10 to 5	0			
	YELLOW		Target bias value (yellow)	-10 to 5	0			
	BLACK		Target bias value (black)	-10 to 5	0			
:	3. Press the start k	ey. Th	ne value is set.					

laintenance em No.	Description				
U464	Setting: [SetInt.Calib PrintRate(H)] 1. Change the setting value using the +/- or numeric keys.				
		Display	Description	Setting range	Initial setting
		Threshold Level(%)	Setting the standard printing ratio	0 to 100 (%)	10
	2.	Press the start key. Th	ne value is set.		
	Setting: [Set Calib TimingduringPrint(H)] 1. Change the setting value using the +/- keys.				
		Display	Description	Setting range	Initial setting
		Timing(sec)	Setting the drive standard time of contin- uous print	300 to 3600 (s)	600
	2. Press the start key. The value is set.				
	Setting: [AC Calib Type] 1. Select MODE1 or MODE2.				
		Display	Description		
		MODE1	Execute AC calibration by normal bi	ias control	
		MODE2	Execute AC calibration by fixed bias	s value	
	Initial setting: MODE1				
	2.	Press the start key. Th	ie setting is set.		
		pletion s stop key. The screen [.]	for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	
			for selecting a maintenance item No. is disp	blayed.	

Maintenance item No.	Description					
U465	Data reference for ID correction Description References the data related to ID correction. Purpose To check the corresponding data.					
	Method1. Press the start key.2. Select the item to be reference. The screen for the selected item is displayed.					
	Display	Description				
	TCONT	Developing bias control value after ID correction				
	XYZ (C)	Data of grayscale variance for cyan				
	XYZ (M)	Data of grayscale variance for magenta				
	XYZ (Y)	Data of grayscale variance for yellow				
	XYZ (K)	Data of grayscale variance for black				
	LASER POWER	Scaling factor to the value determined in light amount calibration				
	Bias Calib	Sensor value for toner thick layer calibration				
	Displaying: [TCOUNT] 1. Select [TCOUNT]. The current value is displayed.					
	Display	Description				
	BEFORE (C)	Developing bias control value for cyan before ID correction				
	BEFORE (M)	Developing bias control value for magenta before ID correction				
	BEFORE (Y)	Developing bias control value for yellow before ID correction				
	BEFORE (K)	Developing bias control value for black before ID correction				
	AFTER (C)	Developing bias control value for cyan after ID correction				
	AFTER (M)	Developing bias control value for magenta after ID correction				
	AFTER (Y)	Developing bias control value for yellow after ID correction				
	AFTER (Y) AFTER (K)	Developing bias control value for yellow after ID correction Developing bias control value for black after ID correction				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed.				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C)	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M)	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y)	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M)	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y) DATA1 - 8 (K) Displaying: [LASER PO	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow) Data of grayscale variance (black)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y) DATA1 - 8 (K) Displaying: [LASER PO	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow) Data of grayscale variance (black)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y) DATA1 - 8 (Y) DATA1 - 8 (K) Displaying: [LASER POV 1. Select [LASER POV	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow) Data of grayscale variance (black) WER] WER]. The current value is displayed. Description				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y) DATA1 - 8 (Y) DATA1 - 8 (K) Displaying: [LASER POV 1. Select [LASER POV Display	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow) Data of grayscale variance (black) WER]. VER]. The current value is displayed. Description Scaling factor to the value determined in light amount calibration (black)				
	AFTER (K) Displaying: [XYZ] 1. Select [XYZ (C)], [X Display DATA1 - 8 (C) DATA1 - 8 (M) DATA1 - 8 (Y) DATA1 - 8 (Y) DATA1 - 8 (K) Displaying: [LASER POV 1. Select [LASER POV Display LASER POWER K	Developing bias control value for black after ID correction YZ (M)], [XYZ (Y)] or [XYZ (K)]. The current value is displayed. Description Data of grayscale variance (cyan) Data of grayscale variance (magenta) Data of grayscale variance (yellow) Data of grayscale variance (black) WER] WER]. The current value is displayed. Description Scaling factor to the value determined in light amount calibration (black) Scaling factor to the value determined in light amount calibration (cyan)				

Maintenance item No.			Description
U465	Displ 1.	laying: [Bias Calib] Select [Bias calib]. The cu	urrent value is displayed.
		Display	Description
		Bias Calib Density K	Sensor value for toner thick layer calibration (black)
		Bias Calib Density C	Sensor value for toner thick layer calibration (cyan)
		Bias Calib Density M	Sensor value for toner thick layer calibration (magenta)
		Bias Calib Density Y	Sensor value for toner thick layer calibration (yellow)
		pletion	for selecting a maintenance item No. is displayed.

nce I o .			Description				
67	Setting the color registration adjustment Description Sets the color registration adjustment and transfer belt speed correction. Also, determines the conditions by which color registration correction is executed depending on the LSU temperature. Purpose If color variance is uneven due to a sensor failure, etc., turn this off and temporarily make a manual adjustment.						
	Method Press the start key. Select the item to be set. 						
	Display		Description				
	Color Regist Adjus	stment	Setting the color registration correct	ion operation			
	Transfer Belt Spee	ed Adj.	Setting the transfer belt speed correction operation				
	Set Timing						
	Setting: [Color Regist A 1. Select ON or OFF.	Adjustmer	nt]				
	Display		Description				
	ON		Enables the color registration correct	ction operation.			
	OFF		Disables the color registration corre	ction operation.			
	Initial setting: ON 2. Press the start key. The setting is set. Setting: [Transfer Belt Speed Adj.]						
	1. Select ON or OFF.	opeeu Au	1 .1				
	Display		Description				
	ON		Enables the transfer belt speed corr	ection operation.			
	OFF		Disables the transfer belt speed cor	rection operation			
	Initial setting: ON 2. Press the start key.	The settir	ng is set.		,		
	Setting: [Set Timing] 1. Change the setting	value usir	ng the +/- or numeric keys.				
	Display	Descri	ption	Setting range	Initial setting		
	TIMING		ions for execution depending on the mperature variation	2 to 10	10		
	2. Press the start key.	The value	e is set.				
	Completion Press the stop key. The s	screen for	selecting a maintenance item No. is	displayed.			

Description					
Checking the color registration data Description Displays the color registration correction data and transfer belt speed correction data. Purpose To check the corresponding data.					
1.	Method 1. Press the start key.				
Ζ.		ence. The screen for the selected item is displayed.			
	Display Auto Adjustment(C)	Description Display the auto color registration adjustment value for cyan			
	Auto Adjustment(M) Auto Adjustment(Y)	Display the auto color registration adjustment value for magenta Display the auto color registration adjustment value for yellow			
	Manual Adjustment(C)	Display the manual color registration adjustment value for year			
	Manual Adjustment(C)	Display the manual color registration adjustment value for tragenta			
	Manual Adjustment(W)	Display the manual color registration adjustment value for magenta Display the manual color registration adjustment value for yellow			
	Speed Adjustment	Display the transfer speed adjustment value			
	opeeu / ajuotinent				
	playing: [Auto Adjustment Select [Auto Adjustment(C The current value is displa Display)], [Auto Adjustment(M)] or [Auto Adjustment(Y)].			
	Main Scan(C)/(M)/(Y)	Auto color registration adjustment value of the main scanning direct			
		tion			
	Sub Scan(C)/(M)/(Y)	Auto color registration adjustment value of the auxiliary scanning direction			
	Sub Scan(C)/(M)/(Y) Magnification(C)/(M)/(Y)	Auto color registration adjustment value of the auxiliary scanning			
	Magnification(C)/(M)/(Y) playing: [Manual Adjustme Select [Manual Adjustmen The current value is displa Display	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] et(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description			
	Magnification(C)/(M)/(Y) playing: [Manual Adjustmen Select [Manual Adjustmen The current value is displa	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed.			
	Magnification(C)/(M)/(Y) playing: [Manual Adjustme Select [Manual Adjustmen The current value is displa Display	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description Manual color registration adjustment value of the main scanning direction			
	Magnification(C)/(M)/(Y) playing: [Manual Adjustmen The current value is displa Display Main Scan(C)/(M)/(Y)	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description Manual color registration adjustment value of the main scanning direction Manual color registration adjustment value of the auxiliary scanning			
Dis	Magnification(C)/(M)/(Y) playing: [Manual Adjustmen The current value is displa Display Main Scan(C)/(M)/(Y) Sub Scan(C)/(M)/(Y) Magnification 1 - 6	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description Manual color registration adjustment value of the main scanning direction Manual color registration adjustment value of the auxiliary scanning direction Manual color registration adjustment value of the magnification Manual color registration adjustment value of the magnification			
Dis	Magnification(C)/(M)/(Y) playing: [Manual Adjustmen The current value is displa Display Main Scan(C)/(M)/(Y) Sub Scan(C)/(M)/(Y) Magnification 1 - 6 (C)/(M)/(Y) playing: [Speed Adjustment]	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description Manual color registration adjustment value of the main scanning direction Manual color registration adjustment value of the auxiliary scanning direction Manual color registration adjustment value of the magnification Manual color registration adjustment value of the magnification			
Dis	Magnification(C)/(M)/(Y) playing: [Manual Adjustmen The current value is displa Display Main Scan(C)/(M)/(Y) Sub Scan(C)/(M)/(Y) Magnification 1 - 6 (C)/(M)/(Y) playing: [Speed Adjustment The current value is displa	Auto color registration adjustment value of the auxiliary scanning direction Auto color registration adjustment value of the magnification ent] ht(C)], [Manual Adjustment((M)] or [Manual Adjustment((Y)]. ayed. Description Manual color registration adjustment value of the main scanning direction Manual color registration adjustment value of the auxiliary scanning direction Manual color registration adjustment value of the magnification Manual color registration adjustment value of the magnification Manual color registration adjustment value of the magnification Manual color registration adjustment value of the magnification			

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

laintenance tem No.				Description					
U470	Desc Sets Purp	ose	or JPE	EG images in each image quality mode		le, in order to softe			
	To change the setting in accordance with the image that the user is copying. For example, in ord the coarseness of the image when making copies at over 200% magnification, change the level sion by raising the value. Lowering the value will increase the compression and thereby lower the ity; Raising the value will increase image quality but lower the image processing speed.								
	1.	ethod 1. Press the start key. 2. Select the item to be set. The setting screen for the selected item is displayed.							
		Display		Description					
		System		Compression ratio for temporary stor	age in system				
		Сору		Compression ratio for copying					
		Send		Compression ratio for sending					
	1.		lue usi	ing the +/- or numeric keys.		T			
					Setting range	Initial setting			
			Bright	ness differential	1 to 100	90			
		C	1 to 100	90					
	Setti 1.	Press the start key. The ng: [Copy] Select the item to be s	et.						
	Setti 1.	ng: [Copy] Select the item to be s Change the setting va	et. lue usi	ing the +/- or numeric keys.	Setting range	Initial setting			
	Setti 1.	ng: [Copy] Select the item to be s Change the setting va Display	et. lue usi Descr	ing the +/- or numeric keys.	Setting range 1 to 100	Initial setting			
	Setti 1.	ng: [Copy] Select the item to be s Change the setting va Display Text Y	et. lue usi Desci Bright	ing the +/- or numeric keys.		-			
	Setti 1.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C	et. lue usi Desci Bright Color	ing the +/- or numeric keys. iption ness in the text mode	1 to 100	90			
	Setti 1.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y	et. lue usi Descr Bright Color Bright	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode	1 to 100 1 to 100	90 90			
	Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y	et. lue usi Desci Bright Color Bright Color	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode	1 to 100 1 to 100 1 to 100 1 to 100	90 90 90			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. Th ng: [Send] Select [Text], [Photo] c Select the item to be s	et. lue usi Descr Bright Color Bright Color ie valu	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set.	1 to 100 1 to 100 1 to 100 1 to 100	90 90 90			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. Th ng: [Send] Select [Text], [Photo] c Select the item to be s	et. Iue usi Descr Bright Color Bright Color Bright color et. Iue usi	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF].	1 to 100 1 to 100 1 to 100 1 to 100	90 90 90			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. The ng: [Send] Select [Text], [Photo] of Select the item to be s Change the setting va	et. Iue usi Descr Bright Color Bright Color e valu or [HC- et. Iue usi Desc	ing the +/- or numeric keys. •iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. •PDF]. ing the +/- or numeric keys.	1 to 100 1 to 100 1 to 100 1 to 100 5 to 100	90 90 90 90			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be so Change the setting var Display Text Y Text C Photo Y Photo C Press the start key. The ng: [Send] Select [Text], [Photo] of Select the item to be so Change the setting var Display	et. lue usi Descr Bright Color Bright Color le valu or [HC- et. lue usi Desc Brigh	ing the +/- or numeric keys. ription ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF]. ing the +/- or numeric keys. cription	1 to 100 1 to 100 1 to 100 1 to 100 1 to 100 Setting range	90 90 90 90 90			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. The ng: [Send] Select [Text], [Photo] of Select the item to be s Change the setting va Display Text Y (1) to (5)	et. Iue usi Descr Bright Color Bright Color et. Iue usi Desc Brigh Colo	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF]. ing the +/- or numeric keys. cription htness in the text mode	1 to 100 1 to 100 1 to 100 1 to 100 1 to 100 Setting range 1 to 100	90 90 90 90 90 90 90 90 90 90 90 90 90 9			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be as Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. Th ng: [Send] Select [Text], [Photo] of Select the item to be as Change the setting va Display Text Y (1) to (5) Text C (1) to (5)	et. lue usi Descr Bright Color Bright Color le value or [HC- et. lue usi Desc Brigh Colo Brigh	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF]. ng the +/- or numeric keys. cription ntness in the text mode r differential in the text mode	1 to 100 1 to 100 1 to 100 1 to 100 1 to 100 Setting range 1 to 100 1 to 100 1 to 100	90 90 90 90 90 90 90 90 90 90 90 90 90 9			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be s Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. The ng: [Send] Select [Text], [Photo] of Select the item to be s Change the setting va Display Text Y (1) to (5) Text C (1) to (5) Photo Y (1) to (5)	et. lue usi Descr Bright Color Bright Color e valu or [HC- et. lue usi Desc Bright Colo Bright Colo	ing the +/- or numeric keys. ription ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF]. ing the +/- or numeric keys. cription ntness in the text mode r differential in the text mode ntness in the photo mode	1 to 100 1 to 100	90 90 90 90 90 90 90 90 90 90 90 90 90 9			
	Setti 1. 2. 3. Setti 1. 2.	ng: [Copy] Select the item to be as Change the setting va Display Text Y Text C Photo Y Photo C Press the start key. Th ng: [Send] Select [Text], [Photo] of Select the item to be as Change the setting va Display Text Y (1) to (5) Text C (1) to (5) Photo Y (1) to (5) Photo C (1) to (5)	et. lue usi Descr Bright Color Bright Color Ine value or [HC- et. lue usi Desc Brigh Colo Brigh Colo Brigh	ing the +/- or numeric keys. iption ness in the text mode differential in the text mode ness in the photo mode differential in the photo mode e is set. PDF]. ng the +/- or numeric keys. cription ntness in the text mode r differential in the text mode r differential in the photo mode r differential in the photo mode r differential in the photo mode	1 to 100 1 to 100	90 90 90 90 90 90 90 90 90 90 90 90 90 9			

Maintenance item No.	Description					
U470		blement				
	While this maintenance item is being executed, copying from an original is available in interrupt copying mode (which is activated by pressing the system menu key).					
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
U473	Desc Adjus enter Purp Enter	exposure density con ose	wer for rection	tion data after replacing the laser sca		
	Method1. Press the start key.2. Select the item to be set or checked.					
		Display		Description		
		Set Sensitivity		Indication of drum sensitivity correct	tion value of each	every color
		Adjust LSU Laser Po	ower	LSU laser output value of each ever	y color	-
		Density Correction		The setting whether or not correct th	-	
		Input Density Adjust	Value	Exposure density correction value		
		Set Density (EmitTime/Dot)		Setting the LSU laser output		
	1.	The current value is c Display	lisplaye	ed. Description		
		C (Full)		Cyan drum sensitivity correction val	ue	
		M (Full)		Magenta drum sensitivity correction value		
		Y (Full)		Yellow drum sensitivity correction value		
	K (Full) K(BW)			Black drum sensitivity correction value		
				Drum sensitivity correction value in black/white mode		
		C (Half)		Cyan drum sensitivity correction val	ue	
		M (Half)		Magenta drum sensitivity correction	value	
		Y (Half)		Yellow drum sensitivity correction value		
		ue				
	1.	ng: [LSU laser outpu Select the item to be Change the value usi	set.	-		
		Display	Desci	ription	Setting range	Initial setting
		LSU LD Power (C)	Laser	output value for cyan	-128 to 127	16
		LSU LD Power (M)	Laser	output value for magenta	-128 to 127	16
		LSU LD Power (Y)	Laser	output value for yellow	-128 to 127	16
		LSU LD Power (K)	Laser	output value for black	-128 to 127	16
		LSU LD Power (K) BW		aser output value for black in white mode	-128 to 127	16
	3.	Press the start key. T	he valu	e is set.		

	Description							
73		ng: [Density Correction Select ON or OFF.	1]					
		Display	Description					
		ON	Correct the sensitivity					
		OFF	Do not correct the sensitivity					
	2.	Initial setting: ON Press the start key. The	setting is set.					
	Setting: [Input Density Adjust Value] 1. Select the color.							
		Display	Description					
		CYAN	Exposure density correction value for cyan	1				
		MAGENTA	Exposure density correction value for mag	enta				
		YELLOW	Exposure density correction value for yello	W				
		BLACK Exposure density correction value for black						
	2.	Enter the setting value of	on the sheet suppled with LSU using the +/- or no	umeric keys.				
		Display	Description	Setting range				
		X0 (C) - X10 (C)	Enter the setting value for cyan	-30 to 30				
		X0 (M) - X10 (M)	Enter the setting value for magenta	-30 to 30				
		X0 (Y) - X10 (Y)	Enter the setting value for yellow	-30 to 30				
		X0 (K) - X10 (K)	Enter the setting value for black	-30 to 30				
		ng: [Set Density(EmitT Select [BLACK] or [ALL]].					
		Display	Description					
		BLACK	LSU laser output for black					
		ALL	LSU laser output for all colors					
	2.	ALL Select the item.	· · ·					
	2.		LSU laser output for all colors Description					
	2.	Select the item. Display 0 (100%)	Description LSU laser output (100%)					
	2.	Select the item. Display 0 (100%) 1 (90%)	Description LSU laser output (100%) LSU laser output (90%)					
	2.	Select the item. Display 0 (100%) 1 (90%) 2 (80%)	DescriptionLSU laser output (100%)LSU laser output (90%)LSU laser output (80%)					
	2.	Select the item. Display 0 (100%) 1 (90%)	Description LSU laser output (100%) LSU laser output (90%)					
		Select the item. Display 0 (100%) 1 (90%) 2 (80%)	DescriptionLSU laser output (100%)LSU laser output (90%)LSU laser output (80%)LSU laser output (70%)					
	3. Supp When	Select the item. Display 0 (100%) 1 (90%) 2 (80%) 3 (70%) Initial setting: ALL: 0 Press the start key. The Display	Description LSU laser output (100%) LSU laser output (90%) LSU laser output (80%) LSU laser output (70%) setting is set. Power Output] or [Input Density Adjust Value], c	opying from an original is ava				
	3. Supp When able Com	Select the item. Display 0 (100%) 1 (90%) 2 (80%) 3 (70%) Initial setting: ALL: 0 Press the start key. The plement n selecting [Adjust Laser in the interrupt copying n pletion	Description LSU laser output (100%) LSU laser output (90%) LSU laser output (80%) LSU laser output (70%) setting is set. Power Output] or [Input Density Adjust Value], c					

Maintenance item No.	Description						
U474	Checking LSU cleaning operation Description Provides cleaning LSU by means of the LSU cleaning clutch and LSU cleaning solenoid. Also, the cleaning cycle can be adjusted.						
		od Press the start key. Select the item.					
		Display		Description			
		Cleaning Operation		Executing the cleaning operation			
		Cleaning Cycle		Setting the cleaning cycle			
		Cleaning Setting		Setting the cleaning operation			
	1. 2. Setti n 1.	od: [Cleaning Opera Select [Cleaning Opera Press the start key. C ng: [Cleaning Cycle] Select [Cleaning Cyc Change the setting v	eration]. Cleaning e].	the LSU slit glass.			
		Display	Descr	iption	Setting range	Initial setting	
		Cleaning Cycle		ing cycle	0 to 5000	1000	
		The setting can be changed by 1000 per step. 3. Press the start key. The value is set. Setting: [Cleaning Setting]					
		Change the setting u		e +/- keys.			
		Display		ription			
		0	LSU c	leaning operation is not executed at s	startup or sleep re	ecovery.	
		1	LSU c	leaning operation is executed at start	up and sleep rec	overy.	
	2.	Initial setting: 1 Press the start key. T	he setti	ng is set.			
		pletion a the stop key. The sc	reen for	r selecting a maintenance item No. is o	displayed.		

ance No. 35	Setting the image pro Description Sets the detection leve	-	Description ode	confidential docur	nent quard 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 detection in ning. Also, changes the process of how PDF images are rotated.				-	
	Method 1. Press the start ke 2. Select the item.	ey.				
	Display		Description			
	Conf. Doc. Dete	ction	Confidential document guard detection	ction level		
	PDF Rotate		Processing the rotation of PDF ima	ages		
	Display Conf. Doc. Detection	Desc Confid level	ing +/- or numeric keys. ription dential document guard detection etection sensitivity but increases the	Setting range	Initial setting 1 detection.	
	A larger value lov 2. Press the start ke Setting: [PDF Rotate]	vers the de ey. The valu	tection sensitivity but decreases the			
	Display		escription			
	0	-	ns the image rotation with the intern	-		
	1	Assigns the image rotation with the actual image				
	Initial setting: 0 2. Press the start ke	ey. The valu	le is set.			
	Completion Press the stop key. The	e screen fo	r selecting a maintenance item No. i	s displayed.		

aintenance em No.	Description					
U486	Description When color and E Purpose To ensure produc However, selectir	ack and white operation mode B/W documents are mixed, sets operation mode after a color document is detected. Stivity when copying color and B/W documents in ACS mode, select MODE3. Ing MODE3 will increase the maintenance count for cyan, magenta, and yellow color devel- tion there is a B/W original after a color original.				
	Setting 1. Press the st 2. Select the M	tart key.				
	Display	Description				
	MODE1	Line speed: Color and B/W line speed is switched according to each original Controlling developing motor MCY: Color and B/W mode is switched according to each original				
	MODE2	Line speed: Fixed at color line speed Controlling developing motor MCY: Color and B/W mode is switched according to each original				
	MODE3	Line speed: Fixed at color line speed on and after a color original Controlling developing motor MCY: Fixed at color mode on and after a color original				
	AUTO	Automatic selection of MODE1 to 3 depending on the using pattern				
	Completion	tart key. The setting is set. ey. The screen for selecting a maintenance item No. is displayed.				

2KY-1

	Description				
U510	Setting the enterprise mode Description Sets whether or not the application function (DBA) is enabled. Purpose According to user request, changes the setting.				
	2.	ng Press the start key. Select [MODE1]. Select the item.			
		Display	Description		
		ON	Application function is enabled		
		OFF	Application function is disabled		
		INSTALL	Executing the install		
		UNINSTALL	Executing the uninstall		
	4.	Initial setting: ON (Ir Press the start key.	nch specifications)/OFF (Metric specifications) The setting is set.		
	3. 4. 5. 6. 7.	When normally com			

Maintenance item No.		Description				
U901	Checking copy counts by paper feed locations Description Displays or clears copy counts by paper feed locations. Purpose To check the time to replace consumable parts.					
	Method 1. Press the start key. The counts by paper feed locations are displayed.					
	Display	Description				
	MP TRAY	MP tray				
	CASETTE 1	Cassette 1				
	CASETTE 2	Cassette 2				
	CASETTE 3	Cassette 3 (optional paper feeder)				
	CASETTE 4	Cassette 4 (optional paper feeder)				
	DUPLEX	Duplex unit				
	LCF	Optional 3000-sheet paper feeder				
	When an optional paper	feed device is not installed, the corresponding count i	s not displayed.			
U902	 Select the counts for all Press the start key. The Completion Press the stop key. The screet Checking/clearing finisher p Description Sets the punch limit and displision Sets the punch limit to notify t punch-hole scrap count if a m 	 4 and LCF cannot be cleared. and press [ALL CLEAR]. counts is cleared. en for selecting a maintenance item No. is displayed. bunch count ays and clears the punch-hole scrap count when 3000 he user of the time to collect punch-hole scrap. Also, u uessage requiring collection of punch-hole scrap is sho scrap is collected with the machine power turned off, th	sed to manually clear the wn on the touch panel			
	 Select the item. Change the value using 	the numeric keys				
	Display	Description	Setting range			
	PUNCH LIMIT (*1000)		0 to 9999000			
	PUNCH WASTE COUNT	Punch-hole scrap count (current number of punch- ing times)	0 to 9999999			
		set in increments of 1000.	1			
	Clearing 1. Enter 0 using the numer 2. Press the start key. The					
	Completion Press the stop key. The scree	en for selecting a maintenance item No. is displayed.				

Maintenance item No.		Description				
U903	Checking/clearing the paper jam counts Description Displays or clears the jam counts by jam locations. Purpose To check the paper jam status. Also to clear the jam counts after replacing consumable parts.					
	Method1. Press the start key.2. Select the item. The screen for selecting an item is displayed.					
	Display	Description				
	Count	Displays/clears the jam counts				
	Total Coun	t Displays the total jam counts				
	Codes for w 2. Change the 3. Select the c 4. Press the st	nt]. The count of jam code by type is displayed. which the count value is 0 are not displayed. screen using the cursor up/down keys. ounts for all jam codes and press [ALL CLEAR]. The individual counter cannot be cleared. art key. The count is cleared.				
	 Method: [Total Count] 1. Select [Total Count]. 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. 					
	Completion Press the stop ke	y. The screen for selecting a maintenance item No. is displayed.				
	Purpose To check the serv Also to clear the s Start 1. Press the st	a the service call code counts by types. ice call code status by types. service call code counts after replacing consumable parts. art key. art key. The screen for selecting an item is displayed.				
	Display	Description				
	Count	Displays/clears the call for service counts				
	Total Coun					
	Codes for w 2. Change the 3. Select the c cleared.	nt]. The count for service call detection by type is displayed. /hich the count value is 0 are not displayed. screen using the cursor up/down keys. ounts for all service call codes and press [ALL CLEAR]. The individual counter cannot be rart key. The count is cleared.				
		ount] I Count]. The total number of service call counts by type is displayed. screen using the cursor up/down keys. The total number of service call count cannot be				
	Completion Press the stop ke	y. The screen for selecting a maintenance item No. is displayed.				

Maintenance item No.			Description
U905	Descript Displays Purpose	the counts of DP or fi	nisher.
	2. Sel		unt of which is to be checked. count of the selected device is displayed.
	Di	splay	Description
	DF	þ	Counts of optional DP
	FI	NISHER	Counts of optional document finisher or 3000-sheet document finisher
	DP		
	Di	splay	Description
	A)P	No. of single-sided originals that has passed through the DP
	R	ADP	No. of double-sided originals that has passed through the DP
	C	DNCURRENT	No. of dual scan originals that has passed through the DP
	Do	cument finisher	
	Di	splay	Description
	CI	P CNT	No. of copies that has passed
	ST	APLE	Frequency the stapler has been activated
	300	0-sheet document fin	nisher
	Di	splay	Description
	CI	P CNT	No. of copies that has passed
	ST	APLE	Frequency the stapler has been activated
	PL	JNCH	Frequency the punch has been activated
	ST	ACK	Frequency the stacker has been activated
	SA	ADDLE	Frequency the center holding has been activated
	Complet Press the		n for selecting a maintenance item No. is displayed.

Maintenance item No.				Descript	ion	
U906	Desc Rese Purp To be		ode for partia	al operation control.	blems in the cassettes or other sections, and the	
	 Method 1. Press the start key. 2. Press [Execute]. 3. Press the start key to reset partial operation control. 4. Turn the main power switch off and on. 					
U908	Checking the total counter value Description Displays the total counter value. Purpose To check the total counter value.					
	Meth 1.		The screen	for total count value	is displayed.	
		Display	D	escription		
		Total Count	То	otal count value		
		pletion s the stop key. The s	screen for se	electing a maintenand	ce item No. is displayed.	
U910	 Clearing the coverage data Description Clears the accumulated data for the digital dot coverage per A4 size paper in all colors. Purpose To clear data as required at times such as during maintenance service. Method 1. Press the start key. 2. Press [Execute]. 3. Press the start key. The digital dot coverage data is cleared. 					
		pletion s the stop key. The s	screen for se	electing a maintenand	ce item No. is displayed.	

Maintenance item No.	Description
U911	Checking/clearing copy counts by paper sizes Description
	Displays and clears the paper feed counts by paper sizes.
	Purpose To check or clear the counts after replacing consumable parts.
	Method Press the start key. The screen for the paper feed counts by paper size is displayed.
	Clearing
	1. Select the paper size to be cleared.
	Select the counts for all and press [ALL CLEAR]. 2. Press the start key. All counts are cleared.
	Completion
	Press the stop key. The screen for selecting a maintenance item No. is displayed.

aintenance em No.				Descri	ption
U917	Desc Retri the n Purp	nachine.	to a US	B memory from the n	nachine; or writes the data from the USB memory to
	Meth 1. 2. 3. 4. 5.	od	on the o witch. n USB i switch ce item.	operation panel, and a memory slot.	after verifying the power indicator has gone off, switcl
		Display		Description	
		Export		-	machine to a USB memory
		Import		-	e USB memory to the machine
	7	Select the item.			
	1.	Display	Desci	iption	Depending data ^{*1}
		Address Book		ss book	-
		Job Accnt.	Job accounting		-
		FAX Forward		ansfer information	Job accounting, user management and docu- ment box information
		One Touch	Inform	ation on one-touch	Address book
		User	User r	nanagements	Job accounting
		Shortcut	Shorto	cut information	Job accountings, user managements and docu- ment box information
		Document Box	Docur	nent box information	Job accountings and user managements
		Program	Program information		Job accountings, user managements and docu- ment box information
		ADDRESS BOOK ONE TOUCH ^{*2}	Address book and Infor- mation on one-touch		Address book and Information on one-touch
	9. 10 Com	written in. *2: When ADDRESS however, Import/E Press the start key. S The progress of sele When an error occur When normally comp Turn the main power	BOOK Export in Starts re- cted iten s, the op pleted, [switch	ONE TOUCH is seled high speed mode is ading or writing. n is displayed in %. peration is canceled a Finished] is displayed off and on after comp	and an error code is displayed (see page 1-3-151).

Maintenance item No.	Description						
U917	Error Codes						
	Codes	Description	Codes	Description			
	321e0001	Parameter error	321e002f	Box open error			
	321e0002	File write error	321e0030	Box close error			
	321e0003	File initialization error	321e0031	Box creation error			
	321e0004	File error	321e0032	Box creation error			
	321e0005	Processing error	321e0033	Box deletion error			
	321e0006	Address book clear error (contact)	321e0034	Box movement error			
	321e0007	Address book open error (contact)	321e0035	Fax memory directory creation error			
	321e0008	Address book list error (contact)	321e0036	Fax memory error in writing			
	321e0009	Address book list error (contact)	321e0037	Fax memory error in reading			
	321e000a	Address book clear error (group)	321e0038	Shortcut error in writing			
	321e000b	Address book open error (group)	321e0039	Shortcut error in reading			
	321e000c	Address book list error (group)	321e003a	Program error in writing			
	321e000d	Address book list error (group)	321e003b	Program error in reading			
	321e000e	Job accounting clear error	321e003c	Address/One Touch directory creation error			
	321e000f	Job accounting file open error	321e003d	Address/One Touch error in writing			
	321e0010	Job accounting file open error	321e003e	Address/One Touch error in reading			
	321e0011	Job accounting error in writing	321e003f	File reading error			
	321e0012	Job accounting list error	321e0040	File writing error			
	321e0013	Job accounting list error	321e0041	Data mismatch			
	321e0014	One-touch open error	321e0042				
	321e0014	One-touch list error	321e0042	Log file open error			
	321e0016	One-touch list error	321e0044	Log file error in writing			
	321e0010 321e0017	User managements backup error	321e0044 321e0045	Directory open error			
	321e0017 321e0018	User managements clear error		Directory error in reading			
	321e0010	User managements file open error	321d0000 321d0001	Unspecified error HDD unavailable			
	321e001a	User managements file open error					
	321e001a		321d0002	USB memory is not inserted			
	321e001b 321e001c	User managements file open error User managements error in writing	321d0003	File for writing is not found in the USE			
		• •	321d0004	File for reading is not found in the HDD			
	321e001d	User managements list error	321d0005	USB error in writing			
	321e001e	User managements list error	321d0006	USB error in reading			
	321e001f	User managements list error	321d0007	USB unmount error			
	321e0020	User managements list error	321d0008	File rename error			
	321e0021	User managements file open error	321d0009	File open error			
	321e0022	User managements error	321d000a	File close error			
	321e0023	User managements error	321d000b	File reading error			
	321e0024	User managements file open error	321d000c	File writing error			
	321e0025	User managements error	321d000d	File copy error			
	321e0026	User managements file open error	321d000e	File compressed error			
	321e0027	User managements error	321d000f	File decompressed error			
	321e0028	Box file open error	321d0010	Directory open error			
	321e0029	Box error in writing	321d0011	Directory creation error			
	321e002a	Box error in reading	321d0012	File writing error			
	321e002b	Box list error	321d0013	File reading error			
	321e002c	Box list error	321d0014	File deletion error			
	321e002d	Box error	321d0015	Log file copy error to the USB			
	321e002e	Box error					

Maintenance item No.			Description		
U920	Checking the copy counts Description Checks the copy counts. Purpose				
		eck the copy counts.			
		Press the start key. The curre	ent counts of full color copy counter, single color copy counter, black and nter counter, black and white printer counter and black and white fax		
		Display	Description		
		Full Color Copy Count	Count value of full color copy		
		Mono Color Copy Count	Count value of single color copy		
		Monochrome Copy Count	Count value of black/white copy		
		Color Printer Count	Count value of color printer		
		Monochrome Printer Count	Count value of black/white printer		
		Monochrome Fax Count	Count value of black/white fax		
		pletion			
	Press the stop key. The screen for selecting a maintenance item No. is displayed. Clearing the all copy counts and machine life counts (one time only)				
	Supp The to or les Meth 1. 2.	s. od Press the start key. Press [EXECUTE].	machine life counter can be cleared only once if all count values are 1000 counts and machine life counts are cleared.		
	[CAN NOT EXECUTE] is displayed if the count cannot be cleared. Completion				
	Press the stop key. The screen for selecting a maintenance item No. is displayed.				
U928	Desc Displa Purp	king machine life counts ription ays the machine life counts. ose eck the machine life counts.			
	Meth 1.		ent machine life counts is displayed.		
		Display	Description		
		LIFE COUNT	Machine life counts		
		pletion the stop key. The screen for	selecting a maintenance item No. is displayed.		

Description Displays the counts of Purpose To check the count after charger roller unit. Method 1. Press the start ke Display Charge Roller C Charge Roller C	count(C) Count value of cyan charge count(M) Count value of magenta count(Y) count value of yellow charge s to be cleared. s for all and press [ALL CLEAR]. ey. The counts is cleared. e screen for selecting a maintenance in for feeding from DP generated when the DP is used.	t. To clear the o oller count for e ger roller ger roller harger roller rger roller em No. is displ	each color i	is displayed.						
 Press the start key Display Charge Roller C Charge Roller Roller C Charge Roller Roller C Charge Roller Roller C Charge Roller Roler Roller Roller Roller Rol	Description count(K) Count value of black char count(C) Count value of cyan charg count(M) Count value of magenta c count(Y) Count value of yellow charg s to be cleared. Count value of yellow charg s to be cleared. S for all and press [ALL CLEAR]. ey. The counts is cleared. S for feeding from DP generated when the DP is used. S used.	ger roller Jer roller harger roller rger roller	layed.							
Display Charge Roller C Charge Roller C Select the counts Setting of deflection f Charge Sthe Start Ke Charge Sthe Start Ke Charge Sthe Start Ke	Description count(K) Count value of black char count(C) Count value of cyan charg count(M) Count value of magenta c count(Y) Count value of yellow charg s to be cleared. Count value of yellow charg s to be cleared. S for all and press [ALL CLEAR]. ey. The counts is cleared. S for feeding from DP generated when the DP is used. S used.	ger roller Jer roller harger roller rger roller	layed.							
Charge Roller C Charge Roller C Charge Roller C Charge Roller C Charge Roller C Clearing 1. Select the counts Select the counts 2. Press the start ke Completion Press the stop key. The Setting of deflection f Description Adjusts the deflection of Purpose Use this mode if an original Setting 1. Press the start ke	count(C) Count value of cyan charge count(M) Count value of magenta of count(Y) Count value of yellow charge s to be cleared. Count value of yellow charge s to be cleared. S for all and press [ALL CLEAR]. ey. The counts is cleared. S for feeding from DP generated when the DP is used. S used.	jer roller harger roller rger roller em No. is displ		vhen the DP is use						
Charge Roller C Charge Roller C Charge Roller C Clearing 1. Select the counts Select the counts 2. Press the start ke Completion Press the stop key. The Setting of deflection f Description Adjusts the deflection of Purpose Use this mode if an original Setting 1. Press the start ke	count(M) Count value of magenta of count(Y) count(Y) Count value of yellow charses s to be cleared. Count value of yellow charses s to be cleared. Count value of yellow charses s to be cleared. Count value of yellow charses s to be cleared. Count value of yellow charses s to be cleared. Count value of yellow charses s to be cleared. Count value of yellow charses ey. The counts is cleared. Counts is cleared. e screen for selecting a maintenance if For feeding from DP generated when the DP is used. Count value of yellow charses	harger roller rger roller em No. is displ		vhen the DP is use						
Charge Roller C Clearing 1. Select the counts Select the counts 2. Press the start ke Completion Press the stop key. The Setting of deflection f Description Adjusts the deflection of Purpose Use this mode if an original Setting 1. Press the start ke	 count(Y) Count value of yellow charses count(Y) Count value of yellow charses count of the count of the coun	rger roller em No. is disp		vhen the DP is use						
Clearing 1. Select the counts Select the counts 2. Press the start ke Completion Press the stop key. The Setting of deflection f Description Adjusts the deflection g Purpose Use this mode if an orig Setting 1. Press the start ke	s to be cleared. s for all and press [ALL CLEAR]. ey. The counts is cleared. e screen for selecting a maintenance it for feeding from DP generated when the DP is used.	em No. is disp		vhen the DP is use						
 Select the counts Select the counts Press the start keep Completion Press the stop key. The Setting of deflection for Description Adjusts the deflection of Purpose Use this mode if an original Setting Press the start keep 	s for all and press [ALL CLEAR]. ey. The counts is cleared. e screen for selecting a maintenance in for feeding from DP generated when the DP is used.			vhen the DP is use						
Press the stop key. The Setting of deflection to Description Adjusts the deflection of Purpose Use this mode if an orig Setting 1. Press the start ke	for feeding from DP			vhen the DP is use						
Setting of deflection f Description Adjusts the deflection of Purpose Use this mode if an orig Setting 1. Press the start ke	for feeding from DP			vhen the DP is use						
· · · · · · · · · · · · · · · · · · ·			 Purpose Use this mode if an original non-feed jam, oblique feed or wrinkling of original occurs when the DP is used Setting Press the start key. 							
2. Select the item to Display	De adjusted.	Setting	Initial	Change in						
REGIST TOP	Deflection of single-sided original	-31 to 31	0	0.176 mm						
	ů ů		-	0.176 mm						
	C C			0.176 mm						
 Place an original Press the system Change the settir The greater the v If an original non- occurs, decrease Press the start ket 	on the DP and press the start key to n in menu key. Ing value using the +/- or numeric keys. value, the larger the deflection; the sma feed jam or oblique feed occurs, incre the value. ey. The setting is set.	iller the value, ase the setting	the smaller value. If w							
	 Place an original Press the system Change the setting The greater the work of an original non- occurs, decrease Press the start kee 	REGIST MIX Deflection of dual scanning 3. Press the system menu key. 4. Place an original on the DP and press the start key to m 5. Press the system menu key. 6. Change the setting value using the +/- or numeric keys. The greater the value, the larger the deflection; the small f an original non-feed jam or oblique feed occurs, increase occurs, decrease the value. 7. Press the start key. The setting is set.	REGIST MIX Deflection of dual scanning -31 to 31 3. Press the system menu key. -31 to 31 4. Place an original on the DP and press the start key to make a test cop 5. Press the system menu key. 6. Change the setting value using the +/- or numeric keys. The greater the value, the larger the deflection; the smaller the value, If an original non-feed jam or oblique feed occurs, increase the setting occurs, decrease the value. 7. Press the start key. The setting is set.	REGIST MIX Deflection of dual scanning -31 to 31 0 3. Press the system menu key. 4. Place an original on the DP and press the start key to make a test copy. 5. Press the system menu key. 6. Change the setting value using the +/- or numeric keys. The greater the value, the larger the deflection; the smaller the value, the smaller If an original non-feed jam or oblique feed occurs, increase the setting value. If w occurs, decrease the value. 7. Press the start key. The setting is set.						

Maintenance item No.		Description					
U964	Checking of log Description Sends a log file saved on the HDD to a USB memory. Purpose To transfer a log file saved on the HDD to a USB memory as a means of investigating malfunctions. Method 1. Insert USB memory in USB memory slot. 2. Turn the main power switch on. 3. Enter the maintenance item.						
	 Enter the maintenance Press the start key. Select [Execute]. Press the start key. Starts sending the log When normally comp When an error occurs 	e item. g file saved on the HDD to the USB memory. leted, [Complete] is displayed. s, an error code is displayed.					
	8. Turn the main power	switch off and on.					
	Error codes	Description					
	Display 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 Description Displays the toner area coo Purpose To check the toner area co Method 1. Press the start key. T	de.					
	Completion Press the stop/clear key. T	he screen for selecting a maintenance item No. is displayed.					

Maintenance item No.		Description			
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. Insert USB memory in USB me 2. Turn the main power switch on 3. Enter the maintenance item. 4. Press the start key. 5. Press [EXECUTE]. 6. Press the start key. 7. Send the print data to the mach Once the print data is stored in 				
	Completion Press the stop key. The screen for se	electing a maintenance item No. is displayed.			
U984	Checking the developing unit num Description Displays the developing unit number Purpose To check the developing unit number				
	Method 1. Press the start key. The developing unit number for each color is displayed.				
	Display	Description			
	DEVELOPING UNIT NO. (C)	Cyan developing unit number			
	DEVELOPING UNIT NO. (M)	Magenta developing unit number			
	DEVELOPING UNIT NO. (Y)	Yellow developing unit number			
	DEVELOPING UNIT NO. (K)	Black developing unit number			
	Completion Press the stop key. The screen for se	electing a maintenance item No. is displayed.			

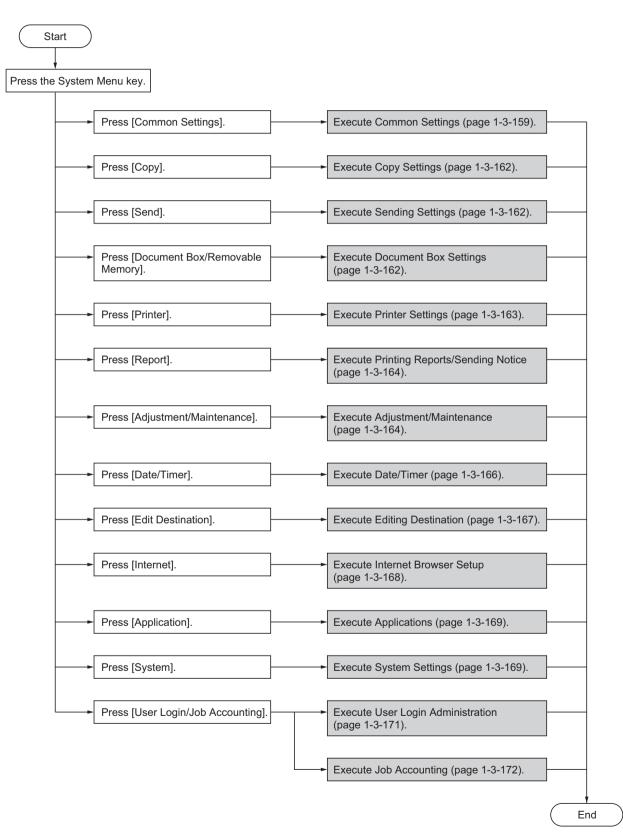
Maintenance item No.	Description					
U985	Displaying the developing unit history Description Indicates the past record of machine number and the developing counter. Purpose To check the machine number and the developing counter.					
	Method 1. Press the start key. 2. Select the color to check.					
	Display	Description				
	DEVELOP HISTORY	(C) Cyan developing unit past record				
	DEVELOP HISTORY	(M) Magenta developing unit past record				
	DEVELOP HISTORY	(Y) Yellow developing unit past record				
	DEVELOP HISTORY	(K) Black developing unit past record				
	The history of a machi	ne number and a developing counter for each color is displayed by three cases.				
	Display	Description				
	MACHINE HISTORY	1 - 3 Historical records of the machine number				
	COUNT HISTORY 1	- 3 Historical records of developing counter				
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					
	 Description Restores data in the hard disk by scanning the disk. Purpose If power is turned off while accessing to the hard disk is performed, the control information in the drive may be damaged. Use this mode to restore the data. Method Press the start key. Press [EXECUTE]. Press the start key. When scanning of the disk is complete, the execution result is displated. Turn the main power switch off and on. 					
U990	Description Displays, clears or changes Purpose	e for the exposure lamp to light the accumulated time for the CIS to light. the CIS. Also to clear the accumulated time for the CIS after replacement.				
	 Method 1. Press the start key. The accumulated time of illumination for the CIS is displayed in minutes. 2. Clear the accumulated time using the +/- or numeric keys. 3. Press the start key. The time is set. 					
	Completion Press the stop key. The screen for selecting a maintenance item No. is displayed.					

Maintenance item No.			Description	
	Desc Displa Purp	king the scanner opera ription ays the scanner operatio ose eck the status of use of t	on count.	
	Meth 1.	od Press the start key.		
		Display	Description	
		COPY SCAN CNT	Scanner operation count for copying	
		FAX SCAN CNT	Scanner operation count for fax	
		OTHER SCAN COUNT	Scanner operation count except for copying	
		pletion s the stop key. The scree	n for selecting a maintenance No. item is displayed.	
		ng the Self-diagnostic f ription	function mode	
	Assig	ins the detection and ope	eration of service calls with normal mode.	
	Purp Switc		peration of service calls from line mode to normal mode.	
	2. 3. Com	pletion	E]. detection and operation of service calls is set as normal mode. on for selecting a maintenance item No. is displayed.	

1-3-2 Management mode

In addition to a maintenance function for service, the machine is equipped with a management function which can be operated by users (mainly by the administrator). In this management mode, settings such as default settings can be changed.

(1) Using the management mode



(2) Common Settings

Switching the Language for Display [Language]

- 1. Press [Change] of Language.
- 2. Press the key for the language you want to use.
- 3. Press [OK].
 - The touch panel language will be changed.

Default Screen

- 1. Press [Change] of Default Screen.
- Select the screen to be displayed as the default screen.
- 3. Press [OK].

Sound

- 1. Press [Next] of Sound and then [Next] of Buzzer.
- 2. Press [Change] of Volume, Key Confirmation, Job Finish, Ready, or Warning.
- 3. Select the buzzer volume level, or other sound options.

Original/Paper Settings

- 1. Press [Next] of Original/Paper Settings and then [Next] of Custom Original Size.
- Press [Change] of any one of Custom 1 to Custom
 4, on which you wish to register the size.
- 3. Press [On], and then press [+], [-] or numeric keys to enter X (horizontal) and Y (vertical) dimensions.
- 4. Press [OK].

Adding a Custom Size and Media Type for Paper to Print

- 1. Paper Settings and then [Next] of Custom Paper Size.
- 2. Press [Change] of any one of Custom 1 to Custom 4, on which you want to register the size.
- Press [On], and then press [+], [-] or numeric keys to enter X (horizontal) and Y (vertical) dimensions. Press [Media Type] to select the type of paper and press [OK] if necessary.
- 4. Press [OK].

Paper Size and Media Type Setup for Cassettes

- Press [Next] of Original/Paper Settings, [Next] of Cassette Setting, [Next] of Cassette 1 to Cassette 4, on which you want to register the size, and then [Change] of Paper Size.
- 2. To detect paper size automatically, press [Auto] and select Metric or Inch for Paper Size. To select paper size, press [Standard Sizes 1] or [Standard Sizes 2] for Paper Size.
- 3. Press [OK]. The previous screen reappears.
- 4. Press [Change] of Media Type to select media type and press [OK].

Paper Size and Media Type Setup for Multi Purpose Tray

- Press [Next] of Original/Paper Settings, [Next] of MP Tray Setting and then [Change] of Paper Size.
- To detect paper size automatically, press [Auto] and select Metric or Inch for Paper Size. To select paper size, press [Standard Sizes 1], [Standard Sizes 2], [Others] or [Size Entry] for Paper Size. If you select [Size Entry], press [+], [-] to enter X (horizontal) and Y (vertical) dimensions. Press [# keys] to enter the paper size using the numeric keys.
- 3. Press [OK]. The previous screen reappears.
- 4. Press [Change] of Media Type to select the media type and press [OK].

Paper Weight

- 1. Press [Next] of Original/Paper Settings and then [Next] of Media Type Setting.
- 2. Press [Next] for the media type whose weight you want to change.
- 3. Press [Change] of Paper Weight.
- 4. Select the weight and press [OK].
- 5. Press [Close]. The previous screen reappears.
- To change the duplex printing settings for Custom 1 (-8), press [Next] of Custom 1(-8) and then [Change] of Duplex. Select [Prohibit] or [Permit] and press [OK]. The previous screen reappears.
- 7. Press [Close].
- 8. To change the name for Custom 1(-8), press [Next] of Custom 1(-8) and then [Change] of Name. Enter the name and press [OK].

Default Paper Source

- 1. Press [Next] of Original/Paper Settings and then [Change] of Default Paper Source.
- 2. Select a paper cassette for the default setting.
- 3. Press [OK].

Automatic Detection of Originals (Available for metric models only)

- 1. Press [Next] of Original/Paper Settings and then [Change] of Original Auto Detect.
- Select [A6] or [Hagaki] of A6/Hagaki. Select [Off] to disable automatic detection or [On] to enable automatic detection of Folio and 11x15" respectively.
- 3. Press [OK].

Media for Auto Selection (Color/B&W)

- Press [Next] of Original/Paper Settings and then [Change] of Media for Auto (Color) or Media for Auto (B & W).
- 2. Select [All Media Types] or any media type for paper selection.
- 3. Press [OK].

Paper Source for Cover Paper

- Press [Next] of Original/Paper Settings, cursor down key and then [Change] of Paper Source for Cover.
- 2. Select the paper source to load cover paper.
- 3. Press [OK].

Special Paper Action

- 1. Press [Next] of Original/Paper Settings, cursor down key and then [Change] of Special Paper Action.
- 2. Select [Adjust Print Direction] or [Speed Priority].
- 3. Press [OK].

Switching Unit of Measurement

- 1. Press [Change] of Measurement.
- 2. Select [mm] for metric or [inch] for inch.
- 3. Press [OK].

Error Handling

- 1. Press [Next] of Error Handling.
- 2. Press [Change] at the error you wish to change the handling.
- Select the error handling method in the selection screen for each of the errors and then press [OK].
- 4. The previous screen appears. To set the handling for a different error, repeat steps 2 and 3.

Paper Output

- 1. Press [Next] of Paper Output.
- 2. Press [Change] of Copy/Custom Box, Printer, FAX Port 1 or FAX Port 2.
- 3. Select Output Tray. For [Finisher Tray], [Tray B], [Tray C] or [Tray 1] to [Tray 7], select [Face Up] (print surface up) or [Face Down] (print surface down) as the paper orientation at output.
- 4. Press [OK].

Orientation Confirmation

- 1. Press [Change] of Orientation Confirmation.
- 2. Select the default for [Off] or [On].
- 3. Press [OK].

Settings for Color Toner Empty Action

- 1. Press [Change] of Color Toner Empty Action.
- 2. Select [Stop Printing] or [Print in Black & White].
- 3. Press [OK].

Function Defaults

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of Original Orientation.
- Select [Top Edge Top] or [Top Edge Left] for the default.
- 3. Press [OK].

Continuous Scan

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of Continuous Scan.
- Select [Off] or [On] for the default. Use the procedure below to select the default quality setting for originals.
- 3. Press [OK].

Original Image

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of Original Image.
- 2. Select the [Text+Photo], [Photo], [Print Photo], [Text], [Map] or [for OCR] as the default.
- 3. Press [OK].

Scan Resolution

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of Scan Resolution.
- 2. Select the default resolution.
- 3. Press [OK].

Color Selection (Copy)

- Press cursor down key, [Next] of Function Defaults and then [Change] of mode Color Selection(Copy).
- 2. Select the default color setting.
- 3. Press [OK].

Color Selection (Send/Store)

- Press cursor down key, [Next] of Function Defaults and then [Change] of mode Color Sel. (Send/ Store).
- 2. Select the default color mode.
- 3. Press [OK].

File Format

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of File Format.
- 2. Select the default file format.
- 3. Press [OK].

File Separation

- 1. Press cursor down key, [Next] of Function Defaults and then [Change] of File Separation.
- 2. Select [Off] or [Each Page].
- 3. Press [OK].

Density

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Density.
- 2. Select the default density.
- 3. Press [OK].

Zoom

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Zoom.
- 2. Select the default zoom setting.
- 3. Press [OK].

File Name Entry

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of File Name Entry.
- 2. Press [File Name] to enter the file name in not more than 32 characters.
- 3. Press [OK].
- Press [Date and Time] to add the date/time to the job, or press [Job No.] to add the job number to the job. The added information will be displayed in Additional Info.
- 5. Press [OK].

E-mail Subject/Body

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key, and then [Change] of E-mail Subject/Body.
- 2. Press [Subject] to enter an E-mail subject not more than 60 characters.
- 3. Press [OK].
- 4. Press [Body] to enter an E-mail Body not more than 500 characters.
- 5. Press [OK].
- 6. Check that the entries are correct and press [OK].

Border Erase Default

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Border Erase Default.
- 2. Press [+] or [-] for the Border and Gutter width to erase.

You can use the number keypad to enter the number directly.

3. Press [OK].

Border Erase to Back Page

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Border Erase to Back Page.
- 2. Select [Same as Front Page] or [Do Not Erase].
- 3. Press [OK].

Margin Default

- Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Margin Default.
- Use the [+] or [-] to enter the margin widths for Left/ Right and Top/Bottom(-0.75 - +0.75). You can use the number keypad to enter the number directly.
- 3. Press [OK].

Auto Image Rotation

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key and then [Change] of Auto Image Rotation.
- 2. Select the default for [Off] or [On].
- 3. Press [OK].

EcoPrint

- Press cursor down key, [Next] of Function Defaults, cursor down key twice, and then [Change] of Eco-Print.
- 2. Select [Off] or [On] for the default.
- 3. Press [OK].

PDF/TIFF/JPEG Image

- Press cursor down key and [Next] of Function Defaults. Press cursor down key twice and then [Change] of PDF/TIFF/JPEG Image.
- Select the default image quality from [1] (Low Quality) to [5] (High Quality).
- 3. Press [OK].

High Comp. PDF Image

- Press cursor down key and [Next] of Function Defaults. Press cursor down key twice and [Change] of High Comp. PDF Image.
- Select the default for [Compression Ratio Priority], [Standard], or [Quality Priority].
- 3. Press [OK].

Color TIFF Compression Settings

- Press cursor down key and [Next] of Function Defaults. Press cursor down key twice and then [Change] of Color TIFF Compression.
- 2. Select [TIFF V6] or [TTN2].
- 3. Press [OK].

Repeat Copying

- Press cursor down key and [Next] of Function Defaults. Press cursor down key twice and [Change] of Repeat Copy.
- 2. Select the default for [Off] or [On].
- 3. Press [OK].

Collate/Offset

- 1. Press cursor down key, [Next] of Function Defaults, cursor down key twice and then [Change] of Collate/Offset.
- 2. Select the defaults for Collate and Offset respectively.
- 3. Press [OK].

JPEG/TIFF Print

- Press cursor down key, [Next] of Function Defaults, cursor down key twice and then [Change] of JPEG/ TIFF Print.
- 2. Select the default for [Fit to Paper Size], [Image Resolution], or [Fit to Print Resolution].
- 3. Press [OK].

XPS Fit to Page

- Press cursor down key, [Next] of Function Defaults, cursor down key twice and then [Change] of XPS Fit to Page.
- 2. Select [Off] or [On] for the default.
- 3. Press [OK].

(3) Copy Settings

Paper Selection

- 1. Press [Change] of Paper Selection.
- 2. Press [Auto] or [Default Paper Source].
- 3. Press [OK].

Auto Paper Selection

- 1. Press [Change] of Auto Paper Selection.
- 2. Press [Most Suitable Size] or [Same as Original
 - Size].
- 3. Press [OK].

Auto % Priority

- 1. Press [Change] of Auto % Priority.
- 2. Select the default for [Off] or [On].
- 3. Press [OK].

Reserve Next Priority

- 1. Press [Change] of Reserve Next Priority.
- 2. Select the default for [Off] or [On].
- 3. Press [OK].

Preset Limit

- 1. Press [Change] of Preset Limit.
- 2. Press [+] or [-] or use the numeric keys to enter the limit for the number of copies.
- 3. Press [OK].

Quick Setup Registration

- 1. Press [Next] of Quick Setup Registration.
- 2. Press [Change] of the function to be registered in Quick Setup.
- 3. Select a key (1-6) allocated on the Quick Setup Registration screen. Press [Off] to delete a key from the Quick Setup.
- 4. Press [OK]. If you overwrite the setting, a confirmation screen appears. Press [Yes].

(4) Sending Settings

Quick Setup Registration

- 1. Press [Next] of Quick Setup Registration.
- 2. Press [Change] of the function to be registered in Quick Setup.
- 3. Select a key (1-6) allocated on the Quick Setup Registration screen. Press [Off] to delete a key from the Quick Setup.
- 4. Press [OK]. If you overwrite the setting, a confirmation screen appears. Press [Yes].

Color Type

- 1. Press [Change] of Color Type.
- 2. Select [RGB] or [sRGB].
- 3. Press [OK].

Setting the Default Send Screen

- 1. Press [Change] of Default Screen.
- 2. Press [Destination] or [Address Book].
- 3. Press [OK].

(5) Document Box Settings

Setting the document deletion time

- 1. Press [Next] of Custom Box, [Next] of Default Setting and then [Change] of Auto File Deletion Time.
- 2. Set the time at which the document is deleted by pressing [+], [-]. Press [# Keys] to enter the time directly using the numeric keys.
- 3. Press [OK].

Quick Copy/Proof and Hold Print Box

Setting the Number of Stored Jobs

- 1. Press [Next] of Job Box, then [Change] of Quick Copy Job Retention.
- 2. Press [+] or [-] to enter the maximum number of stored jobs.
- 3. Press [OK].

Repeat Copy Box

Setting the Number of Stored Jobs

- 1. Press [Next] of Job Box, then [Change] of Repeat Copy Job Retention.
- 2. Press [+] or [-] to enter the maximum number of stored jobs.
- 3. Press [OK].

Automatic Delete Setting for Temporary Documents

- 1. Press [Next] of Job Box, then [Change] of Deletion of Job Retention.
- 2. Select the time for automatic deletion.
- 3. Press [OK].

Quick Setup Registration

- 1. Press [Next] of Quick Setup Registration.
- 2. Press [Next] of Store File, Print or Send.
- 3. Press [Change] of the function to be registered in Quick Setup.
- 4. Select a key (1-6) allocated on the Quick Setup screen. Press [Off] to delete a key from the Quick Setup.
- 5. Press [OK]. If you overwrite the setting, a confirmation screen appears. Press [Yes].

(6) Printer Settings

Emulation

- 1. Press [Change] of Emulation.
- 2. Select the desired emulation.
- 3. Press [OK].

Setting of Alternative Emulation

- 1. Press [Change] of Emulation, [KPDL(Auto)] and then [Alt Emulation].
- Select the desired alternative emulation and then press [OK].
- 3. Press [OK].

Setting of KPDL error report

- 1. Press [Change] of Emulation, [KPDL] or [KPDL(Auto)] and then [KPDL Error Report].
- 2. Press [On] or [Off] and then press [OK].
- 3. Press [OK].

Color Setting

- 1. Press [Change] of Color Setting.
- 2. Select [Color] or [Black & White].
- 3. Press [OK].

EcoPrint

- 1. Press [Change] of EcoPrint.
- 2. Press [Off] or [On].
- 3. Press [OK].

Override A4/Letter

- 1. Press [Change] of Override A4/Letter.
- 2. Press [Off] or [On].
- 3. Press [OK].

Duplex

- 1. Press [Change] of Duplex.
- 2. Press [1-sided], [2-sided Bind LongEdge], or [2-
- sided Bind ShortEdge].
- 3. Press [OK].

Copies

- 1. Press [Change] of Copies.
- 2. Press [+],[-] or the numeric keys to set the default number of copies.
- 3. Press [OK].

Orientation

- 1. Press [Change] of Orientation.
- 2. Press [Portrait] or [Landscape].
- 3. Press [OK].

Form Feed Timeout

- 1. Press cursor down key and [Change] of Form Feed Timeout.
- Press [+] or [-] to set the Form Feed Timeout. You can set the timeout delay in seconds. You cannot use the number keypad to enter this value.
- 3. Press [OK].

LF Action

- 1. Press cursor down key and [Change] of LF Action.
- 2. Press [LF Only], [LF and CR] or [Ignore LF].
- 3. Press [OK].

CR Action

- 1. Press cursor down key and [Change] of CR Action.
- 2. Press [CR Only], [LF and CR] or [Ignore CR].
- 3. Press [OK].

Paper Feed Mode

- 1. Press cursor down key and [Change] of Paper Feed Mode.
- 2. Press [Auto] or [Fixed].
- 3. Press [OK].

(7) Printing Reports/Sending Notice

Printing Reports

- 1. Press [Next] of Print Report.
- Press [Print] for the report you want to print. Printing starts.

A confirmation screen appears. Press [Yes].

Send Result Report

- Press [Next] of Result Report Setting, [Next] of Send Result Report and then [Change] of E-mail/ Folder.
- 2. Press [Off], [On], or [Error Only].
- 3. Press [OK].

(8) Adjustment/Maintenance

Copy Density Adjustment

- 1. Press [Next] of Copy Density Adjustment.
- 2. Press [Change] of Auto or of Manual.
- 3. Press [-3] [+3] (Lighter-Darker) to adjust density.
- 4. Press [OK].

Send/Box Density Adjust

- 1. Press and [Next] of Send/Box Density Adjust.
- 2. Press [Change] of Auto or of Manual.
- 3. Press [-3] [+3] (Lighter-Darker) to adjust density.
- 4. Press [OK].

Drum Refresh

- 1. Press [Next] of Drum Refresh.
- 2. Press [Execute] to Drum Refresh.
- 3. After Drum Refresh is completed, press [OK] to return to the Adjustment/Maintenance screen.

Correcting Fine Black Lines

- 1. Press [Change] of Correcting Black Line.
- 2. Press [Off], [On(Low)] or [On(High)].
- 3. Press [OK].

Display Brightness

- 1. Press [Change] of Display Brightness.
- 2. Press [1] [4] (Darker- Lighter) to adjust brightness.
- 3. Press [OK].

Silent Mode

- 1. Press [Change] of Silent Mode.
- 2. Press [Off] or [On].
- 3. Press [OK].

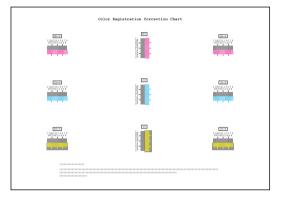
Auto Color Correction

- 1. Press cursor down key and [Change] of Auto Color Correction.
- 2. Press one of keys [1] to [5] (Color B & W) to set the detection level.
- 3. Press [OK].

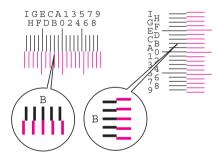
Color Registration

Normal Registration

- 1. Press cursor down key and then [Next] of Color Registration.
- Press [Print] of Chart. A chart is printed. On the chart, for each of M (magenta), C (cyan) and Y (yellow), 3 chart types are printed on one sheet: H-F (left), V (right), H-R (horizontal).



3. Find the location on each chart where 2 lines most closely overlap each other. If this is the 0 position, registration for that color is not required. For the illustration, B is the appropriate value.



- 4. Press [Next] of Registration.
- 5. Press [Change] for the chart to be corrected.
- 6. Press [+] or [-] to enter the values read from the chart and press [OK].

Press [+] to increase the value from 0 to 9. To decrease, press [-].

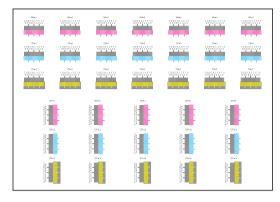
By pressing [-], the value changes from 0 to alphabetic letters, going from A to I. To move in the reverse direction, press [+].

You cannot use the numeric keys to enter these values.

- 7. Repeat steps 5 and 6 to enter the registration values for each chart.
- 8. Press [Execute] after all values have been entered. Color registration begins.
- 9. Press [OK] after color registration is complete.

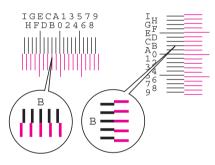
Detailed Settings

- 1. Press cursor down key and then [Next] of Color Registration.
- 2. Press [Detail].
- Press [Print] of Chart (Details). A chart is printed. On the chart, for each of M (magenta), C (cyan) and Y (yellow), charts for H-1 to 7 and V-3 are printed.



4. Find the location on each chart where 2 lines most closely match. If this is the 0 position, registration for that color is not required. For the illustration, B is the appropriate value.

From charts V-1 to V-5, read only the values from V-3 (center).



- 5. Press [Next] of Registration (Details).
- 6. Press [Change] for the chart to be corrected.
- 7. Press [+] or [-] to enter the values read from the chart and press [OK].

Press [+] to increase the value from 0 to 9. To decrease, press [-]. By pressing [-], the value changes from 0 to alphabetic letters, going from A to I. To move in the reverse direction, press [+].

You cannot use the numeric keys to enter these values.

- 8. Repeat steps 6 and 7 to enter the registration values for each chart.
- 9. Press [Execute] after all values have been entered. Color registration begins.
- 10. Press [OK] after color registration is complete.

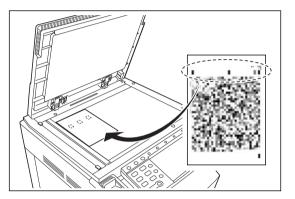
Setting the Color Calibration Cycle

- 1. Press cursor down key and then [Change] of Color Calibration Cycle.
- 2. Select [Auto], [Short], [Standard] or [Long].
- 3. Press [OK].

Gray Adjustment

Normal adjustment

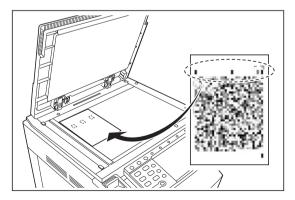
- 1. Press cursor down key and then [Next] of Gray Adjustment.
- 2. Press [Execute]. A color pattern is printed. Check that the number "1" and one magenta box are printed in the top right corner of the color pattern.
- 3. As shown in the illustration, place the printed side down on the platen with the three black boxes aligned to the top.



- 4. Press [Execute]. The color pattern is read and adjustment begins.
- 5. The second color pattern is output. Check that the number "2" and two magenta boxes are printed in the top right corner of the color pattern and then repeat steps 3 and 4.
- 6. Press [OK] in the adjustment end confirmation screen.

Detailed Adjustment

- 1. Press cursor down key and then [Next] of Gray Adjustment.
- 2. Press [Detail].
- 3. Press [Execute]. A color pattern is printed. Check that the number "1" and one magenta box are printed in the top right corner of the color pattern.
- As shown in the illustration, place the printed side down on the platen with the three black boxes aligned to the top.



5. Press [Execute]. The color pattern is read and adjustment begins.

- The second color pattern is printed. Check that the number "2" (to "4") and two (to four) magenta boxes are printed in the top right corner of the color pattern and repeat steps 4 to 6 three times to read color patterns 2, 3 and 4 in sequence.
- 7. Press [OK] in the adjustment end confirmation screen.

Color Calibration

- 1. Press cursor down key and then [Next] of Color Calibration.
- 2. Press [Execute]. Color calibration begins.
- 3. Press [OK] after color calibration is complete.

Developer Refresh

- 1. Press cursor down key and then [Next] of Developer Refresh.
- 2. Press [Execute]. Developer refresh begins.
- 3. Press [OK] after developer refresh is complete.

Laser Scanner Cleaning

- 1. Press cursor down key and then [Next] of Laser Scanner Cleaning.
- 2. Press [Execute]. Laser scanner cleaning begins.
- Press [OK] after laser scanner cleaning is complete.

MP Tray Cleaning

- 1. Press cursor down key and then [Next] of MP Tray Cleaning.
- 2. Load two sheets of A4 or Letter paper in the MP tray
- 3. Press [Execute]. MP Tray Cleaning begins.
- 4. Press [OK] after MP Tray Cleaning is complete.

First Print Position

- 1. Press cursor down key and then [Next] of First Print Position.
- 2. Select [Standard], [Black & White Priority], [Color Priority] or [Auto].
- 3. Press [OK].

System Initialization

- 1. Press [Execute] of System Initialization.
- 2. If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 3. When the confirmation screen appears, press[Yes]. Initialization starts.
- 4. Once the initialization ends, the message Task is completed. Turn the main power switch off and on. appears. Turn the main power switch off.

(9) Date/Timer

Date/Time

- 1. Press [Change] of Date/Time.
- 2. Press [+] or [-] to enter the date and time respectively.
- 3. Press [Off] or [On] of Summer Time and press [OK].

Date Format

- 1. Press [Change] of Date Format.
- 2. Select [MM/DD/YYYY], [DD/MM/YYYY], or [YYYY/ MM/DD] and press [OK].

Time Zone

- 1. Press [Change] of Time Zone.
- 2. Select the location.
- 3. Press [Off] or [On] of Summer Time and press [OK].

Auto Panel Reset

- 1. Press [Change] of Auto Panel Reset.
- 2. Press [Off] or [On].
- 3. Press [OK].

Panel Reset Timer

- 1. Press [Change] of Panel Reset Timer.
- Press [+] or [-] to enter the time until Auto Panel Reset is turned on. You cannot use the number keypad to enter this value.
- 3. Press [OK].

Low Power Timer

- 1. Press [Low Power Timer].
- 2. Press [+],[-] or the numeric keys to enter the time until Low Power Mode is turned on.
- 3. Press [OK].

Auto Sleep

- 1. Press [Change] of Auto Sleep.
- 2. Press [Off] or [On].
- 3. Press [OK].

Sleep Timer

- 1. Press [Change] of Sleep Timer.
- 2. Press [+], [-] or the numeric keys to enter the time until Auto Sleep is turned on.
- 3. Press [OK].

Auto Error Clear ON/OFF

- 1. Press [Change] of Auto Error Clear.
- 2. Press [Off] or [On].
- 3. Press [OK].

Error Clear Timer

- 1. Press cursor down key and then [Change] of Error Clear Timer.
- Press [+] or [-] to enter the time until printing restarts.
 You cannot use the number keypad to enter this

value.

3. Press [OK].

Interrupt Clear Timer

- 1. Press cursor down key and then [Change] of Interrupt Clear Timer.
- 2. Press [+] or [-] to enter the time for the interrupt clear timer.
- 3. Press [OK].

(10) Editing Destination (Address Book/Adding One Touch Keys)

Adding an individual

- 1. Press [Register/Edit] of Address Book, [Add], [Contact] and then [Next].
- 2. To specify the address number, press [Change] in Address Number.
- Press [+],[-] or numeric keys to enter a particular Address Number (1-2500). To have the number assigned automatically, enter "0000"
- 4. Press [OK]. The screen shown in step 2 reappears.
- 5. Press [Change] of Name.
- Enter the destination name (up to 32 characters) to be displayed on the Address Book and press [OK]. The screen shown in step 2 reappears.
- Press [E-mail] to add an e-mail address, [SMB] to add a folder on the computer, or [FTP] to add an FTP folder.

The procedure differs depending on the transmission method selected.

E-mail Address

 Press [Change] of E-mail Address, enter the Email address and press [OK]. The table below explains the items to be entered.

The Folder (FTP) Address

 Press [Change] of Host Name, Path, Login User Name and Login Password, enter the information for each item and press [OK].

The Folder (SMB) Address

- 1. Press [Change] of Host Name, Path, Login User Name and Login Password, enter the information for each item and press [OK].
- 8. Check if the destination entry is correct and press [Register]. The destination is added to the Address Book.

Adding a Group

- 1. Press [Register/Edit] of Address Book, [Add], [Group] and then [Next].
- 2. To specify the address number, press [Change] in Address Number.
- Use [+], [-] or the numeric keys to enter an address number (1 to 2500). To have the number assigned automatically, set "0000".
- 4. Press [OK]. The Add Group screen reappears.
- 5. Press [Change] of Name.
- 6. Enter the group name displayed on the Address Book not more than 32 characters.
- 7. Press [Member].
- 8. Press [Add].
- 9. Select a destination (individual) to add to the group.
- 10. Press [OK].
 - If you have more destinations to add, repeat Steps 8 to 10.
- 11. Check if the selected destination was added to the group and press [Register]. Now the group is added to the Address Book.

Editing a Destination

- 1. Press [Register/Edit] of Address Book.
- 2. Select a destination or group to edit.
- Press [Detail]. The procedure differs depending on the details to be edited.

Editing an Individual Destination

- 1. Change Address Number, Name and destination type and address.
- 2. After you have completed the changes, press [Register].
- 3. Press [Yes] in the change confirmation screen to register the changed destination.

Editing a Group

- 1. Change Address Number and Name.
- 2. Press [Member].
- To delete any destination from the group, select the destination and press [Delete]. Press [Yes] on the screen to confirm the deletion.
- 4. After you have completed the changes, press [Register].
- 5. Press [Yes] in the change confirmation screen to register the changed group.

Deleting an Individual Destination or Group

1. Press [Delete]. Press [Yes] on the screen to confirm the deletion. Deletion is performed.

Adding a Destination on One Touch Key

- 1. Press [Register/Edit] of One touch Key.
- Select a One Touch Key number (0001 to 1000) for the destination. Pressing Quick No. Search key or [No.] enables direct entry of a One Touch Key number.

Select a One Touch Key with no registered destination.

- 3. Press [Register/Edit]. The address book appears.
- Select a destination (individual or group) to add to the One Touch Key number. Pressing [Detail] shows the detailed information of the selected destination.
- 5. Press [OK]. The destination will be added to the One Touch Key.

Editing One Touch Key

- 1. Press [Register/Edit] of One Touch Key.
- Select a One Touch Key number (0001 to 1000) for the destination. Pressing Quick No. Search key or [No.] enables direct entry of a One Touch Key number.

The procedure differs depending on the details to be edited.

Changing the Registered Information

- 1. Press [Register/Edit].
- Select a new destination (individual or group). Pressing [Detail] shows the detailed information of the selected destination.
- 3. Press [OK].
- 4. Press [Yes] on the screen to add the destination to the One Touch Key.

Deleting the Registered Information

- 1. Press [Delete].
- 2. Press [Yes] on the screen to confirm the deletion of the data registered in the One Touch Key.

Destination Filter Settings

- 1. Press [Next] of Address Book Defaults and then [Change] of Narrow Down.
- 2. Select the type of destination filter.
- 3. Press [OK].

(11) Internet Browser Setup

Internet Browser Setting

- 1. Press [Change] of Internet Browser.
- 2. Press [On] or [Off].
- 3. Press [OK].

Browser Preferences

- 1. Press [Next] of Browser Environment.
- 2. To set your home page, press [Change] of Home Page, press [URL], enter the URL and then press [OK]. Press [OK] again.
- 3. To set the text size, press [Change] of Text Size, select [Large], [Medium] or [Small] as the text size and then press [OK].
- 4. To set the display mode, press [Change] of Display Mode, select [Normal], [Just-Fit Rendering] or [Smart-Fit Rendering] as the display mode and then press [OK].
- 5. To specify the settings for accepting cookies, press [Change] of Cookie, select [Accept All], [Reject All] or [Prompt before Accepting] as your cookie acceptance policy and then press [OK].

Proxy Settings

- 1. Press [Change] of Proxy and then press [On]. To set a proxy server (HTTP)
 - 1. Press [Keyboard] of Proxy Server (HTTP), enter the proxy address and press [OK].
 - 2. Press [# Keys] and enter the port number.
 - To set a proxy server (HTTPS)
 - 1. Press [Keyboard] of Proxy Server (HTTPS), enter the proxy address and press [OK].
 - 2. Press [# Keys] and enter the port number.
 - To set domains for which no proxy is used
 - Press [Keyboard] of Do Not Use Proxy for Following Domains, enter the domain name and press [OK].
- 2. Press [OK].

Starting/Exiting Application Use

- 1. Select the desired application and press [Activate]. You can view detailed information on the selected application by pressing [Detail].
- Enter the license key and press [Official]. Some applications do not require you to enter an license key. If the license key entry screen does not appear, go to Step 3.
 - To use the application as a trial, press [Trial] without entering the license key.
- 3. When the confirmation screen appears, press [Yes].

Installing Applications

- 1. Insert the USB memory containing the application to be installed into the USB memory slot (A1).
- 2. Press [Add].
- Select the application to be installed and press [Install].

You can view detailed information on the selected application by pressing [Detail].

 When the confirmation screen appears, press [Yes]. Installation of the application begins. Depending on

the application being installed, the installation may take some time. Once the installation ends, the original screen reappears.

- 5. To install another application, repeat steps 3 to 4.
- To remove the USB memory, press [Remove Memory] and wait until the Removable Memory can be safely removed message appears. Then remove the USB memory.

Deleting Applications

1. Select the application to be deleted and press [Delete].

You can view detailed information on the selected application by pressing [Detail].

2. When the deletion confirmation screen appears, press [Yes]. The application is deleted.

(13) System Settings

Restarting the System

- 1. Press [Execute] of Restart.
- 2. When the confirmation screen appears, press [Yes]. The system is restarted.

Network Setup

TCP/IP (IPv4) Setup

- 1. Press [Next] of Network and then [Next] of TCP/IP Setting.
- 2. Press [Change] of TCP/IP.
- 3. Press [On] and then press [OK].
- 4. Press [Change] of IPv4.
- 5. Press [DHCP].
- 6. Press [Off] of DHCP and then press [OK].
- 7. Press [Bonjour].
- 8. Press [Off] of Bonjour and then press [OK].
- 9. Press [IP Address] and enter the address using the numeric keys.
- 10. Press [Subnet Mask] and enter the address using the numeric keys.
- 11. Press [Default Gateway] and enter the address using the numeric keys.
- 12. Check if all the address entries are correct and press [OK].
- 13. After changing the setting, restart the system or turn the machine OFF and then ON again.

TCP/IP (IPv6) Setup

- 1. Press [Next] of Network and then [Next] of TCP/IP Setting.
- 2. Press [Change] of TCP/IP.
- 3. Press [On] and then press [OK].
- 4. Press [Next] of IPv6.
- 5. Press [Change] of IPv6.
- 6. Press [On].
- 7. Press [OK].
- 8. After changing the setting, restart the system or turn the machine OFF and then ON again.

Manual Setting (IPv6)

- 1. Press [Next] of Network and then [Next] of TCP/IP Setting.
- 2. Press [Next] of IPv6.
- 3. Press [Next] of Manual Setting.
- 4. Press [IP Address (Manual)] to enter IP address.
- 5. Press [On].
- 6. Press [Default Gateway] to enter the default gateway.
- 7. Check that all the entries are correct and Press [OK].
- 8. After changing the setting, restart the system or turn the machine OFF and then ON again.

RA (Stateless) Settings

- 1. Press [Next] of Network and then [Next] of TCP/IP Setting.
- 2. Press [Next] of IPv6.
- 3. Press [Change] of RA(Stateless).
- 4. Press [On] or [Off] of RA (Stateless).
- 5. Press [OK].
- 6. After changing the setting, restart the system or turn the machine OFF and then ON again.

DHCP (IPv6) Settings

- 1. Press [Next] of Network and then [Next] of TCP/IP Setting.
- 2. Press [Next] of IPv6.
- 3. Press [Change] of DHCP.
- 4. Press [On] or [Off] of DHCP.
- 5. Press [OK].
- 6. After changing the setting, restart the system or turn the machine OFF and then ON again.

NetWare Setup

- 1. Press [Next] of Network and then [Change] of Net-Ware.
- 2. Press [On].
- 3. Press the key for the frame type you want to use.
- 4. Press [OK].
- 5. After changing the setting, restart the system or turn the machine OFF and then ON again.

AppleTalk Setup

- 1. Press [Next] of Network and then [Change] of AppleTalk.
- 2. Press [On] or [Off].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

WSD Scan Setup

- 1. Press [Next] of Network and then [Change] of WSD Scan.
- 2. Press [On] or [Off].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

WSD Print Setup

- 1. Press [Next] of Network and then [Change] of WSD Print.
- 2. Press [On] or [Off].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

Secure Protocol

SSL Setup

- 1. Press [System], [Next] of Network, [Next] of Secure Protocol, and then [Next] of SSL.
- 2. Press [On] or [Off].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

SSL Setup

- 1. Press [System], [Next] of Network, [Next] of Secure Protocol, and then [Next] of SSL.
- 2. Press [On] or [Off].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

IPP Security Setup

- 1. Press [System], [Next] of Network, [Next] of Secure Protocol, and then [Change] of IPP Security.
- Press [IPP over SSL Only] or [IPP or IPP over SSL].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

HTTP Security Setup

- 1. Press [System], [Next] of Network, [Next] of Secure Protocol, and then [Change] of HTTPS Security.
- 2. Press [HTTP or HTTPS] or [HTTPS Only].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

LDAP Security Setup

- 1. Press [System], [Next] of Network, [Next] of Secure Protocol, and then [Change] of LDAP Security.
- 2. Press [Off], [LDAP over SSL] or [LDAPv3/TLS].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

IPSec Setting

- 1. Press [System], [Next] of Network, and then [Change] of IPSec.
- 2. Press [On].
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

LAN Interface Setup

- 1. Press [Next] of Network and then [Change] of LAN Interface.
- Select [Auto], [10BASE-T Half], [10BASE-T Full], [100BASE-TX Half] or [100BASE-TX Full] as the LAN interface.
- 3. Press [OK].
- 4. After changing the setting, restart the system or turn the machine OFF and then ON again.

Interface Block Setting

USB Host (USB memory slot setting)

- 1. Press [Next] of Interface Block Setting and then [Change] of USB Host.
- 2. Press [Block].
- 3. Press [OK].

USB Device (USB interface setting)

- 1. Press [Next] of Interface Block Setting and then [Change] of USB Device.
- 2. Press [Block].
- 3. Press [OK].

Optional interface (Optional interface card setting)

- Press [Next] of Interface Block Setting and then [Change] of Optional Interface 1 or Optional Interface 2.
- 2. Press [Block].
- 3. Press [OK].

Document Guard Setting

- 1. Press and then [Change] of Document Guard.
- 2. Press [On].
- To scan documents, press [Off].
- 3. Press [OK].

Optional Functions

Starting Application Use

- 1. Press [Next] of Optional Function.
- Select the desired application and press [License On].

You can view detailed information on the selected application by pressing [Detail].

- In the license key entry screen, press [Official]. Some applications do not require you to enter an license key. If the license key entry screen does not appear, go to Step 4. To use the application as a trial, press [Trial] without entering the license key.
- 4. When the confirmation screen appears, press [Yes].

Checking Application Details

- 1. Press [Next] of Optional Function.
- Select the application you want to check the details of and press [Detail]. You can now view detailed information on the selected application.

(14) User Login Administration

Enabling/Disabling User Login Administration

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of User Login Setting and then [Change] of User Login.
- 3. Select [Local Authentication] or [Network Authentication]. Select [Off] to disable user login administration.

If you select [Network Authentication], enter the host name (62 characters or less) and domain name (256 characters or less) for the Authentication Server. Select [NTLM] or [Kerberos] as the server type.

4. Press [OK].

Adding a User

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of User Login Setting, [Register/Edit] of Local User List, and then [Add].
- 3. Press [Change] of User Name.
- 4. Enter the user name and press [OK].
- 5. Enter the login user name and E-mail address following 3 and 4 above.
- Press [Change] of Login Password and then [Password].
- 7. Enter the login password and press [OK].
- 8. Press [Confirm Password].
- 9. Enter the same login password to confirm and press [OK].
- 10. Press [OK].
- 11. Press [Change] of Access Level.
- 12. Select the user access privilege and press [OK].
- 13. Press [Change] of Account Name.
- 14. Select the account and press [OK].
- 15. Press [Register] to add a new user on the local user list.

Changing User Properties

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of User Login Setting and [Register/ Edit] of Local User List.
- 3. Select the user whose properties you wish to change.

The procedure differs depending on the details to be edited.

Changing user information

- 1. Press [Detail].
- 2. Refer to steps 3 to 14 of Adding a User to change a user property.
- 3. Press [Register].
- 4. Press [Yes] in the registration confirmation screen. The user information is changed.
- Deleting a user
- 1. Press [Delete].
- 2. Press [Yes] on the screen to confirm deletion. The selected user will be deleted.

Unknown login user name Job

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Change] of Unknown ID Job.
- 3. Press [Reject] or [Permit].
- 4. Press [OK].

Group Authorization

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of User Login Setting, [Next] of Group Authorization Set., and then [Change] of Group Authorization.
- 3. Press [On].
- 4. Press [OK].

Group List

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of User Login Setting, [Next] of Group Authorization Set., [Register/Edit] of Group List, and then [Add].
- 3. Press [Change] of Group ID.
- 4. Enter the group ID and press [OK].
- 5. Press [Change] of Group Name.
- 6. Enter the group name and press [OK].
- 7. Press [Change] of Access Level.
- 8. Select the user access privilege and press [OK].
- 9. Press [Change] of Print Restriction.
- 10. Select [Reject Usage] or [Off] and press [OK].
- 11. Follow steps 9 and 10 above to set Print Restriction (Color), Copy Restriction, Copy Restriction (Color), Copy Restr. (Full Color), Send Restriction, FAX TX Restriction, Storing Restr. in Box, and Storing Restr. in Memory.

12. Press [Register] to add a new group on the group list.

Obtain Network User Property

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of User Login Setting, [Change] of Obtain NW User Property.
- 3. Press [On].
- 4. Press [Server Name].
- 5. Enter the LDAP server name or the IP address and press [OK].
- 6. Press [# keys] to enter the LDAP port number using the numeric keys.
- 7. Press [Name 1].
- 8. Enter the LDAP Attribute to obtain the user name to be displayed and press [OK].
- 9. Follow steps 7 and 8 above to set Name 2.
- 10. Press [E-mail Address].
- 11. Enter the LDAP Attribute to obtain the e-mail address and press [OK].
- 12. Press [Search Timeout] to set the amount of time to wait before time-out.
- 13. Press [+], [-] or the numeric keys to enter the time.
- 14. Press [LDAP Security] to select the type of encryption according to the type of security employed by the LDAP server.
- 15. Select [Off], [LDAP over SSL], or [LDAPv3/TLS] and press [OK].

(15) Job accounting

Enabling/Disabling Job Accounting

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of Job Accounting Setting, and then [Change] of Job Accounting.
- 3. Press [On]. To disable job accounting, press [Off].
- 4. Press [OK].

Adding an Account

- 1. If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting, [Register/ Edit] of Accounting List, and then [Add].
- 3. Press [Change] of Account Name.
- 4. Enter the account name and press [OK]. The Account screen reappears.
- 5. Follow steps 3 and 4 above to enter the Account ID.
- 6. Activate or deactivate restriction.
- 7. Press [Register] to add a new account on the Account List.

Managing Accounts

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting and then [Register/Edit] of Accounting List.
- 3. Select an account to change or delete.

Changing account information

- 1. Press [Detail].
- 2. Refer to steps 3 to 5 of Adding an Account and steps 3 to 6 of Restricting Using the Machine to change account information.
- 3. Press [Register].
- 4. Press [Yes] in the registration confirmation screen. The account information is changed.

Deleting an account

- 1. Press [Delete].
- 2. Press [Yes]. To delete the account.

Managing the Copier/Printer Counts

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting, [Next] of Default Setting and then [Change] of Copier/Printer Count.
- 3. Press [Total] or [Split].
- 4. Press [OK].

Applying Restriction

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of Job Accounting Setting, [Register/ Edit] of Accounting List, and then [Add].
- 3. Press [Change] for the item to be restricted.
- Select the restriction mode. If [Counter Limit] is selected, press [+],[-] or numeric keys to select the number of pages.
- 5. Press [OK].
- 6. Repeat steps 3 to 5 for other accounts to be restricted.
- 7. Press [Register]. The restricted account is added.

Applying Limit of Restriction

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting, [Next] of Default Setting and then [Change] of Apply Limit.
- 3. Select [Immediately], [Subsequently], or [Alert Only].
- 4. Press [OK].

Default Counter Limit

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting, [Next] of Default Setting and then [Next] of Default Counter Limit.
- 3. Press [Change] for the item you want to modify and then press [+] or [-] or use the numeric keys to enter the default restriction on the number of sheets.
- 4. Press [OK].
- 5. To set another default restriction, repeat steps 3 to 4.

Total Job Accounting/Resetting the Counter

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of Job Accounting Setting and then [Next] of Total Job Accounting.
- 3. Press [Check] at the function to check the count. The results will be displayed.
- 4. Confirm the count and press [Close].
- 5. Press [Execute] of Counter Reset to reset the counter.
- 6. Press [Yes] on the screen to confirm the reset. The counter is reset.

Each Job Accounting/Resetting the Counter

- 1. If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- 2. Press [Next] of Job Accounting Setting and [Check] of Each Job Accounting.
- 3. Select the account to check the count.
- 4. Press [Detail].
- 5. Press [Check] at the function to check the count. The results will be displayed.
- 6. Confirm the count and press [Close].
- 7. Press [Execute] of Counter Reset to reset the counter.
- 8. Press [Yes] on the screen to confirm the reset. The counter will be reset.

Counting by Paper Size

- If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
- Press [Next] of Job Accounting Setting, [Next] of Default Setting, [Change] of Count by Paper Size, [Change] of Paper Size 1 to 5 and then [On].
- 3. Select the paper size.
- 4. Press [Media Type] to specify media type.
- 5. Select the media type and press [OK].
- 6. Press [Close].

- Printing an Accounting Report
 1. If user login administration is disabled, the user authentication screen appears. Enter your login user name and password and then press [Login].
 - 2. Press [Next] of Job Accounting Setting and then Prior [Print] of Print Accounting Report.
 Press [Yes] on the screen to confirm the printing.

1-4-1 Paper misfeed detection

(1) Paper misfeed indication

When a paper misfeed occurs, the machine immediately stops copying and displays the jam location on the operation panel.

Paper misfeed counts sorted by the detection condition can be checked in maintenance item U903.

To remove paper jammed in the machine, open the left cover, pull the cassette out or pull the paper feed unit out. To remove original jammed in optional DP, open the DP top cover.

To remove the jammed paper in optional document finisher, detach the finisher from the machine.

Paper misfeed detection can be reset by opening and closing the respective covers.

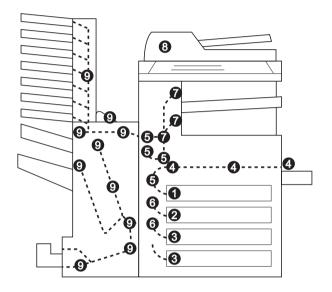


Figure 1-4-1

- (1) Misfeed in cassette 1
- (2) Misfeed in cassette 2
- (3) Misfeed in cassette 3 or 4 (option)
- (4) Misfeed in the MP tray
- (5) Misfeed in the duplex section
- (6) Misfeed in left cover 1,3 or 4
- (7) Misfeed in the fuser section
- (8) Misfeed in document processor (option)
- (9) Misfeed in document finisher (option)

(2) Paper misfeed detection conditions

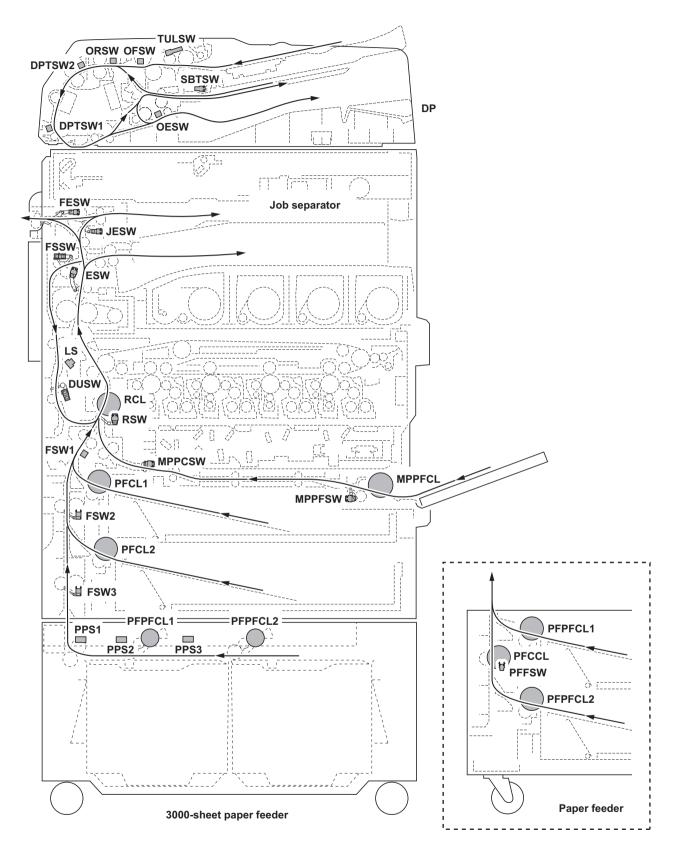


Figure 1-4-2

1-4-2

2KY

Section	Jam code	Conditions		Specified time	
Section	Jam code	Conditions	Color	B/W	
System	00 Initial JAM	The power is turned on when a sensor in the conveying system is on.	-	-	
	04 Cover open JAM	Cover is open during paper conveying.	-	-	
	05 Secondary paper feed does not start	Secondary paper feed does not start within specified time of arrival of paper at the registration section.	40 s	40 s	
	09 Sequence error JAM	Sequence error is occurred between the machine and 3000-sheet paper feeder.	-	-	
Paper feed sec- tion	10 No paper feed from cassette 1	Feed switch 1 (FSW1) does not turn on within the specified time of paper feed clutch 1 (PFCL1) turning on and cannot be detected at the same timing even after retry.	1028 ms	935 ms	
	11 No paper feed from cassette 2	Feed switch 2 (FSW2) does not turn on within the specified time of paper feed clutch 2 (PFCL2) turning on and cannot be detected at the same timing even after retry.	1080 ms	982 ms	
	12 No paper feed from optional cassette 3	Feed switch 3 (FSW3) does not turn on within the specified time of PF paper feed clutch 1 (PFPFCL1) turning on and cannot be detected at the same timing even after retry (paper feed from paper feeder).	2112 ms	1920 ms	
		Feed switch 3 (FSW3) does not turn on within the specified time of PF paper feed clutch 1 (PFPFCL1) turning on (paper feed from 3000-sheet paper feeder).	620 ms	620 ms	
	13 No paper feed from optional cassette 4	The PF feed switch (PFFSW) does not turn on within the specified time of PF paper feed clutch 2 (PFPFCL2) turning on and cannot be detected at the same timing even after retry (paper feed from paper feeder).	2112 ms	1920 ms	
	14 No paper feed from MP tray	The MP paper feed switch (MPPFSW) does not turn on within the specified time of the MP paper feed clutch (MPPFCL) turning on and cannot be detected at the same timing even after retry.	924 ms	840 ms	
	15 Misfeed in paper feeder horizontal paper conveying sec- tion 1	Paper path sensor 3 (PPS3) does not turn on within speci- fied time of PF paper feed clutch 2 (PFCL2) turning on (paper feed from 3000-sheet paper feeder).	360 ms	360 ms	
	16 Misfeed in paper feeder horizontal paper conveying sec- tion 2	Paper path sensor 2 (PPS2) does not turn on within speci- fied time of the paper path sensor 3 (PPS3) turning on (paper feed from 3000-sheet paper feeder).	380 ms	380 ms	
	17 Misfeed in paper feeder horizontal paper conveying sec- tion 3	Paper path sensor 1 (PPS1) does not turn on within speci- fied time of the paper path sensor 2 (PPS2) turning on (paper feed from 3000-sheet paper feeder).	250 ms	250 ms	

Section	Jam code	Conditions	Specified time	
Section	Jan code	Conditions	Color	B/W
Paper feed sec- tion	18 Misfeed in vertical paper conveying sec-	The registration switch (RSW) does not turn on within spec- ified time of feed switch 1 (FSW1) turning on.	844 ms	767 ms
	tion	Feed switch 1 (FSW1) does not turn on within specified time of feed switch 2 (FSW2) turning on.	624 ms	567 ms
		Feed switch 2 (FSW2) does not turn on within specified time of feed switch 3 (FSW3) turning on.	1280 ms	1164 ms
		Feed switch 1 (FSW1) does not turn off within specified time of feed switch 2 (FSW2) turning off.	1224 ms	1113 ms
		Feed switch 2 (FSW2) does not turn off within specified time of feed switch 3 (FSW3) turning off.	680 ms	618 ms
		Feed switch 1 (FSW1) does not turn off within specified time of feed switch 2 (FSW2) turning on.	624 ms	567 ms
		Feed switch 2 (FSW2) does not turn off within specified time of feed switch 3 (FSW3) turning on.	1280 ms	1164 ms
	19 Misfeed in paper feeder paper convey- ing section	Feed switch 3 (FSW3) does not turn on within specified time of PF feed switch (PFFSW) turning on.	680 ms	618 ms
	21 Multiple sheets in MP tray paper feed sec- tion	The MP paper feed switch (MPPFSW) does not turn off within specified time from start of paper feed.	924 ms	840 ms
		The MP paper feed switch (MPPFSW) does not turn off within specified time of its turning on.	Paper length + 876 ms	Paper length + 796 ms
	22 Multiple sheets in cas- sette 1 paper feed section	Feed switch 1 (FSW1) does not turn off within specified time from start of paper feed.	1028 ms	935 ms
		Feed switch 1 (FSW1) does not turn off within specified time of its turning on.	1428 ms	1298 ms
	23 Multiple sheets in cas- sette 2 paper feed section	Feed switch 2 (FSW2) does not turn off within specified time from start of paper feed.	1080 ms	982 ms
		Feed switch 2 (FSW2) does not turn off within specified time of its turning on.	1480 ms	1345 ms
	24 Multiple sheets in cas-	Feed switch 3 (FSW3) does not turn off within specified time of its turning on (paper feed from paper feeder).	682 ms	620 ms
	sette 3 paper feed section	Feed switch 3 (FSW3) does not turn off within specified time of its turning on (paper feed from 3000-sheet paper feeder).	950 ms	950 ms
	25 Multiple sheets in cas- sette 4 paper feed section	The PF feed switch 1 (PFFSW) does not turn off within specified time of its turning on.	682 ms	620 ms

Section	Jam code	Conditions		Specified time	
Section	Jam Coue	Conditions	Color	B/W	
Paper feed sec- tion	26 The MP paper conveying switch (MPPCSW) does not turn Multiple sheets in MP on within specified time of MP paper feed switch tray paper feed sec- (MPPFSW) turning on. tion The MP paper feed switch (MPPFSW) turning on.		2104 ms	1913 ms	
		The MP paper conveying switch (MPPCSW) does not turn off within specified time of MP paper feed switch (MPPFSW) turning off.	2504 ms	2276 ms	
		The registration switch (RSW) does not turn on within spec- ified time of MP paper conveying switch (MPPCSW) turning on.	1672 ms	1520 ms	
		The registration switch (RSW) does not turn off within spec- ified time of MP paper feed switch (MPPFSW) turning off.	1272 ms	1156 ms	
Paper conveying section	30 Misfeed in registra- tion/transfer section	The registration switch (RSW) does not turn off within spec- ified time of feed switch 1 (FSW1) turning off.	848 ms	771 ms	
	31 Misfeed round the transfer belt	The loop sensor (LS) does not turn on within specified time of the registration clutch (RCL) turning on.	584 ms	531 ms	
Fuser sec- tion	40 The eject switch (ESW) does not turn on within specified Misfeed in fuser sec- tion (MP tray) The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.		580 ms	527 ms	
	41 Misfeed in fuser sec- tion (cassette 1)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	
	42 Misfeed in fuser sec- tion (cassette 2)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	
	43 Misfeed in fuser sec- tion (cassette 3)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	
	44 Misfeed in fuser sec- tion (cassette 4)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	
	45 Misfeed in fuser sec- tion (3000-sheet paper feeder)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	
	46 Misfeed in fuser sec- tion (duplex section)	The eject switch (ESW) does not turn on within specified time of the loop sensor (LS) turning on.	580 ms	527 ms	

Section	Jam code	Conditions		Specified time	
Section	Jain code	Conditions	Color	B/W	
Eject section	50 Misfeed in eject sec- tion	The eject switch (ESW) does not turn off within specified time of the loop sensor (LS) turning off.	1660 ms	1509 ms	
	51 Misfeed in job separa-	The job eject switch (JESW) does not turn off within speci- fied time of the eject switch (ESW) turning off.	628 ms	571 ms	
	tor eject section	During switchback ejection, the job eject switch (JESW) does not turn off within specified time.	Paper length + 680 ms	Paper length + 621 ms	
		During switchback ejection, the job eject switch (JESW) does not turn off within specified time of the eject switch (ESW) turning off.	1632 ms	1484 ms	
		During switchback ejection, the job eject switch (JESW) does not turn on within specified time.	1080 ms	982 ms	
		During switchback ejection/job separator ejection, the job eject switch (JESW) does not turn on within specified time of the eject switch (ESW) turning on.	1000 ms	909 ms	
		During finisher ejection, the finisher eject switch (FESW) does not turn on within specified time of the eject switch (ESW) turning on.	1148 ms	1044 ms	
		During finisher ejection, the finisher eject switch (FESW) does not turn off within specified time of the eject switch (ESW) turning off.	1704 ms	1549 ms	
Feedshift section	52 Misfeed in feedshift section	During paper switchback operation in the main body, the feedshift switch (FSSW) does not turn on within specified time.		1044 ms	
Duplex section	60 Misfeed in duplex	The duplex switch (DUSW) does not turn on within speci- fied time of the feedshift switch (FSSW) turning on.	2588 ms	2353 ms	
	paper conveying sec- tion 1	During duplex refeeding, the duplex switch (DUSW) does not turn off within specified time of the registration switch (RSW) turning on.	Paper length + 732 ms	Paper length + 665 ms	
	61 Misfeed in duplex paper conveying sec- tion 2	During duplex refeeding, the registration switch (RSW) does not turn on within specified time.	648 ms	589 ms	
DP	70 No original feed	The original feed switch (OFSW) does not turn on within specified time during the first sheet feeding (Retry 5 times).	705 ms	705 ms	
		The original feed switch (OFSW) does not turn on within specified time during the second sheet feeding (Retry 5 times).	705 ms	705 ms	
		During original tray ascent, the tray upper limit switch (TULSW) does not turn on within specified time.	2 s	2 s	
	71 An original jam in the original feed section	The original registration switch (ORSW) does not turn on within specified time of the original feed switch (OFSW) turning on.	557 ms	557 ms	

Section	Jam code Conditions		Specified time	
Jeculi	Jain Coue	Conditions	Color	B/W
DP	72 An original jam in the original conveying section	DP timing switch 1 (DPTSW1) turns off within the specified time since the switch turns on.	557 ms	557 ms
	73 An original jam in the original registration	During single scanning, the DP timing switch 1 (DPTSW1) does not turn on within specified time of the original registration switch (ORSW) turning on (Retry 5 times).	1080 ms	1080 ms
	section	During duplex switchback scanning, the DP timing switch 1 (DPTSW1) does not turn on within specified time of the original registration switch (ORSW) turning on (Retry 5 times).	1080 ms	1080 ms
		During dual scanning, the DP timing switch 2 (DPTSW2) does not turn on within specified time of the original registration switch (ORSW) turning on (Retry 5 times).	617 ms	617 ms
	74 An original jam in the original feed section	The original feed switch (OFSW) or original registration switch (ORSW) does not turn off within specified time of the DP timing switch 1 (DPTSW1) turning on.	1268 ms	1268 ms
		Scanning of previous original is not complete when DP tim- ing switch 1 (DPTSW1) turns on.	-	-
	75 An original jam in the original conveying	During single scanning, the DP timing switch 1 (DPTSW1) does not turn off within specified time of the original registration switch (ORSW) turning off.	862 ms	862 ms
	section	During duplex switchback scanning, the DP timing switch 1 (DPTSW1) does not turn off within specified time of the original registration switch (ORSW) turning off.	862 ms	862 ms
		During dual scanning, the DP timing switch 2 (DPTSW2) does not turn off within specified time of the original registration switch (ORSW) turning off.	400 ms	400 ms
	76 An original jam in the original switchback section 1	During duplex switchback scanning, the switchback tray switch (SBTSW) does not turn on within specified time of the DP timing switch 1 (DPTSW1) turning on.	1411 ms	1411 ms
	77 An original jam in the original switchback section 2	During duplex switchback scanning, the original registration switch (ORSW) does not turn on within specified time since original switchback operation starts.	569 ms	569 ms
	78	The DP or DP top cover is opened during original feeding.	-	-
	DP cover open JAM	When the power is turned on or original feeding starts, the original feed switch (OFSW), the original registration switch (ORSW) or DP timing switch 1/2 (DPTSW1/2) turning on.	-	-
	79 An original jam in the original eject section	During single scanning or dual scanning, the original eject switch (OESW) does not turn on within specified time of the DP timing switch 1 (DPTSW1) turning on.	1038 ms	1038 ms
		During duplex switchback scanning, the original eject switch (OESW) does not turn on within specified time since switchback ejection starts.	512 ms	512 ms
		During single scanning or dual scanning, the original eject switch (OESW) does not turn off within specified time of the DP timing switch 1 (DPTSW1) turning off.	1038 ms	1038 ms

Section	Jam code	Conditions	Specified time	
Section	Jam Coue	Conditions	Color	B/W
Finisher	80 Jam between the fin- isher and machine	Paper ejection is not output from the machine to the docu- ment finisher within specified time of the paper entry sensor (PES) turning on.	15 s	15 s
		The paper entry sensor (PES) turns on before the eject signal is output from the machine.	-	-
	81 Paper entry sensor non arrival jam	(3000-sheet document finisher) The paper entry sensor (PES) is not turned off even if a specified time has elapsed after the machine eject signal was received.	968 ms	880 ms
		(3000-sheet document finisher) The paper entry sensor (PES) is not turned on even if a specified time has elapsed after the machine eject signal was received.	968 ms	880 ms
		(3000-sheet document finisher) The paper entry sensor (PES) does not turn off within spec- ified time of its turning on.	2128 ms	1935 ms
		(Document finisher) The paper entry sensor (PES) is not turned on even if a specified time has elapsed after the machine eject signal was received.	674 ms	612 ms
	82 Jam in stapler	(3000-sheet document finisher) The home position is not detected within the specified time when driving the staple motor.	600 ms	600 ms
		(Document finisher) The staple home position sensor (STSPS) is not turned on within the specified time when driving the staple motor (STM).	-	-
	83 Eject sensor stay jam	(3000-sheet document finisher) Eject switch 1 (ESW1) is not turned off within specified time of its turning on.	1404 ms	1404 ms
		(Document finisher) In the straight mode, the eject paper sensor (EPS) is not turned off within specified time of its turning on.	-	-
		(Document finisher) In the bundle discharge mode or the staple mode, bundle discharge operation does not turn off within specified time since the operation starts.	902 ms	902 ms
	84 Jam in eject section of right sub tray (3000-	Eject switch 2 (ESW2) is not turned off even if a specified time has elapsed after the machine eject signal was received.	1112 ms	1011 ms
	sheet document fin- isher only)	Eject switch 2 (ESW2) is not turned on even if a specified time has elapsed after the machine eject signal was received.	1112 ms	1011 ms
		Eject switch 2 (ESW2) is not turned off within specified time of its turning on.	2128 ms	1935 ms

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	Jam code	Conditions	• •	
	85		Color	B/W
	Jam in eject section of	Eject switch 3 (ESW3) does not turn off within specified time of paper entry sensor (PES) turning on.	1312 ms	1193 ms
	left sub tray (3000- sheet document fin- isher only)	Eject switch 3 (ESW3) does not turn on within specified time of paper entry sensor (PES) turning on.	1312 ms	1193 ms
		Eject switch 3 (ESW3) is not turned off within specified time of its turning on.	2128 ms	1935 ms
	87 Jam in eject section of	Inner tray entry sensor 2 (ITPES2) does not turn on within specified time of the paper entry sensor (PES) turning on.	2068 ms	1880 ms
	inner tray 2 (3000- sheet document fin- isher only)	Inner tray entry sensor 2 (ITPES2) does not turn off within specified time of the paper entry sensor (PES) turning off.	1371 ms	1371 ms
	88 Jam in eject section of	Eject switch 1 (ESW1) is not turned on within specified time.	1324 ms	1324 ms
	main tray (3000-sheet document finisher only)	At the time of bundle up initial operation, paper conveying belt home position sensor 1 (PCBHPS1) does not turn on.	-	-
		At the time of bundle down initial operation, paper convey- ing belt home position sensor 2 (PCBHPS2) does not turn on.	-	-
		At the time of side registration standby operation, side reg- istration home position sensor 1 (SRHPS1) does not turn off within specified time.	500 ms	500 ms
		At the time of side registration standby operation, side reg- istration home position sensor 2 (SRHPS2) does not turn off within specified time.	500 ms	500 ms
	89 Jam in center-folding unit (3000-sheet doc- ument finisher only)	The centerfold paper entry sensor (CPES) does not turn off within specified time of centerfold paper conveying sensor (CPCS) turning on.	3224 ms	2931 ms
		The centerfold paper entry sensor (CPES) does not turn on within specified time of centerfold paper conveying sensor (CPCS) turning on.	3224 ms	2931 ms
		The centerfold paper entry sensor (CPES) is not turned off within specified time of its turning on.	2313 ms	2313 ms
		The centerfold eject switch (CESW) is not turned on within specified time.	4080 ms	4080 ms
		The centerfold eject switch (CESW) is not turned off within specified time of its turning on.	8200 ms	8200 ms
		Centerfold side registration sensor 1 (CSRS1) is not turned on within specified time.	600 ms	600 ms
		Centerfold side registration sensor 2 (CSRS2) is not turned on within specified time.	600 ms	600 ms
		The home position is not detected within the specified time after driving the centerfold staple motor (CSTM).	1000 ms	1000 ms
		The centerfold paper conveying sensor (CPCS) is not turned off within specified time.	1370 ms	1370 ms
		The centerfold paper conveying sensor (CPCS) is not turned on within specified time.	1370 ms	1370 ms
		The centerfold paper conveying sensor (CPCS) is not turned off within specified time of its turning on.	2313 ms	2313 ms

Section	Jam code	Conditions	Specified time	
Section		Conditions	Color	B/W
Finisher	90 Jam in mailbox (3000- sheet document fin- isher only)	The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 1).	3072 ms	2793 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 2).	2780 ms	2527 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 3).	2488 ms	2262 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 4).	2196 ms	1996 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 5).	1904 ms	1731 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 6).	1612 ms	1465 ms
		The tray eject sensor (TEJS) does not turn on within speci- fied time from start of paper eject (tray 7).	1320 ms	1200 ms
		The tray eject sensor (TEJS) is not turned off within speci- fied time of its turning on.	Depends on paper size	Depends on paper size
	91 Finisher cover open	(3000-sheet document finisher) The front cover, top cover or right sub tray is opened when starting the finisher operation. The centerfold unit top cover is opened when starting the center-fold operation. The mailbox cover is opened when starting the operation.	-	-
		(Document finisher) The finisher cover becomes open during paper is running. Paper is remaininig in paths at power on.	-	-
	92 Eject paper sensor non-arrival jam (docu- ment finisher only)	In the straight mode, the eject paper sensor (EPS) is not turned on even if a specified time has elapsed after the paper entry sensor (PES) was turned on.	-	-
	93 Reverse sensor jam (document finisher	The reverse sensor (SBS) does not turn on within specified time of paper entry sensor (PES) turning on (unfinished reversing canceled).	402 ms	366 ms
	only)	The reverse sensor (SBS) is not turned on within specified time (unfinished reversing set).	431 ms	431 ms
		The reverse sensor (SBS) is not turned off within specified time its turning on (resident reversing canceled).	1680 ms	1527 ms
		The reverse sensor (SBS) is not turned off within specified time its turning on (resident reversing set).	700 ms	700 ms
	94 Paper entry sensor stay/remaining jam (document finisher only)	The paper entry sensor (PES) is not turned off within speci- fied time its turning on.	1260 ms	1145 ms
	95 Paper conveying sen-	The paper conveying sensor (PCS) is not turned off within specified time its turning on (reversing canceled).	1260 ms	1145 ms
	sor jam (document finisher only)	The paper conveying sensor (PCS) is not turned off within specified time its turning on (reversing set).	656 ms	656 ms

Problem	Causes/check procedures	Corrective measures
(1) A paper jam in the paper feed, convey- ing, duplex or eject section is indicated as soon as the main power switch is turned on.	A piece of paper torn from copy paper is caught around feed switche1/2/3, MP paper feed switch, MP paper conveying switch, registration switch, duplex switch, eject switch, feed- shift switch or loop sensor.	Check visually and remove it, if any.
	Defective switch.	Run maintenance item U031 and turn switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Feed switch 1/2/3, MP paper feed switch, MP paper conveying switch, registration switch, duplex switch, eject switch, feedshift switch, loop sensor
(2)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during copying (no paper feed from cassette	Check if the paper feed pul- ley, forwarding pulley and separation pulley of cas- sette 1 are deformed.	Check visually and replace any deformed pulleys (see page 1-5-3).
1). Jam code 10	Broken feed switch 1 actua- tor.	Check visually and replace switch.
	Defective feed switch 1.	Run maintenance item U031 and turn feed switch 1 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
	Check if paper feed clutch 1 malfunctions.	Run maintenance item U032 and select paper feed clutch 1 on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with paper feed clutch 1.	Check (see page 1-4-71).
(3)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during copying (no paper feed from cassette	Check if the paper feed pul- ley, forwarding pulley and separation pulley of cas- sette 2 are deformed.	Check visually and replace any deformed pulleys (see page 1-5- 3).
2). Jam code 11	Broken feed switch 2 actua- tor.	Check visually and replace switch.
	Defective feed switch 2.	Run maintenance item U031 and turn feed switch 2 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
	Check if paper feed clutch 2 malfunctions.	Run maintenance item U032 and select paper feed clutch 2 on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with paper feed clutch 2.	Check (see page 1-4-71).

Problem	Causes/check procedures	Corrective measures
(4)	Paper feeder	
A paper jam in the paper feed section is	Paper is extremely curled.	Change the paper.
indicated during copying (no paper feed from cassette 3). Jam code 12	Check if the paper feed pul- ley, forwarding pulley and separation pulley of cas- sette 3 are deformed.	Check visually and replace any deformed pulleys.
	Broken feed switch 3 actua- tor.	Check visually and replace switch.
	Defective feed switch 3.	Run maintenance item U031 and turn feed switch 3 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
	Check if PF paper feed clutch 1 malfunctions.	Run maintenance item U247 and select PF paper feed clutch 1 on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with PF paper feed clutch 1.	Check (see service manual of paper feeder).
	3000-sheet paper feeder	
	Paper is extremely curled.	Change the paper.
	Broken feed switch 3 actua- tor.	Check visually and replace switch.
	Defective feed switch 3.	Run maintenance item U031 and turn feed switch 3 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
	Check if the clutch malfunc- tions.	Run maintenance item U247 and select following clutch on the touch panel to be turned on and off. Check the status and remedy if necessary. PF paper feed clutch 1/2, PF paper conveying clutch
	Electrical problem with clutch.	Check (see service manual of 3000-sheet paper feeder).
(5)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during copying (no paper feed from cassette	Check if the paper feed pul- ley, forwarding pulley and separation pulley of cas- sette 4 are deformed.	Check visually and replace any deformed pulleys.
4). Jam code 13	Broken PF feed switch actuator.	Check visually and replace switch.
	Defective PF feed switch.	With 5 V DC present at YC3-7 on the PF main PWB, check if YC3- 5 on the PF main PWB remains low or high when the PF feed switch is turned on and off. If it does, replace the PF feed switch.
	Check if PF paper feed clutch 2 malfunctions.	Run maintenance item U247 and select PF paper feed clutch 2 on the touch panel to be turned on and off. Check the status and rem- edy if necessary.
	Electrical problem with PF paper feed clutch 2.	Check (see service manual of paper feeder).

Problem	Causes/check procedures	Corrective measures
(6)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during copying (no paper feed from MP tray).	Check if the MP paper feed pulley, MP forwarding pulley and MP separation pulley are deformed.	Check visually and replace any deformed pulleys (see page 1-5-8).
Jam code 14	Broken MP paper feed switch actuator.	Check visually and replace switch.
	Defective MP paper feed switch.	Run maintenance item U031 and turn MP paper feed switch on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.
	Check if clutch malfunc- tions.	Run maintenance item U032 and select MP paper feed clutch or MP paper conveying clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with MP paper feed clutch or MP paper conveying clutch.	Check (see page 1-4-72).
	Defective MP solenoid.	Run maintenance item U033 and select MP solenoid on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with MP solenoid.	Check (see page 1-4-72).
(7)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during	Check if the paper side guides are deformed.	Check visually and replace.
copying (misfeed in 3000-sheet paper feeder horizontal paper conveying sec-	Defective paper path sen- sor 3.	With 5 V DC present at CN6-12 on the PF main PWB, check if CN6-11 on the PF main PWB remains low or high when paper path sensor 3 is turned on and off. If it does, replace paper path sensor 3.
tion). Jam code 15	Check if PF paper feed clutch 2 malfunctions.	Run maintenance item U247 and select PF paper feed clutch 2 on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with PF paper feed clutch 2.	Check (see service manual of 3000-sheet paper feeder).
(8)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during	Check if the paper side guides are deformed.	Check visually and replace.
copying (misfeed in 3000-sheet paper feeder horizontal paper conveying sec-	Defective paper path sen- sor 2.	With 5 V DC present at CN6-9 on the PF main PWB, check if CN6-8 on the PF main PWB remains low or high when paper path sensor 2 is turned on and off. If it does, replace paper path sensor 2.
tion). Jam code 16	Check if PF paper feed clutch 1 malfunctions.	Run maintenance item U247 and select PF paper feed clutch 1 on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with PF paper feed clutch 1.	Check (see service manual of 3000-sheet paper feeder).

Problem	Causes/check procedures	Corrective measures
(9)	Paper is extremely curled.	Change the paper.
A paper jam in the paper feed section is indicated during	Check if the paper side guides are deformed.	Check visually and replace.
copying (misfeed in 3000-sheet paper feeder horizontal paper conveying sec- tion).	Defective paper path sen- sor 1.	With 5 V DC present at CN6-6 on the PF main PWB, check if CN6-5 on the PF main PWB remains low or high when paper path sensor 1 is turned on and off. If it does, replace paper path sensor 1.
Jam code 17	Check if PF paper convey- ing clutch malfunctions.	Run maintenance item U247 and select PF paper conveying clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with PF paper conveying clutch.	Check (see service manual of 3000-sheet paper feeder).
(10)	Broken switch actuator.	Check visually and replace switch.
A paper jam in the paper feed section is indicated during copying (misfeed in vertical paper con-	Defective switch.	Run maintenance item U031 and turn following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Feed switch 1/2/3, registration switch
veying section). Jam code 18	Defective paper conveying motor.	Run maintenance item U030 and select paper conveying motor on the touch panel to be turned on and off. Check the status and remedy if necessary.
(11) A paper jam in the	Broken feed switch 3 actua- tor.	Check visually and replace switch.
paper feed section is indicated during copying (misfeed in paper feeder vertical paper conveying sec- tion). Jam code 19	Defective feed switch 3.	Run maintenance item U031 and turn feed switch 3 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
(12) A paper jam in the	Broken MP paper feed switch actuator.	Check visually and replace switch.
paper feed section is indicated during copying (multiple sheets in MP tray).	Defective MP paper feed switch.	Run maintenance item U031 and turn MP paper feed switch on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.
Jam code 21	Defective MP paper con- veying clutch.	Run maintenance item U032 and select MP paper conveying clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.
	Electrical problem with paper conveying clutch.	Check (see page 1-4-71).

Problem	Causes/check procedures	Corrective measures	
(13) A paper jam in the paper feed section is	Defective feed switch 1.	Run maintenance item U031 and turn feed switch 1 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
indicated during copying (multiple sheets in cassette 1).	Defective feed pulleys or feed rollers.	Check visually and replace.	
Jam code 22	Defective paper feed clutch 1.	Run maintenance item U032 and select paper feed clutch 1 on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with paper feed clutch 1.	Check (see page 1-4-71).	
	Defective paper conveying motor.	Run maintenance item U030 and select paper conveying motor on the touch panel to be turned on and off. Check the status and remedy if necessary.	
(14) A paper jam in the	Broken feed switch 2 actua- tor.	Check visually and replace switch.	
paper feed section is indicated during copying (multiple sheets in cassette 2).	Defective feed switch 2.	Run maintenance item U031 and turn feed switch 2 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
Jam code 23	Defective feed pulleys or feed rollers.	Check visually and replace.	
	Defective paper feed clutch 2.	Run maintenance item U032 and select paper feed clutch 2 on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with paper feed clutch 2.	Check (see page 1-4-71).	
	Defective paper conveying motor.	Run maintenance item U030 and select paper conveying motor on the touch panel to be turned on and off. Check the status and remedy if necessary.	
(15) A paper jam in the	Broken feed switch 3 actua- tor.	Check visually and replace switch.	
paper feed section is indicated during copying (multiple sheets in cassette 3).	Defective feed switch 3.	Run maintenance item U031 and turn feed switch 3 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
Jam code 24	Defective feed pulleys or feed rollers.	Check visually and replace.	
	Defective PF paper feed clutch 1.	Run maintenance item U247 and select PF paper feed clutch 1 on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with PF paper feed clutch 1.	Check (see service manual of paper feeder).	

Problem	Causes/check procedures	Corrective measures	
(16) A paper jam in the paper feed section is indicated during copying (multiple sheets in cassette 4).	Broken PF feed switch actuator.	Check visually and replace switch.	
	Defective paper feeder feed switch.	With 5 V DC present at YC3-7 on the PF main PWB, check if YC3- 5 on the PF main PWB remains low or high when the PF feed switch is turned on and off. If it does, replace the PF feed switch.	
Jam code 25	Defective feed pulleys or feed rollers.	Check visually and replace.	
	Defective PF paper feed clutch 2.	Run maintenance item U247 and select PF paper feed clutch 2 on the touch panel to be turned on and off. Check the status and rem- edy if necessary.	
	Electrical problem with PF paper feed clutch 2.	Check (see service manual of paper feeder).	
(17)	Broken switch actuator.	Check visually and replace switch.	
A paper jam in the paper feed section is indicated during copying (multiple sheets in MP tray). Jam code 26	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. MP paper feed switch, MP paper conveying switch, registration switch	
	Defective MP paper con- veying clutch.	Run maintenance item U032 and select MP paper conveying clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with MP paper conveying clutch.	Check (see page 1-4-72).	
(18) A paper jam in the	Broken registration switch actuator.	Check visually and replace switch.	
paper conveying sec- tion is indicated dur- ing copying (misfeed in registration/trans- fer section).	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Feed switch 1, registration switch	
Jam code 30	The contact between the right and left registration rollers is not correct.	Check visually and replace.	
	Defective registration clutch.	Run maintenance item U032 and select registration clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with reg- istration clutch.	Check (see page 1-4-71).	
(19)	Broken switch actuator.	Check visually and replace switch.	
A paper jam in the paper conveying sec- tion is indicated dur- ing copying (misfeed	Defective loop sensor.	Run maintenance item U031 and turn the loop sensor on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
round the transfer belt). Jam code 31	Defective registration clutch.	Run maintenance item U032 and select registration clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with reg- istration clutch.	Check (see page 1-4-71).	

Problem Causes/check procedures Corrective measures		Corrective measures	
(20) A paper jam in the	Broken eject switch actua- tor.	Check visually and replace switch.	
fuser section is indi- cated during copying (misfeed in fuser sec- tion). Jam code 40 to 46	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Loop sensor, eject switch	
(21) A paper jam in the	Broken eject switch actua- tor.	Check visually and replace switch.	
eject section is indi- cated during copying (misfeed in eject sec- tion). Jam code 50	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Loop sensor, eject switch	
(22)	Broken switch actuator.	Check visually and replace switch.	
A paper jam in the eject section is indi- cated during copying (misfeed in job sepa- rator eject section). Jam code 51	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Eject switch, job eject switch, finisher eject switch	
(23) A paper jam in the	Broken feedshift switch actuator.	Check visually and replace switch.	
feedshift section is indicated during copying (misfeed in feedshift section). Jam code 52	Defective feedshift switch.	Run maintenance item U031 and turn the feedshift switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
(24)	Broken switch actuator.	Check visually and replace switch.	
A paper jam in the duplex section is indi- cated during copying (misfeed in duplex paper conveying sec- tion 1). Jam code 60	Defective switch.	Run maintenance item U031 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Feedshift switch, duplex switch, registration switch	
(25) A paper jam in the	Broken registration switch actuator.	Check visually and replace switch.	
duplex section is indi- cated during copying (misfeed in duplex paper conveying sec-	Defective registration switch.	Run maintenance item U031 and turn the registration switch on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.	
tion 2). Jam code 61	Defective registration clutch.	Run maintenance item U032 and select registration clutch on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Electrical problem with reg- istration clutch.	Check (see page 1-4-71).	

Problem	Causes/check procedures	Corrective measures	
(26) An original jams in optional DP is indi-	Defective original feed switch.	Run maintenance item U244 and turn the original feed switch on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.	
cated during copying (no original feed). Jam code 70	Defective original feed motor.	Run maintenance item U243 and select original feed motor on the touch panel to be turned on and off. Check the status and remedy if necessary.	
	Defective tray upper limit switch.	Run maintenance item U244 and turn the tray upper limit switch on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.	
	Defective original lift motor.	Run maintenance item U243 and select original lift motor on the touch panel to be turned on and off. Check the status and remedy if necessary.	
(27) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Original feed switch, original registration switch	
(jam in the original feed section). Jam code 71	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original conveying motor	
(28) An original jams in optional DP is indi-	Defective DP timing switch 1.	Run maintenance item U244 and turn the DP timing switch 1 on and off manually. Replace the switch if indication of the corre- sponding switch on the touch panel is not displayed in reverse.	
cated during copying (jam in the original conveying section). Jam code 72	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original conveying motor	
(29) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Original registration switch, DP timing switch 1/2	
(jam in the original registration section). Jam code 73	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original conveying motor	
(30) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. DP timing switch1, original feed switch, original registration switch	
(jam in the original feed section). Jam code 74	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original conveying motor	
(31) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on ar off manually. Replace the switch if indication of the correspondir switch on the touch panel is not displayed in reverse. Original registration switch, DP timing switch 1/2	
(jam in the original conveying section). Jam code 75	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original conveying motor	

Problem	Causes/check procedures	Corrective measures	
(32) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. DP timing switch 1, switchback tray switch	
(jam in the original switchback section 1). Jam code 76	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original conveying motor, original switchback motor	
(33) An original jams in optional DP is indi- cated during copying	Defective original registra- tion switch.	Run maintenance item U244 and turn the original registration switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
(jam in the original switchback section 2). Jam code 77	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original switchback motor, original feed motor	
(34) A original jam in the optional DP is indi- cated as soon as the main power switch is	A piece of paper torn from original is caught around original feed switch, original registration switch or DP timing switch 1/2.	Check visually and remove it, if any.	
turned on. (DP cover open JAM). Jam code 78	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Original feed switch, original registration switch, DP timing switch 1/2	
(35) An original jams in optional DP is indi- cated during copying	Defective switch.	Run maintenance item U244 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. DP timing switch 1, original eject switch	
(jam in the original eject section). Jam code 79	Defective motor.	Run maintenance item U243 and select the following motor on the touch panel to be turned on and off. Check the status and remedy if necessary. Original feed motor, original switchback motor	
(36) A paper jam in optional document finisher is indicated	Defective paper entry sen- sor.	(3000-sheet document finisher) Run maintenance item U241 and turn the paper entry sensor on and off manually. Replace the sensor if indication of the corre- sponding sensor on the touch panel is not displayed in reverse.	
during copying (jam between finisher and machine). Jam code 80		(Document finisher) With 5 V DC present at CN3-1 and CN3-3 on the finisher main PWB, check if CN3-2and CN3-4 on the finisher main PWB remains low or high when the paper entry sensor is turned on and off. If it does, replace the paper entry sensor.	
(37)	Extremely curled paper.	Change the paper.	
A paper jam in optional document finisher is indicated during copying (paper jam during	Defective paper entry sen- sor.	(3000-sheet document finisher) Run maintenance item U241 and turn the paper entry sensor on and off manually. Replace the sensor if indication of the corre- sponding sensor on the touch panel is not displayed in reverse.	
paper insertion to the finisher). Jam code 81		(Document finisher) With 5 V DC present at CN3-1 and CN3-3 on the finisher main PWB, check if CN3-2and CN3-4 on the finisher main PWB remains low or high when the paper entry sensor is turned on and off. If it does, replace the paper entry sensor.	
	Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.	

Problem	Causes/check procedures	Corrective measures			
(38) A paper jam in optional document finisher is indicated during copying (fin- isher stapler jam). Jam code 82	Defective staple home posi- tion sensor.	Run maintenance item U241 and turn the staple home position sensor on and off manually. Replace the sensor if indication of th corresponding sensor on the touch panel is not displayed in reverse.			
(39)	3000-sheet document finisher				
A paper jam in optional document finisher is indicated during copying (eject	Defective eject switch 1.	Run maintenance item U241 and turn eject switch 1 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.			
sensor stay jam).	Document finisher				
Jam code 83	Defective eject paper sen- sor.	With 5 V DC present at CN7-1 on the finisher main PWB, check if CN7-3 on the finisher main PWB remains low or high when the eject paper sensor is turned on and off. If it does, replace the eject paper sensor.			
	Check if the paper convey- ing motor malfunctions.	Check and remedy.			
	Check if the eject roller and eject pulley contact each other.	Check and remedy.			
	Check if the eject guide is deformed.	Check and remedy.			
	Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.			
(40) A paper jam in optional document finisher is indicated during copying (right sub tray eject jam). Jam code 84	Defective eject switch 2.	Run maintenance item U241 and turn eject switch 2 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.			
(41) A paper jam in optional document finisher is indicated during copying (left sub tray eject jam). Jam code 85	Defective eject switch 3.	Run maintenance item U241 and turn eject switch 3 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.			
(42) A paper jam in optional document finisher is indicated during copying (inner tray paper entry sen- sor 2 jam). Jam code 87	Defective inner tray paper entry sensor 2.	Run maintenance item U241 and turn inner tray paper entry sen- sor 2 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.			
(43) A paper jam in optional document finisher is indicated during copying (main tray eject jam). Jam code 88	Defective eject switch 1.	Run maintenance item U241 and turn eject switch 1 on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.			

Problem	Causes/check procedures	Corrective measures	
(44) A paper jam in optional document finisher is indicated during copying (cen- ter-folding unit jam). Jam code 89	Defective sensor/switch.	Run maintenance item U241 and turn the following switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse. Centerfold paper entry sensor, centerfold eject switch, centerfold paper conveying sensor	
(45) A paper jam in optional document finisher is indicated during copying (mail- box jam). Jam code 90	Defective tray eject sensor.	Run maintenance item U241 and turn tray eject sensor on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.	
(46) A paper jam in optional document finisher is indicated	Defective eject paper sen- sor.	With 5 V DC present at CN7-1 on the finisher main PWB, check if CN7-3 on the finisher main PWB remains low or high when the eject paper sensor is turned on and off. If it does, replace the eject paper sensor.	
during copying (eject sensor non-arrival jam).	Check if the paper convey- ing motor malfunctions.	Check.	
Jam code 92	Check if the eject roller and eject pulley contact each other.	Check and remedy.	
	Check if the eject guide is deformed.	Check and remedy.	
	Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.	
(47) A paper jam in optional document finisher is indicated	Defective switchback sen- sor.	With 5 V DC present at CN3-5 on the finisher main PWB, check if CN3-7 on the finisher main PWB remains low or high when the switchback sensor is turned on and off. If it does, replace the switchback sensor.	
during copying (switchback sensor jam).	Check if the switchback motor malfunctions.	Check.	
Jam code 93	Check if the switchback roller and switchback pul- ley contact each other.	Check and remedy.	
	Check if the switchback guide is deformed.	Check and remedy.	
	Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.	
(48)	Extremely curled paper.	Change the paper.	
A paper jam in optional document finisher is indicated during copying (paper entry sensor	Defective paper entry sen- sor.	With 5 V DC present at CN3-1and CN3-3 on the finisher main PWB, check if CN3-2 and CN3-4 on the main PCB remains low or high when the paper entry sensor is turned on and off. If it does, replace the paper entry sensor.	
stay jam). Jam code 94	Check if the paper entry guide is deformed.	Check and remedy.	
	Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.	
1		1	

Problem	Causes/check procedures	Corrective measures
(49) A paper jam in optional document finisher is indicated during copying	Defective paper conveying sensor.	With 5 V DC present at CN9-1 on the finisher main PWB, check if CN9-3 on the finisher main PWB remains low or high when the paper conveying sensor is turned on and off. If it does, replace the paper conveying sensor.
during copying (paper conveying sensor jam).	Check if the paper convey- ing motor malfunctions.	Check.
Jam code 95	Check if the paper convey- ing roller and paper convey- ing pulley contact each other.	Check and remedy.
	Check if the paper convey- ing guide is deformed.	Check and remedy.
	ing guide is deformed. Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

1-4-2 Self-diagnosis

(1) Self-diagnostic function

This unit is equipped with a self-diagnostic function. When a problem is detected, copying is disabled and the problem displayed as a code consisting of C followed by a number, indicating the nature of the problem. A message is also displayed requesting the user to call for service.

After removing the problem, the self-diagnostic function can be reset by turning cover switch off and back on.

List of system errors

When an unexpected error is detected for some reason, a system error will be indicated. (When 0800 error is detected, JAM05 is indicated.) After a system error is indicated, the error can be cleared by turning the power switch off and then on. If the error is detected continuously, however, perform the operation shown in Table 1-4-1. If a system error occurs frequently, a fault may have occurred. Check the details of the C call to take proper measures.

System error	Contents	Operation
0800	Image processing problem	Repetition of JAM05 \rightarrow System error \rightarrow JAM05
1800	Paper feeder communication error (optional paper feeder)	System error \rightarrow Service call \rightarrow Partial operation control
4100	BD initialization problem	System error \rightarrow Normal service call processing
4200	BD steady-state problem	System error \rightarrow Normal service call processing
8800	Document finisher communication error (optional 3000-sheet document finisher)	System error \rightarrow Service call \rightarrow Partial operation control

Table 1-4-1

Partial operation control If one of the following service codes is detected, partial operation control will be activated. Take actions to clear the cause of the trouble and perform maintenance item U906 to reset partial operation control.

Code	Contents	
C0840	Faults of RTC	
C1010	Lift motor 1 error	
C1020	Lift motor 2 error	
C1030	PF lift motor 1 error (optional paper feeder)	
C1040	PF lift motor 2 error (optional paper feeder)	
C1100	PF lift motor 1 error (optional 3000-sheet paper feeder)	
C1110	PF lift motor 2 error (optional 3000-sheet paper feeder)	
C1120	PF left lift position problem (optional 3000-sheet paper feeder)	
C1130	PF right lift position problem (optional 3000-sheet paper feeder)	
C1140	Rotary guide motor error	
C2600	PF paper conveying motor error (optional paper feeder)	
C8020	Punch motor problem (optional 3000-sheet document finisher)	
C8030	Tray upper limit detection problem (optional document finisher)	
C8040	Belt problem (optional document finisher)	
C8050	Paper conveying belt motor 1 problem (optional 3000-sheet document finisher)	
C8060	Paper conveying belt motor 2 problem (optional 3000-sheet document finisher)	
C8070	Inner tray communication error (optional 3000-sheet document finisher)	
C8140	Main tray problem (optional 3000-sheet document finisher)	
	Tray elevation motor problem (optional document finisher)	
C8170	Side registration motor 1 problem (optional 3000-sheet document finisher)	
C8180	Side registration motor 2 problem (optional 3000-sheet document finisher)	
C8210	Stapler moving motor 1 error (optional 3000-sheet document finisher)	
	Stapler problem (optional document finisher)	
C8220	Stapler moving motor 2 error (optional 3000-sheet document finisher)	
C8230	Stapler motor problem (optional 3000-sheet document finisher)	
C8300	Center-folding unit communication error (optional center-folding unit of 3000-sheet document finisher)	
C8310	Centerfold side registration motor 2 problem (optional center-folding unit of 3000-sheet document finisher)	
C8320	Centerfold paper conveying belt motor problem (optional center-folding unit of 3000-sheet document finisher)	
	Adjustment motor 2 problem (optional document finisher)	
C8330	Blade motor problem (optional center-folding unit of 3000-sheet document finisher)	
	Adjustment motor 1 problem (optional document finisher)	
C8340	Centerfold staple motor problem (optional center-folding unit of 3000-sheet document finisher)	
C8350	Centerfold side registration motor 1 problem (optional center-folding unit of 3000-sheet document finisher)	
	Roller motor problem (optional document finisher)	
C8360	Centerfold main motor problem (optional center-folding unit of 3000-sheet document finisher)	
	Slide motor problem (optional document finisher)	
C8440	Sensor adjusting problem (optional document finisher)	
C8460	EEPROM problem (optional document finisher)	
C8500	Mailbox communication error (optional mailbox of 3000-sheet document finisher)	
C8510	Mailbox drive motor problem (optional mailbox of 3000-sheet document finisher)	
C9040	DP lift motor going up error (optional DP)	
C9050	DP lift motor going down error (optional DP)	
C9060	DP EEPROM error (optional DP)	
C9070	Communication problem between DP and SHD (optional DP)	
C9080	Communication problem between DP and CIS (optional DP)	

Measures against the service codes detecting fuser problems If one of the following service codes is detected, take actions to clear the cause of the trouble and perform maintenance item U163 to reset the service code.

Code	Contents	
C6000	Fuser heater 1 break	
C6010	Abnormally high fuser thermistor temperature	
C6020	Abnormally high fuser thermistor 1 temperature	
C6030	Fuser thermistor 1 break error	
C6040	Fuser heater error	
C6050	Abnormally low fuser thermistor 1 temperature	
C6100	Fuser heater 2 break	
C6120	Abnormally high fuser thermistor 2 temperature	
C6130	Fuser thermistor 2 break error	
C6200	Fuser heater 1 edge break	
C6220	Abnormally high fuser thermistor 1 edge temperature	
C6230	Fuser thermistor 1 edge break error	
C6400	Zero-cross signal error	

(2) Self diagnostic codes

	Contents	Remarks		
Code		Causes Check procedures/corrective measure		
C0030	Fax control PWB system problem Processing with the fax software was disabled due to a hardware or software problem.	Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.	
C0070	Abnormal detection of fax control PWB incompatibility	Defective fax soft- ware.	Install the fax software.	
	In the initial communication with the fax control PWB, any normal communication command is not transmitted.	Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.	
C0100	Backup memory (EEPROM) device problem (Main PWB)	Defective main PWB.	Replace the main PWB and check for correct operation.	
	Reading from or writing to EEPROM cannot be performed.	Device damage of EEPROM.	Contact the Service Administrative Division.	
C0120	MAC address data error For data in which the MAC address is invalid.	Defective main PWB.	Replace the main PWB and check for correct operation.	
C0150	Backup memory (EEPROM) device problem (Engine PWB)	Defective engine PWB.	Replace the engine PWB and check for correct operation.	
	No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times succes- sively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Device damage of EEPROM.	Contact the Service Administrative Division.	
C0160	Backup memory (EEPROM) data problem (Engine PWB) Reading data from EEPROM is abnor- mal.	Data damage of EEPROM.	Contact the Service Administrative Division.	
C0170	Copy counts problem A checksum error is detected in the main	Data damage of EEPROM.	Contact the Service Administrative Division.	
	and sub backup memories for the copy counters.	Defective main PWB.	Replace the main PWB and check for cor- rect operation.	
C0180	Machine number mismatch error Machine number of main PWB and engine PWB does not match.	Data damage of EEPROM.	Contact the Service Administrative Division.	
C0320	Power CPU communication problem A communication error is detected 10 times in succession.	Defective engine PWB.	Replace the engine PWB and check for correct operation.	
C0620	FAX image DIMM problem DIMM is not installed correctly.	DIMM installed incorrectly.	Check if the DIMM is inserted into the socket on the main PWB correctly.	
	DIMM cannot be accessed.	Defective main PWB.	Replace the main PWB and check for correct operation.	

Code	Contents	Remarks		
		Causes	Check procedures/corrective measures	
C0630	DMA problem DMA transmission of image data does not complete within the specified period of time.	Poor contact in the connector terminals.	Check the connection the signal cable for CIS and the main PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective main PWB.	Replace the main PWB and check for correct operation.	
C0640	Hard disk drive problem The hard disk cannot be accessed.	Poor contact in the connector terminals.	Check the connection the main PWB and the hard disk, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective hard disk.	Run U024 (HDD formatting) without turning the power off to initialize the hard disk (see page 1-3-24). Replace the hard disk drive and check for correct operation if the prob- lem is still detected after initialization.	
		Defective main PWB.	Replace the main PWB and check for correct operation.	
C0650	FAX image DIMM check problem Improper DIMM is installed.	DIMM installed incorrectly.	Check if the DIMM is inserted into the socket on the main PWB correctly.	
		Defective main PWB.	Replace the main PWB and check for cor- rect operation.	
C0800	Image processing problem JAM05 is detected twice.	Defective main PWB.	Replace the main PWB and check for correct operation.	
C0820	20 Fax control PWB CG ROM checksum error (optional fax) A checksum error occurred with the CG ROM data of the fax control PWB.	Defective fax soft- ware.	Install the fax software.	
		Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.	
C0830	Fax control PWB flash program area checksum error (optional fax) A checksum error occurred with the pro- gram of the fax control PWB.	Defective fax soft- ware.	Install the fax software.	
		Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.	
C0840	Faults of RTC 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.	Defective main PWB.	Replace the main PWB and check for correct operation.	
		The battery is dis- connected from the main PWB.	Check visually and remedy if necessary.	
C0860	Fax control PWB software switch checksum error (optional fax)	Defective fax soft- ware.	Install the fax software.	
	A checksum error occurred with the soft- ware switch value of the fax control PWB.	Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.	
C0870	B70 Fax control PWB to main PWB high capacity data transfer problem High-capacity data transfer between the fax control PWB and the scanner MIP PWB was not normally performed even if the data transfer was retried 10 times.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the main PWB and the connector on the fax control PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective PWB.	Replace the fax control PWB or main PWB and check for correct operation.	

	_	Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C0880	Program archive problem (optional fax)	Defective fax soft- ware.	Install the fax software.
	When power is turned on, the com- pressed program in the Flash ROM on the fax control PWB was not success- fully decompressed.	Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.
C0890	Fax control PWB CG FONT archive problem (optional fax) When power is turned on, the com- pressed CG font in the Flash ROM on the fax control PWB was not success- fully decompressed.	Defective fax soft- ware.	Install the fax software.
		Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.
C0920	Fax file system error The backup data is not retained for file system abnormality of flash memory of the fax control PWB.	Defective fax con- trol PWB.	Replace the fax control PWB and verify the operation.
C1010	Lift motor 1 error After cassette 1 is inserted, lift switch 1 does not turn on within 12 s. This error is detected four times successively.	Poor contact in the connector terminals.	Check the connection of connector of lift motor 1 and the connector YC3 on the feed PWB, and the continuity across the connec- tor terminals. Repair or replace if necessary.
		Broken gears or couplings of lift motor 1.	Replace lift motor 1.
		Defective lift motor 1.	Check for continuity across the coil. If none, replace lift motor 1.
		Defective lift switch 1.	Check if YC4-2 on the feed PWB goes low when lift switch 1 is turned off. If not, replace lift switch 1.
		Poor contact in the connector terminals.	Check the connection of connector of lift switch 1 and the connector YC4 on the feed PWB, and the continuity across the connec- tor terminals. Repair or replace if necessary.
		Defective PWB.	Replace the feed PWB or engine PWB and check for correct operation.
C1020	Lift motor 2 error After cassette 2 is inserted, lift switch 2 does not turn on within 12 s. This error is detected four times successively.	Poor contact in the connector terminals.	Check the connection of connector of lift motor 2 and the connector YC3 on the feed PWB, and the continuity across the connec- tor terminals. Repair or replace if necessary.
		Broken gears or couplings of lift motor 2.	Replace lift motor 2.
		Defective lift motor 2.	Check for continuity across the coil. If none, replace lift motor 2.
		Defective lift switch 2.	Check if YC4-8 on the feed PWB goes low when lift switch 2 is turned off. If not, replace lift switch 2.
		Poor contact in the connector terminals.	Check the connection of connector of lift switch 2 and the connector YC4 on the feed PWB, and the continuity across the connec- tor terminals. Repair or replace if necessary.
		Defective PWB.	Replace the feed PWB or engine PWB and check for correct operation.

	2	Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C1030	PF lift motor 1 error (optional paper feeder) After cassette 3 is inserted, PF lift switch 1 does not turn on within 12 s. This error is detected two times successively. During driving the motor, the lift overcurrent protective monitor signal is detected for 500 ms or more two times successively. However, the first 1 s after PF lift motor 1 is turned on is excluded from detection.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Broken gears or couplings of PF lift motor 1.	Replace PF lift motor 1.
		Defective PF lift motor 1.	Check for continuity across the coil. If none, replace PF lift motor 1.
		Defective PF lift switch 1.	Check if YC1-7 on the PF main PWB goes low when PF lift switch 1 is turned off. If not, replace PF lift switch 1.
C1040	PF lift motor 2 error (optional paper feeder) After cassette 4 is inserted, PF lift switch 2 does not turn on within 12 s. This error is detected two times successively. During driving the motor, the lift overcurrent protective monitor signal is detected for 500 ms or more two times successively. However, the first 1 s after PF lift	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Broken gears or couplings of PF lift motor 2.	Replace PF lift motor 2.
	motor 2 is turned on is excluded from detection.	Defective PF lift motor 2.	Check for continuity across the coil. If none, replace PF lift motor 2.
		Defective PF lift switch 2.	Check if YC1-9 on the PF main PWB goes low when PF lift switch 2 is turned off. If not, replace PF lift switch 2.
C1100	PF lift motor 1 error (optional 3000- sheet paper feeder) A motor over-current signal is detected continuously for 1 s or longer.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		PF lift motor 1 does not rotate correctly (the motor is over- loaded).	Check the gears and remedy if necessary.
C1110	PF lift motor 2 error (optional 3000- sheet paper feeder) A motor over-current signal is detected continuously for 1 s or longer.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		PF lift motor 2 does not rotate correctly (the motor is over- loaded).	Check the gears and remedy if necessary.

		Remarks		
Code	Contents	Causes	Check procedures/corrective measures	
C1120	PF left lift position problem (optional 3000-sheet paper feeder) Level switch 1 does not turn on within 30 s of PF lift motor 1 turning on.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective level switch 1.	Check if YC5-4 on the PF main PWB goes low when level switch 1 is turned off. If not, replace PF lift switch 1.	
		Defective PF lift motor 1.	Check for continuity across the coil. If none, replace PF lift motor 1.	
		The PF left lift does not rise properly.	Check the gears and belts, and remedy if necessary.	
C1130	PF right lift position problem (optional 3000-sheet paper feeder) Level switch 2 does not turn on within 30 s of PF lift motor 2 turning on.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective level switch 2.	Check if YC5-7 on the PF main PWB goes low when level switch 2 is turned off. If not, replace PF lift switch 2.	
		Defective PF lift motor 2.	Check for continuity across the coil. If none, replace PF lift motor 2.	
		The PF right lift does not rise prop- erly.	Check the gears and belts, and remedy if necessary.	
C1400	Rotary guide motor error Rotary guide sensor does not turn on.	Poor contact in the connector terminals.	Check the connection of connector of the rotary guide motor and the connector YC2 on the main front PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Broken gears or couplings of rotary guide motor.	Replace rotary guide motor.	
		Defective rotary guide motor.	Check for continuity across the coil. If none, replace rotary guide motor.	
		Defective rotary guide sensor.	Check if YC2-8 on the main front PWB goes low when rotary guide sensor is turned off. If not, replace rotary guide sensor.	
		Poor contact in the connector terminals.	Check the connection of connector of the rotary guide sensor and the connector YC2 on the main front PWB, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective PWB.	Main front PWB or engine PWB and check for correct operation.	

<u> </u>		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C1800	Paper feeder communication error (optional paper feeder) A communication error from paper feeder is detected 10 times in succes- sion.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective PWB.	Replace the PF main PWB or engine PWB and check for correct operation.
C1900	Paper feeder EEPROM error (optional paper feeder) When writing the data, the write data and the read data is not continuously in agreement three times.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
		Defective paper feeder.	Replace the paper feeder with another unit and check the operation. If the operation is normal, replace or repair optional paper feeder.
C1950	Transfer belt 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 succes- sively.	Poor contact in the connector terminals.	Check the connection of connector YC28 on the engine PWB and the connector of the transfer belt unit, and the continuity across the connector terminals. Repair or replace if necessary.
	Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective transfer belt speed PWB (inner transfer belt unit).	Replace the transfer belt unit (see page 1-5- 37).
C2101	Developing motor K error The rated speed achievement signal does not turn to L within 2 s since devel- oping motor K is activated. The rated speed achievement signal is at the H level for 1 s continuously after developing motor K is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC16 on the engine PWB and the connector of the developing motor K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective develop- ing motor K.	Run maintenance item U030 and check if the developing motor K operates when YC16-B4 (remote signal) on the engine PWB goes low. If not, replace the develop- ing motor K.
		Defective engine PWB.	Run maintenance item U030 and check if YC16-B4 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.

<u> </u>	Contents	Remarks		
Code		Causes	Check procedures/corrective measures	
C2102	Developing motor MCY error The rated speed achievement signal does not turn to L within 2 s since devel- oping motor MCY is activated. The rated speed achievement signal is at the H level for 1 s continuously after developing motor MCY is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC16 on the engine PWB and the connector of the developing motor MCY, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.	
		Defective develop- ing motor MCY.	Run maintenance item U030 and check if the developing motor MCY operates when YC16-A4 (remote signal) on the engine PWB goes low. If not, replace the develop- ing motor MCY.	
		Defective engine PWB.	Run maintenance item U030 and check if YC16-A4 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.	
C2201	Drum motor K steady-state error Drum motor K does not keep the steady- state speed for 5 s successively since the motor is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the motor control PWB and the connector of the drum motor K, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective drum motor K.	Replace the drum motor K.	
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.	
C2202	Drum motor C steady-state error Drum motor C does not keep the steady- state speed for 5 s successively since the motor is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the motor control PWB and the connector of the drum motor C, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective drum motor C.	Replace the drum motor C.	
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.	
C2203	Drum motor M steady-state error Drum motor M does not keep the steady- state speed for 5 s successively since the motor is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the motor control PWB and the connector of the drum motor M, and the continuity across the connector terminals. Repair or replace if necessary.	
		Defective drum motor M.	Replace the drum motor M.	
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.	

Contents	Causes	
	Cuucoo	Check procedures/corrective measures
Drum motor Y steady-state error Drum motor Y does not keep the steady- state speed for 5 s successively since the motor is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the motor control PWB and the connector of the drum motor Y, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective drum motor Y.	Replace the drum motor Y.
	Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
Drum motor K startup error Drum motor K is not stabilized within 5 s since the motor is activated.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the motor control PWB and the connector of the drum motor K, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective drum motor K.	Replace the drum motor K.
	Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
Drum motor C startup error Drum motor C is not stabilized within 5 s since the motor is activated.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the motor control PWB and the connector of the drum motor C, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective drum motor C.	Replace the drum motor C.
	Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
Drum motor M startup error Drum motor M is not stabilized within 5 s since the motor is activated.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the motor control PWB and the connector of the drum motor M, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective drum motor M.	Replace the drum motor M.
	Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
Drum motor Y startup error Drum motor Y is not stabilized within 5 s since the motor is activated.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the motor control PWB and the connector of the drum motor Y, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective drum motor Y.	Replace the drum motor Y.
	Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
_	Drum motor K is not stabilized within 5 s since the motor is activated. Drum motor C startup error Drum motor C is not stabilized within 5 s since the motor is activated. Drum motor M startup error Drum motor M is not stabilized within 5 s since the motor is activated. Drum motor M startup error Drum motor M is not stabilized within 5 s since the motor is activated. Drum motor Y is not stabilized within 5 s since the motor is activated. Drum motor Y startup error Drum motor Y is not stabilized within 5 s	motor Y. Defective PWB. Drum motor K startup error Drum motor K is not stabilized within 5 s since the motor is activated. Poor contact in the connector termi- nals. Defective drum motor K. Defective drum motor K. Drum motor C startup error Drum motor C is not stabilized within 5 s since the motor is activated. Poor contact in the connector termi- nals. Defective PWB. Poor contact in the connector termi- nals. Drum motor M startup error Drum motor M startup error Drum motor M is not stabilized within 5 s since the motor is activated. Poor contact in the connector termi- nals. Defective drum motor M. Defective drum motor M. Defective PWB. Poor contact in the connector termi- nals. Drum motor M startup error Drum motor Y is not stabilized within 5 s since the motor is activated. Poor contact in the connector termi- nals. Defective drum motor Y. Defective drum motor Y.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C2231	Drum motor K main sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the motor control PWB and the connector of the drum motor K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor K.	Replace the drum motor K.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2232	Drum motor C main sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the motor control PWB and the connector of the drum motor C, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor C.	Replace the drum motor C.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2233	Drum motor M main sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the motor control PWB and the connector of the drum motor M, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor M.	Replace the drum motor M.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2234	Drum motor Y main sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the motor control PWB and the connector of the drum motor Y, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor Y.	Replace the drum motor Y.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2241	Drum motor K sub sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the motor control PWB and the connector of the drum motor K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor K.	Replace the drum motor K.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C2242	Drum motor C sub sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the motor control PWB and the connector of the drum motor C, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor C.	Replace the drum motor C.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2243	3 Drum motor M sub sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the motor control PWB and the connector of the drum motor M, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor M.	Replace the drum motor M.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2244	Drum motor Y sub sensor error No signal is input to the sensor for 1.5 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the motor control PWB and the connector of the drum motor Y, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor Y.	Replace the drum motor Y.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2261	Drum motor K device sensor error The device alarm signal is input.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the motor control PWB and the connector of the drum motor K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor K.	Replace the drum motor K.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2262	Drum motor C device error The device alarm signal is input.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the motor control PWB and the connector of the drum motor C, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor C.	Replace the drum motor C.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.

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Code	Contents	Causes	Check procedures/corrective measures
C2263	Drum motor M device error The device alarm signal is input.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the motor control PWB and the connector of the drum motor M, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor M.	Replace the drum motor M.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2264	Drum motor Y device error The device alarm signal is input.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the motor control PWB and the connector of the drum motor Y, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum motor Y.	Replace the drum motor Y.
		Defective PWB.	Replace the motor control PWB or engine PWB and check for correct operation.
C2271	Drum position sensor K error While the drum rotates two turns, no sig- nal is input to the sensor.	Poor contact in the connector terminals.	Check the connection of connector YC3 on the main front PWB and the connector of the drum unit K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum position sensor K.	Replace the drum unit K (see page 1-5-35).
		Defective PWB.	Replace the main front PWB or engine PWB and check for correct operation.
C2272	Prum position sensor C error While the drum rotates two turns, no signal is input to the sensor.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the sub front PWB and the connector of the drum unit C, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum position sensor C.	Replace the drum unit C (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C2273	Drum position sensor M error While the drum rotates two turns, no sig- nal is input to the sensor.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the sub front PWB and the connector of the drum unit M, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum position sensor M.	Replace the drum unit M (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C2274	Drum position sensor Y error While the drum rotates two turns, no sig- nal is input to the sensor.	Poor contact in the connector terminals.	Check the connection of connector YC3 on the sub front PWB and the connector of the drum unit Y, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum position sensor Y.	Replace the drum unit Y (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C2300	Fuser motor error After the motor drive ON signal is output and 1 s elapses, the rated speed reach signal is not input continuously for 2 s.	Poor contact in the connector terminals.	Check the connection of connector YC25 on the engine PWB and the connector of the fuser motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective fuser motor.	Run maintenance item U030 and check if the fuser motor operates when YC25-B4 (remote signal) on the engine PWB goes low. If not, replace the fuser motor.
		Defective engine PWB.	Run maintenance item U030 and check if YC25-B4 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.
C2351	Cleaning motor K error After the motor drive ON signal is output and 2 s elapses, the rated speed reach signal is not input continuously for 1 s.	Poor contact in the connector terminals.	Check the connection of connector YC16 on the engine PWB and the connector of the cleaning motor K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective cleaning motor K.	Run maintenance item U030 and check if the cleaning motor K operates when YC16- B13 (remote signal) on the engine PWB goes low. If not, replace the cleaning motor K.
		Defective engine PWB.	Run maintenance item U030 and check if YC16-B13 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C2352	Cleaning motor MCY error After the motor drive ON signal is output and 2 s elapses, the rated speed reach signal is not input continuously for 1 s.	Poor contact in the connector terminals.	Check the connection of connector YC16 on the engine PWB and the connector of the cleaning motor MCY, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective cleaning motor K.	Run maintenance item U030 and check if the cleaning motor MCY operates when YC16-A13 (remote signal) on the engine PWB goes low. If not, replace the cleaning motor MCY.
		Defective engine PWB.	Run maintenance item U030 and check if YC16-A13 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.
C2400	Eject motor error After the motor drive ON signal is output and 2 s elapses, the rated speed reach signal is not input continuously for 1 s.	Poor contact in the connector terminals.	Check the connection of connector YC25 on the engine PWB and the connector on the eject motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective eject motor.	Run maintenance item U030 and check if the eject motor operates when YC25-A5 (remote signal) on the engine PWB goes low. If not, replace the eject motor.
		Defective engine PWB.	Run maintenance item U030 and check if YC25-A5 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.
C2500	MP motor error After the motor drive ON signal is output and 2 s elapses, the rated speed reach signal is not input continuously for 1 s.	Poor contact in the connector terminals.	Check the connection of connector YC24 on the engine PWB and the connector on the MP motor, and the continuity across the con- nector terminals. Repair or replace if neces- sary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective MP motor.	Run maintenance item U030 and check if the MP motor operates when YC24-2 (remote signal) on the engine PWB goes low. If not, replace the MP motor.
		Defective engine PWB.	Run maintenance item U030 and check if YC24-3 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.
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Code	Contents	Causes	Check procedures/corrective measures
C2550	Paper conveying motor error After the motor drive ON signal is output and 2 s elapses, the rated speed reach signal is not input continuously for 1 s.	Poor contact in the connector terminals.	Check the connection of connector YC2 on the feed PWB and the connector on the paper conveying motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective paper conveying motor.	Run maintenance item U030 and check if the motor operates. If not, replace the paper conveying motor.
		Defective PWB.	Replace the feed PWB or engine PWB and check for correct operation.
C2600	PF paper conveying motor error (optional paper feeder) The lock signal of the motor is detected above 450 ms.	Poor contact in the connector terminals.	Check the connection of connector YC27 on the engine PWB and the connector on the PF main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective paper PF paper conveying motor.	Replace the PF paper conveying motor.
		Defective PWB.	Replace the PF main PWB or engine PWB and check for correct operation.
C2700	Color release motor error After driving of the color release motor starts, the error signal is not at the H level for 4 s continuously. After driving of the color release motor	Poor contact in the connector termi- nals.	Check the connection of connector YC28 on the engine PWB and the connector of the color release motor, and the continuity across the connector terminals. Repair or replace if necessary.
	starts, the release signal does not turn to the L level within 5 s.	Defective color release motor.	Replace the color release motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation
C2810	Waste toner motor error After driving of the waste toner motor starts, the error signal is not at the H level for 2 s continuously.	Poor contact in the connector terminals.	Check the connection of connector YC12 on the engine PWB and the connector of the waste toner motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective waste toner motor.	Replace the waste toner motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.

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Contents otor control PWB communication rror communication error from motor con- ol PWB is detected 10 times in succes- on. canner carriage problem he home position is not correct when e power is turned on or at the start of opying using the table.	Causes Poor contact in the connector termi- nals. Defective PWB. Poor contact in the connector termi- nals. Defective home position switch. Defective scanner motor. The mirror frame, exposure lamp, or scanner wire is defective.	Check procedures/corrective measures Check the connection of connector YC14 and YC15 on the engine PWB and the con- nector of the motor control PWB, and the continuity across the connector terminals. Repair or replace if necessary. Replace the motor control PWB or engine PWB and check for correct operation. Check the connection of connector YC8 on the ISM PWB and the connector of the home position switch, and the connection of connector YC7 on the ISM PWB and the continuity across the connector terminals. Repair or replace if necessary. Replace the scanner motor and the continuity across the connector terminals. Repair or replace if necessary. Replace the scanner motor. Check if the mirror flames and exposure lamp are on the rail. And check the scanner wire winds correctly.
rror communication error from motor con- ol PWB is detected 10 times in succes- on. canner carriage problem he home position is not correct when e power is turned on or at the start of	connector termi- nals. Defective PWB. Poor contact in the connector termi- nals. Defective home position switch. Defective scanner motor. The mirror frame, exposure lamp, or scanner wire is	 and YC15 on the engine PWB and the connector of the motor control PWB, and the continuity across the connector terminals. Repair or replace if necessary. Replace the motor control PWB or engine PWB and check for correct operation. Check the connection of connector YC8 on the ISM PWB and the connector of the home position switch, and the connection of connector YC7 on the ISM PWB and the connector terminals. Repair or replace if necessary. Replace the scanner motor and the continuity across the connector terminals. Repair or replace if necessary. Replace the scanner home position switch. Check if the mirror flames and exposure lamp are on the rail. And check the scanner
he home position is not correct when e power is turned on or at the start of	Poor contact in the connector termi- nals. Defective home position switch. Defective scanner motor. The mirror frame, exposure lamp, or scanner wire is	 PWB and check for correct operation. Check the connection of connector YC8 on the ISM PWB and the connector of the home position switch, and the connection of connector YC7 on the ISM PWB and the connector on the scanner motor and the continuity across the connector terminals. Repair or replace if necessary. Replace the scanner home position switch. Replace the scanner motor. Check if the mirror flames and exposure lamp are on the rail. And check the scanner
he home position is not correct when e power is turned on or at the start of	connector termi- nals. Defective home position switch. Defective scanner motor. The mirror frame, exposure lamp, or scanner wire is	the ISM PWB and the connector of the home position switch, and the connection of connector YC7 on the ISM PWB and the connector on the scanner motor and the continuity across the connector terminals. Repair or replace if necessary. Replace the scanner home position switch. Replace the scanner motor. Check if the mirror flames and exposure lamp are on the rail. And check the scanner
	position switch. Defective scanner motor. The mirror frame, exposure lamp, or scanner wire is	Replace the scanner motor. Check if the mirror flames and exposure lamp are on the rail. And check the scanner
	motor. The mirror frame, exposure lamp, or scanner wire is	Check if the mirror flames and exposure lamp are on the rail. And check the scanner
	exposure lamp, or scanner wire is	lamp are on the rail. And check the scanner
	Defective PWB.	Replace the ISM PWB or ISC PWB and check for correct operation.
Exposure lamp problem When input value at the time of exposure lamp illumination does not exceed the threshold value between 5 s.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the ISM PWB and the connector on the inverter PWB, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective exposure lamp or inverter PWB.	Replace the exposure lamp or inverter PWB.
	Incorrect shading position.	Adjust the position of the contact glass (shading plate). If the problem still occurs, replace the scanner home position switch.
	Defective PWB.	Replace the ISM PWB, ISC PWB or CCD PWB and check for correct operation.
IS lamp problem /hen input value at the time of CIS illu- ination does not exceed the threshold alue between 5 s.	Poor contact in the connector terminals.	Check the connection of connector on the ISM PWB and the connector on the DP driver PWB, and the continuity across the connector terminals. Repair or replace if necessary.
	Defective DP driver PWB.	Replace the DP driver PWB and check for correct operation.
	Defective DP inverter PWB.	Replace the DP inverter PWB and check for correct operation.
	Defective CIS.	Replace the CIS and check for correct oper- ation.
in	ation does not exceed the threshold	ation does not exceed the threshold ue between 5 s. Defective DP driver PWB. Defective DP inverter PWB.

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Code	Contents	Causes	Check procedures/corrective measures
C3300	Optical system (AGC) problem After AGC, correct input is not obtained at CCD.	Poor contact in the connector terminals.	Check the connection of connector YC5 on the ISM PWB and the connector on the inverter PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective exposure lamp or inverter PWB.	Replace the exposure lamp or inverter PWB.
		Defective PWB.	Replace the ISM PWB, ISC PWB or CCD PWB and check for correct operation.
C3310	CIS AGC problem After AGC, correct input is not obtained	Defective DP driver PWB.	Replace the DP driver PWB and check for correct operation.
	at CIS.	CIS output prob- lem.	Replace the CIS and check for correct oper- ation.
		Defective DP inverter PWB.	Replace the DP inverter PWB and check for correct operation.
C3500	Communication error between scan- ner and ASIC An error code is detected.	Poor contact in the connector terminals.	Check the connection of connector YC2 on the CCD PWB and the connector YC2 on the ISC PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective PWB.	Replace the CCD PWB or ISC PWB and check for correct operation.
C3900	Backup memory read/write problem (ISC PWB) Read and write data does not match.	Defective backup RAM or PWB.	Replace the ISC PWB or ISM PWB and check for correct operation.
C3910	Backup memory data problem (ISC PWB) Data in the specified area of the backup memory does not match the specified values.	Defective backup RAM or PWB.	Replace the ISC PWB or ISM PWB and check for correct operation.
C4000	Polygon motor synchronization prob- lem The rated speed achievement signal won't turn to L in 48 s since the polygon	Poor contact in the connector terminals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
	motor is activated.	Defective polygon motor.	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C4010	Polygon motor steady-state problem The rated speed achievement signal turns to H every other 24 s after the poly- gon motor is stabilized.	Poor contact in the connector terminals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective polygon motor.	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C4100	BD initialization problem When power is turned on, ASIC of engine PWB detects a BD error for 1 s after the polygon motor is activated.	Poor contact in the connector terminals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective APC PWB BK (inner laser scanner unit)	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C4200	BD steady-state problem	Poor contact in the connector terminals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective laser scanner unit.	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C5101	Main high-voltage K error Abnormality of charger roller K is detected when Vpp adjustment.	Installation defec- tiveness on charger roller unit K.	Check the mounting state of the charger roller unit K. If any problem is found, repair or replace the unit.
		Defective charger roller unit K.	Replace the charger roller unit K (see page 1-5-36).
C5102	Main high-voltage C error Abnormality of charger roller C is detected when Vpp adjustment.	Installation defec- tiveness on charger roller unit C.	Check the mounting state of the charger roller unit C. If any problem is found, repair or replace the unit.
		Defective charger roller unit C.	Replace the charger roller unit C (see page 1-5-36).
C5103	Main high-voltage M error Abnormality of charger roller M is detected when Vpp adjustment.	Installation defec- tiveness on charger roller unit M.	Check the mounting state of the charger roller unit M. If any problem is found, repair or replace the unit.
		Defective charger roller unit M.	Replace the charger roller unit M (see page 1-5-36).
C5104	Main high-voltage Y error Abnormality of charger roller Y is detected when Vpp adjustment.	Installation defec- tiveness on charger roller unit Y.	Check the mounting state of the charger roller unit Y. If any problem is found, repair or replace the unit.
		Defective charger roller unit Y.	Replace the charger roller unit Y (see page 1-5-36).

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Code	Contents	Causes	Check procedures/corrective measures
C5301	Cleaning lamp K error	Poor contact in the connector terminals.	Check the connection of connector YC3 on the main front PWB and the connector of the drum unit K, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective clean- ing lamp K.	Replace the drum unit K (see page 1-5-35).
		Defective PWB.	Replace the main front PWB or engine PWB and check for correct operation.
C5302	Cleaning lamp C error	Poor contact in the connector terminals.	Check the connection of connector YC5 on the sub front PWB and the connector of the drum unit C, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective cleaning lamp C.	Replace the drum unit C (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C5303	303 Cleaning lamp M error	Poor contact in the connector terminals.	Check the connection of connector YC7 on the sub front PWB and the connector of the drum unit M, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective cleaning lamp M.	Replace the drum unit M (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C5304	Cleaning lamp Y error	Poor contact in the connector terminals.	Check the connection of connector YC3 on the sub front PWB and the connector of the drum unit Y, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective cleaning lamp Y.	Replace the drum unit Y (see page 1-5-35).
		Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C6000	Fuser heater 1 break Fuser thermistor 1 detects a temperature lower than the Ready indication temper-	Defective fuser heater 1.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
	ature for 90 s during warming up. Fuser thermistor 1 deduced less than 130 °C/266 °F for 5 s during stand-by. Fuser thermistor 1 does not reach 75° C/	Defective fuser thermostat 1.	Check for continuity across thermostat. If none, remove the cause and replace the fuser unit (see page 1-5-41).
	167 °F even after 30 s during warming up.	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.

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Code	Contents	Causes	Check procedures/corrective measures
C6010	Abnormally high fuser thermistor temperature The fuser Abnormally high signal is detected for 60 s or more.	Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6020	temperature The fuser temperature exceeds 240 °C/	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6030	Fuser thermistor 1 break error During warming up, fuser thermistor 1 does not detect temperature rise of 1 °C/	Defective fuser heater 1.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
	1.8 °F for 10 s. When the difference of temperature of fuser thermistor 1 and 2 becomes 90 °C/ 195 °F or more is detected continuously for 6 s.	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6040	Fuser heater error Fuser thermistor 1 detects temperature change of 20 °C/36 °F or more for 160	Defective fuser heater 1.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
	ms 100 times or more since the power is turned on.	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6050	Abnormally low fuser thermistor 1 temperature	Defective fuser heater 1.	Replace the fuser unit (see page 1-5-41).
	During printing, the temperature at the heat roller lower than 110 °C/230 °F is detected continuously for 6 s.	Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6100	Fuser heater 2 break Fuser thermistor 2 detected less than 100 °C/212 °F for 120 s during driving.	Defective fuser heater 2.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
	Fuser thermistor 2 deduced less than 150 °C/302 °F for 300 s during driving. Fuser thermistor 2 deduced less than	Defective fuser thermostat 2.	Check for continuity across thermostat. If none, remove the cause and replace the fuser unit (see page 1-5-41).
	100 °C/212 °F for 5 s during driving.	Installation defec- tiveness on fuser thermistor 2.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6120	Abnormally high fuser thermistor 2 temperature The fuser temperature exceeds 190 °C/	Installation defec- tiveness on fuser thermistor 2.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
	374 °F for 1 s.	Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C6130	Fuser thermistor 2 break error Fuser thermistor 2 detects a temperature of 30 °C/86 °F or lower for 75 s.	Installation defec- tiveness on fuser thermistor 2.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective fuser heater 2.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6200	Fuser heater 1 edge break During warming up, fuser thermistor 1 does not detect temperature rise of 1 °C/	Defective fuser heater 1.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
	1.8 °F for 10 s. Fuser thermistor 1 does not reach 90° C/ 194 °F even after 30 s during warming up.	Defective fuser thermostat 1.	Check for continuity across thermostat. If none, remove the cause and replace the fuser unit (see page 1-5-41).
	up.	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6220	Abnormally high fuser thermistor 1 edge temperature The fuser temperature exceeds 250 °C/	Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
	482 °F for 1 s.	Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6230	Fuser thermistor 1 edge break error Fuser thermistor 1 detects a temperature of 40 °C/104 °F or lower for 30 s.	Defective fuser heater 1.	Check for continuity across each heater. If none, replace the fuser unit (see page 1-5-41).
		Installation defec- tiveness on fuser thermistor 1.	Measure the resistance. If it is $\infty \Omega$, replace the fuser unit (see page 1-5-41).
		Defective PWB.	Replace the power source PWB or engine PWB and check for correct operation.
C6400	Zero-cross signal error While fuser heater ON/OFF control is performed, the zero-cross signal is not input within 3 s.	Poor contact in the connector terminals.	Check the connection of connector YC4 on the engine PWB and the connector YC10 on the power source PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective PWB.	Replace the engine PWB or power source PWB and check for correct operation.
C6410	Fuser unit type mismatch problem Absence of the fuser unit is detected.	Fuser unit connec- tor inserted incor- rectly.	Reinsert the fuser unit connector if neces- sary.
		Different type of the fuser unit is installed.	Install the correct fuser unit.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C7000	Toner motor problem After driving of the toner motor starts, the error signal is not at the H level for 500 ms continuously.	Poor contact in the connector terminals.	Check the connection of connector YC26 on the engine PWB and the connector of the toner motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Broken the gear.	Check visually and replace the gear if necessary.
		Defective toner motor M/C/Y/K.	Run maintenance item U135 and check if the toner motor operates. If not, replace the toner motor.
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation.
C7100	Toner container motor error The rated speed achievement signal does not turn to L within 2 s since toner container motor is activated. The rated speed achievement signal is	connector termi- nals. the engine PWB and the connector on t toner container motor, and the continuity	Check the connection of connector YC26 on the engine PWB and the connector on the toner container motor, and the continuity across the connector terminals. Repair or replace if necessary.
	at the H level for 1 s continuously after toner container motor is stabilized.	Defective drive transmission sys- tem.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
		Defective toner container motor.	Run maintenance item U030 and check if the toner container motor operates when YC26-A7 (remote signal) on the engine PWB goes low. If not, replace the toner con- tainer motor.
		Defective engine PWB.	Run maintenance item U030 and check if YC26-A7 (remote signal) on the engine PWB goes low. If not, replace the engine PWB.
C7101	Toner sensor K problem Sensor output value of 60 or less or 944 or more continued for 3 s.	Defective develop- ing unit K.	Replace the developing unit K (see page 1- 5-34).
		Defective PWB.	Replace the main front PWB or engine PWB and check for correct operation.
C7102	Toner sensor C problem Sensor output value of 60 or less or 944	Defective develop- ing unit C.	Replace the developing unit C (see page 1- 5-34).
	or more continued for 3 s.	Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C7103	Toner sensor M problem Sensor output value of 60 or less or 944	Defective develop- ing unit M.	Replace the developing unit M (see page 1- 5-34).
	or more continued for 3 s.	Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
C7104	Toner sensor Y problem Sensor output value of 60 or less or 944	Defective develop- ing unit Y.	Replace the developing unit Y (see page 1- 5-34).
	or more continued for 3 s.	Defective PWB.	Replace the sub front PWB or engine PWB and check for correct operation.
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Code	Contents	Causes	Check procedures/corrective measures
C7200	Broken internal thermistor wire An abnormal value is detected in the input data to inner temperature sensor 1.	Poor contact in the connector terminals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective laser scanner unit.	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C7210	Short-circuited internal thermistor An abnormal value is detected in the input data to inner temperature sensor 1.	Poor contact in the connector termi- nals.	Check the connection of connector YC13 on the engine PWB and laser scanner unit, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective laser scanner unit.	Replace the laser scanner unit (see page 1- 5-21).
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C7240	Broken internal thermistor 2 wire An abnormal value is detected in the input data to inner temperature sensor 2.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the engine PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C7250	Short-circuited internal thermistor 2 An abnormal value is detected in the input data to inner temperature sensor 2.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the engine PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective engine PWB.	Replace the engine PWB and check for cor- rect operation.
C7401	Developing unit K type mismatch problem Absence of the developing unit K is	Developing unit connector inserted incorrectly.	Reinsert the developing unit connector if necessary.
	detected.	Different type of the developing unit is installed.	Install the correct developing unit.
C7402	Developing unit C type mismatch problem Absence of the developing unit C is	Developing unit connector inserted incorrectly.	Reinsert the developing unit connector if necessary.
	detected.	Different type of the developing unit is installed.	Install the correct developing unit.
C7403	Developing unit M type mismatch problem Absence of the developing unit M is	Developing unit connector inserted incorrectly.	Reinsert the developing unit connector if necessary.
	detected.	Different type of the developing unit is installed.	Install the correct developing unit.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C7404	Developing unit Y type mismatch problem Absence of the developing unit Y is	Developing unit connector inserted incorrectly.	Reinsert the developing unit connector if necessary.
	detected.	Different type of the developing unit is installed.	Install the correct developing unit.
C7411	Drum unit K type mismatch problem Absence of the drum unit K is detected.	Drum unit connec- tor inserted incor- rectly.	Reinsert the drum unit connector if neces- sary.
		Different type of the drum unit is installed.	Install the correct drum unit.
C7412	Drum unit C type mismatch problem Absence of the drum unit C is detected.	Drum unit connec- tor inserted incor- rectly.	Reinsert the drum unit connector if neces- sary.
		Different type of the drum unit is installed.	Install the correct drum unit.
C7413	Drum unit M type mismatch problem Absence of the drum unit M is detected.	Drum unit connec- tor inserted incor- rectly.	Reinsert the drum unit connector if neces- sary.
		Different type of the drum unit is installed.	Install the correct drum unit.
C7414	Drum unit Y type mismatch problem Absence of the drum unit Y is detected.	Drum unit connec- tor inserted incor- rectly.	Reinsert the drum unit connector if neces- sary.
		Different type of the drum unit is installed.	Install the correct drum unit.
C7420	Transfer belt unit type mismatch problem Absence of the transfer belt unit is	Transfer belt unit connector inserted incorrectly.	Reinsert the transfer belt unit connector if necessary.
	detected.	Different type of the transfer belt unit is installed.	Install the correct transfer belt unit.
C7601	ID sensor 1 error An abnormal value is detected in the input data to ID sensor 1.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the engine PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
C7602	ID sensor 2 error An abnormal value is detected in the input data to ID sensor 2.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the engine PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C7800	Broken external thermistor wire An abnormal value is detected in the input data to the outer temperature sen- sor.	Poor contact in the connector terminals.	Check the connection of connector YC1 on the main front PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective PWB.	Replace the main front PWB or engine PWB and check for correct operation.
C7901	Drum K EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times succes-	Poor contact in the connector terminals.	Check the connection of connector YC3 on the main front PWB and the continuity across the connector terminals. Repair or replace if necessary.
	sively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective drum PWB K.	Replace the drum unit K (see page 1-5-35).
C7902	Drum C EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times succes-	Poor contact in the connector terminals.	Check the connection of connector YC5 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
	sively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective drum PWB C.	Replace the drum unit C (see page 1-5-35).
C7903	7903 Drum M EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times succes- sively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective drum PWB M.	Replace the drum unit M (see page 1-5-35).
C7904	Drum Y EEPROM error No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times succes-	Poor contact in the connector terminals.	Check the connection of connector YC3 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
	sively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective drum PWB Y.	Replace the drum unit Y (see page 1-5-35).
C7911	Developing unit K EEPROM error No response is issued from the device in reading/writing for 7.5 ms or more and this problem is repeated five times suc-	Poor contact in the connector terminals.	Check the connection of connector YC4 on the main front PWB and the continuity across the connector terminals. Repair or replace if necessary.
	cessively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective develop- ing PWB K.	Replace the developing unit K (see page 1- 5-34).

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Code	Contents	Causes	Check procedures/corrective measures
C7912	 Developing unit C EEPROM error No response is issued from the device in reading/writing for 7.5 ms or more and this problem is repeated five times suc- cessively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively. 	Poor contact in the connector terminals.	Check the connection of connector YC6 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective develop- ing PWB C.	Replace the developing unit C (see page 1- 5-34).
C7913	Developing unit M EEPROM error No response is issued from the device in reading/writing for 7.5 ms or more and this problem is repeated five times suc-	Poor contact in the connector terminals.	Check the connection of connector YC8 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
	cessively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Defective develop- ing PWB M.	Replace the developing unit M (see page 1- 5-34).
C7914	Developing unit Y EEPROM error No response is issued from the device in reading/writing for 7.5 ms or more and this problem is repeated five times suc- cessively. Mismatch of reading data from two loca- tions occurs eight times successively. Mismatch between writing data and reading data occurs eight times succes- sively.	Poor contact in the connector terminals.	Check the connection of connector YC4 on the sub front PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective develop- ing PWB Y.	Replace the developing unit Y (see page 1- 5-34).
C7950	High voltage control PWB error A communication error from high voltage control PWB is detected 10 times in suc- cession.	Poor contact in the connector terminals.	Check the connection of connector YC30 on the engine PWB and the connector on the high voltage control PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective PWB.	Replace the high voltage control PWB or engine PWB and check for correct opera- tion.
C8020	Punch motor problem (optional 3000- sheet document finisher) The error signal of the punch motor is detected for more than 500 ms while the punch motor is operating.	Poor contact in the connector terminals.	Check the connection of connector on the punch PWB and the continuity across the connector terminals. Repair or replace if necessary.
		Defective punch motor.	Replace the punch motor.
		Defective PWB.	Replace the punch PWB or finisher main PWB and check for correct operation.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C8030	Tray upper limit detection problem (optional document finisher) When the tray elevation motor raises a tray, the ON status of the tray upper limit sensor is detected.	The tray upper limit sensor, paper sur- face sensor 1/2 connector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective tray upper limit sensor, paper surface sen- sor 1/2.	Replace the sensor.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8040	Belt problem (optional document fin- isher) The belt sensor does not turn on/off within specified time of the belt solenoid	The belt sensor, belt solenoid con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
	turning on.	Defective belt sen- sor.	Replace the belt sensor.
		Defective belt sole- noid.	Replace the belt solenoid.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8050	Paper conveying belt motor 1 prob- lem (optional 3000-sheet document finisher) Paper conveying belt home position sen- sor 1 does not turn off within 1.5 s. Paper conveying belt home position sen- sor 1 does not turn on within 2.5 s. Jam 88 is indicated.	Poor contact in the connector terminals.	Check the connection of connector YC2 on the inner tray PWB and the connector on paper conveying belt motor 1, and the conti- nuity across the connector terminals. Repair or replace if necessary.
		Defective paper conveying belt home position sen- sor 1.	Replace paper conveying belt home position sensor 1.
		Defective paper conveying belt motor 1.	Replace paper conveying belt motor 1.
		Defective PWB.	Replace the inner tray PWB or finisher main PWB and check for correct operation.
C8060	Paper conveying belt motor 2 prob- lem (optional 3000-sheet document finisher) Paper conveying belt home position sen- sor 2 does not turn off within 1.5 s. Paper conveying belt home position sen- sor 2 does not turn on within 1.5 s.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the inner tray PWB and the connector on paper conveying belt motor 2, and the conti- nuity across the connector terminals. Repair or replace if necessary.
		Defective paper conveying belt home position sen- sor 2.	Replace paper conveying belt home position sensor 2.
		Defective paper conveying belt motor 2.	Replace paper conveying belt motor 2.
		Defective PWB.	Replace the inner tray PWB or finisher main PWB and check for correct operation.

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Code	Contents	Causes	Check procedures/corrective measures
C8070	Inner tray communication error (optional 3000-sheet document fin- isher) Communication with the inner tray is not possible although the connection is	Poor contact in the connector terminals.	Check the connection of connector YC6 and YC24 on the finisher main PWB and the connector YC1 and YC4 on the inner tray PWB, and the continuity across the connector terminals. Repair or replace if necessary.
	detected.	Defective PWB.	Replace the inner tray PWB or finisher main PWB and check for correct operation.
C8140	Main tray problem (optional 3000- sheet document finisher) The main tray is not detected by the main tray upper limit detection sensor or the main tray paper upper surface detec-	Poor contact in the connector terminals.	Check the connection of connector YC11 on the finisher main PWB and the connector on the main tray motor, and the continuity across the connector terminals. Repair or replace if necessary.
	tion sensor within 20 s since the tray has started ascending. The main tray upper limit detection sen-	Defective main tray motor.	Replace the main tray motor.
	sor or the main tray paper upper surface detection sensor is not detected to be turned off in 20 s after the main tray has descended. The main tray low limit detection sensor is not detected to be turned on in 20 s after the main tray has descended. During main tray ascent, the main tray upper limit detection sensor or the main tray paper upper surface detection sen- sor stays on for more than 2 s.	Defective main tray upper limit detec- tion sensor/main tray paper upper surface detection sensor/main tray lower limit detec- tion sensor.	Replace the sensor.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
	Tray elevation motor problem (optional document finisher) The tray low limit sensor or paper sur- face sensor 1/2 cannot be detected to be on within 10 s since the tray elevation motor is activated.	The tray elevation motor connector makes poor con- tact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		The tray elevation motor malfunc- tions.	Replace the tray elevation motor.
		The tray lower limit sensor, paper sur- face sensor 1/2 connector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective tray lower limit sensor, paper surface sen- sor 1/2.	Replace the sensor.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C8170	(optional 3000-sheet document fin- c	Poor contact in the connector terminals.	Check the connection of connector YC2 on the inner tray PWB and the connector on side registration motor 1, and the continuity across the connector terminals. Repair or replace if necessary.
	operation and a home position is not detected even if 3 s passed. Jam 88 is indicated.	Defective side reg- istration motor 1.	Replace side registration motor 1.
		Defective PWB.	Replace the inner tray PWB or finisher main PWB and check for correct operation.
C8180	Side registration motor 2 problem (optional 3000-sheet document fin- isher) When operation returned to a home position is performed at the time of initial	Poor contact in the connector terminals.	Check the connection of connector YC8 on the inner tray PWB and the connector of side registration motor 2, and the continuity across the connector terminals. Repair or replace if necessary.
	operation and a home position is not detected even if 3 s passed. Jam 88 is indicated.	Defective side reg- istration motor 2.	Replace side registration motor 2.
		Defective PWB.	Replace the inner tray PWB or finisher main PWB and check for correct operation.
C8210	Stapler moving motor 1 error (optional 3000-sheet document fin- isher) When operation returned to a home position is performed at the time of initial operation and a home position is not detected even if 1.5 s passed.	Poor contact in the connector terminals.	Check the connection of connector YC9 on the finisher main PWB and the connector of stapler moving motor 1, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective stapler moving motor 1.	Replace stapler moving motor 1.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
	Stapler problem (optional document finisher) Jam 82 is indicated.	The stapler con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		The stapler is blocked with a staple.	Remove the stapler cartridge, and check the cartridge and the stapling section of the stapler.
		The stapler is bro- ken.	Replace the stapler and check for correct operation.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8220	Stapler moving motor 2 error (optional 3000-sheet document fin- isher) When operation returned to a home position is performed at the time of initial operation and a home position is not detected even if 3.5 s passed.	Poor contact in the connector terminals.	Check the connection of connector YC10 on the finisher main PWB and the connector of staple relay PWB and stapler moving motor 2, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective stapler moving motor 2.	Replace stapler moving motor 2.
		Defective staple relay PWB.	Replace the staple relay PWB and check for correct operation.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

		Remarks	
Code	Contents	Causes	Check procedures/corrective measures
C8230	Stapler motor problem (optional 3000- sheet document finisher) Jam 82 is indicated.	Poor contact in the connector terminals.	Check the connection of connector YC10 on the finisher main PWB and the connector of staple relay PWB and stapler motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective stapler motor.	Replace the stapler motor.
		Defective staple relay PWB.	Replace the staple relay PWB and check for correct operation.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8300	Center-folding unit communication error (optional center-folding unit of 3000-sheet document finisher) Communication with the center-folding unit is not possible although the connec- tion is detected.	Poor contact in the connector terminals.	Check the connection of connector YC5 and YC20 on the finisher main PWB and the connector YC1 and YC2 on the centerfold main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective center- fold set switch.	Replace the centerfold set switch.
		Defective center- fold main PWB.	Replace the centerfold main PWB and check for correct operation.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8310	Centerfold side registration motor 2 problem (optional center-folding unit of 3000-sheet document finisher) The home position is not detected when initial operation even if 1 s passed.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the centerfold main PWB and the connector of centerfold side registration motor 2, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective center- fold side registra- tion motor 2.	Replace centerfold side registration motor 2.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.

		Remarks
	Causes	Check procedures/corrective measures
Poor contact in the connector termi- nals. Defective center- fold paper convey- ing belt motor 1/2.		Check the connection of connector YC6, YC7 on the centerfold main PWB and the connector of centerfold paper conveying belt motor 1/2, and the continuity across the con- nector terminals. Repair or replace if neces- sary.
		Replace centerfold paper conveying belt motor 1/2.
	Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
	The adjustment sensor 2, adjust- ment motor 2 con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
	Defective adjust- ment sensor 2.	Replace the adjustment sensor 2.
	Defective adjust- ment motor 2.	Replace the adjustment motor 2.

		Defective center- fold paper convey- ing belt motor 1/2.	Replace centerfold paper conveying belt motor 1/2.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
	Adjustment motor 2 problem (optional document finisher) The adjustment sensor 2 does not turn on/off within specified time of the adjust- ment motor 2 turning on.	The adjustment sensor 2, adjust- ment motor 2 con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective adjust- ment sensor 2.	Replace the adjustment sensor 2.
		Defective adjust- ment motor 2.	Replace the adjustment motor 2.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8330	Blade motor problem (optional cen- ter-folding unit of 3000-sheet docu- ment finisher) The home position is not detected when initial operation even if 1.5 s passed.	Poor contact in the connector terminals.	Check the connection of connector YC8 on the centerfold main PWB and the connector of the blade motor, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective blade motor.	Replace the blade motor.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
	Adjustment motor 1 problem (optional document finisher) The adjustment sensor 1 does not turn on/off within specified time of the adjust- ment motor 1 turning on.	The adjustment sensor 1, adjust- ment motor 1 con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective adjust- ment sensor 1.	Replace the adjustment sensor 1.
		Defective adjust- ment motor 1.	Replace the adjustment motor 1.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

Code

C8320

isher)

Contents

motor problem (optional center-fold-

ing unit of 3000-sheet document fin-

The home position is not detected when initial operation even if 2.5 s passed.

Centerfold paper conveying belt

	_		Remarks
Code	Contents	Causes	Check procedures/corrective measures
C8340	Centerfold staple motor problem (optional center-folding unit of 3000- sheet document finisher) Jam 89 is indicated.	Poor contact in the connector terminals.	Check the connection of connector YC9 on the centerfold main PWB and the connector of the centerfold staple motor, and the conti- nuity across the connector terminals. Repair or replace if necessary.
		Defective center- fold staple motor.	Replace the centerfold staple motor.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
C8350	Centerfold side registration motor 1 problem (optional center-folding unit of 3000-sheet document finisher) The home position is not detected when initial operation even if 1 s passed.	Poor contact in the connector terminals.	Check the connection of connector YC7 on the centerfold main PWB and the connector of centerfold side registration motor 1, and the continuity across the connector termi- nals. Repair or replace if necessary.
		Defective center- fold side registra- tion motor 1.	Replace centerfold side registration motor 1.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
	Roller motor problem (optional docu- ment finisher) The roller sensor does not turn on/off within specified time of the roller motor turning on.	The roller sensor, roller motor con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective roller sensor.	Replace the roller sensor.
		Defective roller motor.	Replace the roller motor.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8360	Centerfold main motor problem (optional center-folding unit of 3000- sheet document finisher) The motor lock signal is detected above 1 s during driving the centerfold main	Poor contact in the connector terminals.	Check the connection of connector YC12 on the centerfold main PWB and the connector of the centerfold main motor, and the conti- nuity across the connector terminals. Repair or replace if necessary.
	motor.	Defective center- fold main motor.	Replace the centerfold main motor.
		Defective PWB.	Replace the centerfold main PWB or finisher main PWB and check for correct operation.
	Slide motor problem (optional docu- ment finisher) The slide sensor does not turn on/off within specified time of the slide motor turning on.	The slide sensor, slide motor con- nector makes poor contact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective slide sensor.	Replace the slide sensor.
		Defective slide motor.	Replace the slide motor.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

	-		Remarks
Code	Contents	Causes	Check procedures/corrective measures
C8440	Sensor adjusting problem (optional document finisher) The sensor cannot be adjusted within the specified range.	The paper entry sensor connector makes poor con- tact.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective paper entry sensor.	Replace the paper entry sensor and check for correct operation.
		The optical path of the paper entry sensor is blocked by foreign matter.	Remove the foreign matter.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.
C8460	EEPROM problem (optional document finisher) Reading from or writing to EEPROM cannot be performed.	Defective EEPROM or fin- isher main PWB.	Replace the finisher main PWB and check for correct operation.
C8500	Mailbox communication error (optional mailbox of 3000-sheet docu- ment finisher) Communication with the mailbox is not possible although the connection is	Poor contact in the connector terminals.	Check the connection of the connector of the mailbox and the connector YC7 on the finisher main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
	detected.	Defective PWB.	Replace the mailbox main PWB or finisher main PWB and check for correct operation.
C8510	Mailbox drive motor problem (optional mailbox of 3000-sheet docu- ment finisher) The motor lock signal is detected above 500 ms during driving the mailbox drive	Poor contact in the connector terminals.	Check the connection of connector YC5 on the mailbox main PWB and the connector of the mailbox drive motor, and the continuity across the connector terminals. Repair or replace if necessary.
	motor.	Defective mailbox drive motor.	Replace the mailbox drive motor.
		Defective PWB.	Replace the mailbox main PWB or finisher main PWB and check for correct operation.
C8800	Document finisher communication error (optional 3000-sheet document finisher) A communication error from document finisher is detected 10 times in succes-	Poor contact in the connector terminals.	Check the connection of connector on the engine PWB and the connector on the fin- isher main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
	sion.	Defective PWB.	Replace the finisher main PWB or engine PWB and check for correct operation.
C8900	Backup memory data problem (optional 3000-sheet document fin- isher) Read and write data does not match 3 times in succession.	Poor contact in the connector terminals.	Check the connection of connector on the finisher main PWB and the connector of the machine, and the continuity across the connector terminals. Repair or replace if necessary.
		EEPROM installed incorrectly.	Install EEPROM correctly.
		Defective finisher main PWB.	Replace the finisher main PWB and check for correct operation.

<u> </u>			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C8910	Backup memory data problem (optional of 3000-sheet document fin- isher) Read and write data does not match 3 times in succession.	Poor contact in the connector terminals.	Check the connection of connector on the punch PWB and the connector YC4 on the finisher main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Defective punch PWB.	Replace the punch PWB and check for correct operation.
C8930	Backup memory data problem (optional center-folding unit of 3000- sheet document finisher) Read and write data does not match 3 times in succession.	Poor contact in the connector terminals.	Check the connection of connector on the centerfold main PWB and the connector YC5 on the finisher main PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		EEPROM installed incorrectly.	Install EEPROM correctly.
		Defective center- fold main PWB.	Replace the centerfold main PWB and check for correct operation.
C9000	DP communication problem (optional DP) A communication error is detected.	Poor contact in the connector terminals.	Check the connection of connector YC6 on the ISM PWB and the connector of the DP, and the continuity across the connector ter- minals. Repair or replace if necessary.
		Defective PWB.	Replace the DP driver PWB or ISM PWB and check for correct operation.
C9010	Coin vender communication error A communication error from coin vender is detected 10 times in succession.	Poor contact in the connector terminals.	Check the connection of connector on the main PWB and the connector on the coin vender control PWB, and the continuity across the connector terminals. Repair or replace if necessary.
		Data setting failure.	Set maintenance mode U206 to off when a coin vender is not installed.
		Defective coin vender control PWB.	Replace the coin vender control PWB.
		Defective main PWB.	Replace the main PWB and check for cor- rect operation.
C9040	DP lift motor going up error (optional DP) The tray upper limit switch does not turn	Loose connection of the DP lift motor connector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
	on within 2 s of DP lift motor turning on.	Malfunction of the DP lift motor.	Replace the DP lift motor and check for correct operation.
		Loose connection of the tray upper limit switch con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Malfunction of the tray upper limit switch.	Replace the tray upper limit switch and check for correct operation.
		Defective DP driver PWB.	Replace the DP driver PWB and check for correct operation.

			Remarks
Code	Contents	Causes	Check procedures/corrective measures
C9050	DP lift motor going down error (optional DP) The tray lower limit switch does not turn	Loose connection of the DP lift motor connector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
	on within 2 s of DP lift motor turning on.	Malfunction of the DP lift motor.	Replace the DP lift motor and check for correct operation.
		Loose connection of the tray lower limit switch con- nector.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Malfunction of the tray lower limit switch.	Replace the tray lower limit switch and check for correct operation.
		Defective DP driver PWB.	Replace the DP driver PWB and check for correct operation.
C9060	DP EEPROM error (optional DP) Read and write data does not match. Data in the specified area of the backup	Defective DP driver PWB.	Replace the DP driver PWB and check for correct operation.
	memory does not match the specified values.	Device damage of EEPROM.	Contact the Service Administrative Division.
C9070	Communication problem between DP and SHD (optional DP) A communication error is detected.	Loose connection of the ISC PWB.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective ISC PWB.	Replace the ISC PWB and check for correct operation.
C9080	Communication problem between DP and CIS (optional DP) A communication error is detected.	Loose connection of CIS.	Reinsert the connector. Also check for conti- nuity within the connector cable. If none, remedy or replace the cable.
		Defective CIS.	Replace CIS and check for correct opera- tion.
C9500			Contact the Service Administrative Division.
C9510			Contact the Service Administrative Division.
C9520			Contact the Service Administrative Division.
C9530			Contact the Service Administrative Division.
C9540			Contact the Service Administrative Division.
C9550			Contact the Service Administrative Division.
F000	Operation panel PWB communication	Firmware upgrade	Execute again upgrading.
	error	error	Replace the main firmware DIMM with the latest one and then execute again upgrading.
		Defective main PWB.	Replace the main PWB and check for cor- rect operation.
		Defective main operation panel PWB.	Replace the main operation panel PWB and check for correct operation.

Code			Remarks
Coue	Contents	Causes	Check procedures/corrective measures
F040	Engine PWB communication error	Firmware upgrade error	Only for engine firmware, execute upgrading using USB memory in which software is stored individually.
		Defective main PWB.	Replace the main PWB and check for correct operation.
		Defective engine PWB.	Replace the engine PWB and check for correct operation.
F041	Scanner PWB communication error	Defective main PWB.	Replace the main PWB and check for cor- rect operation.
		Defective ISM PWB.	Replace the ISM PWB and check for correct operation.
F050	Engine ROM checksum error	Defective engine PWB.	Replace the engine PWB and check for correct operation.
F090	Fax control PWB communication error	Defective main PWB.	Replace the main PWB and check for cor- rect operation.

1-4-3 Image formation problems

(1)No image appears (entirely white).



See page 1-4-62.

(6)A white line appears longitudinally.



See page 1-4-64.

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



See page 1-4-66. (16)Fusing is poor.



See page 1-4-68.

(entirely black).

(2)No image appears

See page 1-4-62. (7)A line appears longitudinally.



See page 1-4-65. (12)The leading edge

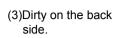
of the image is sporadically misaligned with the original.



See page 1-4-66. (17)Image is out of focus.



See page 1-4-68.





See page 1-4-63. (8)A line appears lat-

erally.



See page 1-4-65. (13)Paper creases.



See page 1-4-67. (18)Colors are printed offset to each other.



See page 1-4-68.

(4)Image is too light.

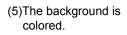


See page 1-4-63.

(9)One side of the copy image is darker than the other.



See page 1-4-65. (14)Offset occurs.





See page 1-4-64.

(10)Dots appear on the image.



See page 1-4-66. (15)Image is partly missing.



See page 1-4-67.



See page 1-4-67.

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



See page 1-4-68.



(1) No image appears (entirely white).

Copy example		Causes	Check procedures/corrective measures
	Defective transfer bias output.	The connector terminals of the transfer high volt- age PWB 1 make poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective engine PWB.	Replace the engine PWB.
		Defective transfer high voltage PWB 1.	Replace the transfer high voltage PWB 1.
		Defective transfer belt unit.	Replace the transfer belt unit (see page 1-5-37).
	No LSU laser is out-	Defective laser scanner unit.	Replace the laser scanner unit (see page 1-5-21).
	put.	Defective engine PWB.	Replace the engine PWB.
	Defective developing bias output.	The connector terminals of the main high voltage PWB make poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		The connector terminals of the high voltage con- trol PWB make poor con- tact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective engine PWB.	Replace the engine PWB.
		Defective high voltage control PWB.	Replace the high voltage control PWB.
		Defective main high volt- age PWB.	Replace the main high voltage PWB.

(2) No image appears (entirely black).

Copy example		Causes	Check procedures/corrective measures
	No main	Defective drum unit.	Replace the drum unit (see page 1-5-35).
	charging.	The connector terminals of the main high voltage PWB make poor contact.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective engine PWB.	Replace the engine PWB.
		Defective main high volt- age PWB.	Replace the main high voltage PWB.
	Exposure lamp fails to light.	Poor contact in the expo- sure lamp connector ter- minals.	Reinsert the connector. Also check for continuity within the connector cable. If none, remedy or replace the cable.
		Defective inverter PWB.	Check if the exposure lamp lights when the terminal on the inverter PWB goes low while maintenance item U061 is run. If not, replace the inverter PWB.
		Defective ISM PWB.	Run maintenance item U061 and check if YC5-4 on the ISM PWB goes low. If not, replace the ISM PWB.
	The laser is activated simulta- neously for all colors.	Defective laser scanner unit.	Replace the laser scanner unit (see page 1-5-21).

(3) Dirty on the back side.

Copy example	Causes	Check procedures/corrective measures
	Faulty transfer belt cleaning.	Replace the transfer belt unit (see page 1-5-37).
	Dirty paper conveying path.	Clean the paper conveying path.
	Dirty fuser belt or press roller (inner fuser unit).	Replace the fuser unit (see page 1-5-41).

(4) Image is too light.

Copy example		Causes	Check procedures/corrective measures
	Defective develop- ing bias output.	Defective developing unit.	Run maintenance mode U089 to output four-color bar PG, check the output status of the four colors, and replace the developing unit for any faulty color (see page 1-3-52 and page 1-5-34).
		Defective main high volt- age PWB.	Replace the main high voltage PWB.
		Defective high voltage control PWB.	Replace the high voltage control PWB.
		Defective engine PWB.	Replace the engine PWB.
	Dirty drum.		Perform the drum refresh operation.
	Defective transfer	Defective transfer high voltage PWB 1.	Replace the transfer high voltage PWB 1.
	bias out- put.	Defective transfer belt unit.	Replace the transfer belt unit (see page 1-5-37).
		Defective engine PWB.	Replace the engine PWB.
	Defective c	olor calibration.	Perform gray adjustment.
	Insufficient	toner.	If the display shows the message requesting toner replenish- ment, replace the container.
	Defective a	gitation of toner container.	Shake the toner container up and down approximately ten times.
	Paper dam	р	Check the paper storage conditions, replace the paper.

(5) The background is colored.

Copy example		Causes	Check procedures/corrective measures
	Defective develop- ing bias output.	Defective developing unit.	Run maintenance mode U089 to output four-color bar PG, check the output status of the four colors, and replace the developing unit for any faulty color (see page 1-3-52 and page 1-5-34).
		Defective main high volt- age PWB.	Replace the main high voltage PWB.
		Defective high voltage control PWB.	Replace the high voltage control PWB.
		Defective engine PWB.	Replace the engine PWB.
	Defective c	olor calibration.	Perform gray adjustment.

(6) A white line appears longitudinally.

Copy example	Causes	Check procedures/corrective measures
	Foreign matter in the developing unit.	Run maintenance mode U089 to output four-color bar PG, check the output status of the four colors, and replace the developing unit for any faulty color (see page 1-3-52 and page 1-5-34).
	Dirty transfer belt.	Clean the transfer belt. Replace the transfer belt unit if it is extremely dirty (see page 1-5-37).
	Dirty transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-39).
	Dirty shading plate.	Clean the shading plate.
	Dirty scanner mirror.	Clean the scanner mirror.
	Dirty LSU slit glasses.	Perform the laser scanner cleaning.
	Dirty contact glass.	Clean the contact glass.

(7) A line appears longitudinally.

Copy example	Causes	Check procedures/corrective measures
	Dirty contact glass.	Clean the contact glass.
	Dirty slit glass.	Clean the slit glass.
	Dirty or flawed drum. Perform the drum refresh operation. If the drum is flawed, replace the drum unit (see page 35).	
	Deformed or worn cleaning blade of the drum unit.	Replace the drum unit (see page 1-5-35).
	Dirty scanner mirror.	Clean the scanner mirror.
	Dirty lens of ISU.	Clean lens of ISU.
	Worn transfer belt.	Replace the transfer belt unit (see page 1-5-37).
	Defective transfer roller.	Replace the transfer roller (see page 1-5-39).

(8) A line appears laterally.

Copy example	Causes	Check procedures/corrective measures
	Flawed drum.	Replace the drum unit (see page 1-5-35).
	Dirty developing section.	Clean any part contaminated with toner or carrier in the developing section.
BG:(4)	Leaking separation electrode.	Clean the separation electrode.
	Poor contact of grounding terminal of drum unit.	Check the mounting state of the image formation holder. If any problem is found, repair it (see page 1-5-30).

(9) One side of the copy image is darker than the other.

Copy example	Causes	Check procedures/corrective measures
	Defective exposure lamp.	Check if the exposure lamp light is distributed evenly to run maintenance item U061. If not, replace the exposure lamp (see page 1-3-38 and page 1-5-11).

(10) Dots appear on the image.

Copy example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum refresh operation. If the drum is flawed, replace the drum unit (see page 1-5- 35).
	Dirty contact glass.	Clean the contact glass.
	Deformed or worn cleaning blade of the drum unit.	Replace the drum unit (see page 1-5-35).
	Flawed developing roller.	Replace the developing unit (see page 1-5-34).
	Dirty fuser belt or press roller (inner fuser unit).	Replace the fuser unit (see page 1-5-41).

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

Copy example	Causes	Check procedures/corrective measures
	Registration clutch operating incor- rectly.	Check the installation of the registration clutch. If it operates incorrectly, replace it.
	Misadjusted the deflection in the paper.	Run maintenance mode U051 to readjust the deflection in the paper (see page 1-3-32).
	Misadjusted leading edge registration.	Run maintenance mode U034 to readjust the leading edge registration (see page 1-3-28).
	Misadjusted scanner leading edge registration.	Run maintenance mode U066 to readjust the scanner lead- ing edge registration (see page 1-3-41).

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

Copy example	Causes	Check procedures/corrective measures
	Paper feed clutch 1/2, paper convey- ing clutch, MP paper feed clutch, MP paper conveying clutch or registration clutch installed or operating incor- rectly.	Check the installation position and operation of paper feed clutch 1/2, paper conveying clutch, MP paper feed clutch, MP paper conveying clutch and registration clutch. If any of them operates incorrectly, replace it.

(13) Paper creases.

Copy example	Causes	Check procedures/corrective measures
	Paper curled.	Check the paper storage conditions.
	Paper damp.	Check the paper storage conditions.
	Dirty separation electrode.	Clean the separation electrode.

(14) Offset occurs.

Copy example	Causes	Check procedures/corrective measures
	Defective cleaning blade of the drum unit.	Replace the drum unit (see page 1-5-35).
	Faulty transfer belt cleaning.	Run maintenance item U107 (see page 1-3-64). Replace the transfer belt unit (see page 1-5-37).
	Defective fuser unit.	Replace the fuser unit (see page 1-5-41).
	Wrong types of paper.	Check if the paper meets specifications. Replace paper.

(15) Image is partly missing.

Copy example	Causes	Check procedures/corrective measures
	Paper damp.	Check the paper storage conditions.
	Paper creased.	Change the paper.
	Drum condensation.	Perform the drum refresh operation.
	Dirty or flawed drum.	Perform the drum refresh operation. If the drum is flawed, replace the drum unit (see page 1-5- 35).
	Dirty transfer belt.	Clean the transfer belt. Replace the transfer belt unit if it is extremely dirty (see page 1-5-37).
	Dirty transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-39).
	Dirt on the back surface of the contact glass and scanner mirror.	Clean the contact glass and scanner mirror.

(16) Fusing is poor.

Copy example	Causes	Check procedures/corrective measures
	Wrong types of paper.	Check if the paper meets specifications. Replace paper.
	Flawed fuser belt (inner fuser unit).	Replace the fuser unit (see page 1-5-41).
	Flawed fuser heater (inner fuser unit).	Replace the fuser unit (see page 1-5-41).

(17) Image is out of focus.

Copy example	Causes	Check procedures/corrective measures
	Defective ISU.	Replace the ISU (see page 1-5-19).
	Drum condensation.	Perform the drum refresh operation.

(18) Colors are printed offset to each other.

Copy example	Causes	Check procedures/corrective measures
+ +	Defective calibration.	Perform the color calibration.
+ +	Slip the mirror position of laser scan- ner unit.	Perform the color registration. When the problem is not cleared, perform the manual color registration adjustment (see page 1-5-28).

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

Copy example	Causes	Check procedures/corrective measures
	Misadjusted image center line.	Run maintenance item U034 to readjust the center line of image printing (see page 1-3-30).
	Misadjusted scanner center line.	Run maintenance item U067 to readjust the scanner leading edge registration (see page 1-3-42).
	Original is not placed correctly.	Place the original correctly.
	The paper is not loaded correctly.	Load the paper correctly.

1-4-4 Electric problems

Troubleshooting to each failure must be in the order of the numbered symptoms.

Problem	Causes	Check procedures/corrective measures
(1) The machine does not operate when the main power switch is turned on.	1. The power cord is not plugged in properly.	Check the contact between the power plug and the outlet.
	2. No electricity at the power outlet.	Measure the input voltage.
	3. Broken power cord.	Check for continuity. If none, replace the cord.
	4. Defective main power switch.	Check for continuity across the contacts. If none, replace the main power switch.
	5. Defective power source PWB.	With AC present, check for 24 V DC at YC7-1, YC7-2 and 5 V DC at YC7-6 on the power source PWB. If none, replace the power source PWB.
(2) Registration motor or	1. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
duplex motor does not operate.	2. Defective drive transmis- sion system.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
	3. Defective motor.	Run maintenance item U030 and check if the motor operates. If not, replace the motor.
	4. Defective feed PWB.	Run maintenance item U030 and check if the motor operates. If not, replace the feed PWB.
	5. Defective engine PWB.	Run maintenance item U030 and check if the motor operates. If not, replace the engine PWB.
(3) Toner container	1. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
motor does not oper- ate.	2. Defective drive transmis- sion system.	Check if the rollers and gears rotate smoothly. If not, grease the bushings and gears. Check for broken gears and replace if any.
	3. Defective motor.	Run maintenance item U135 and check if the motor operates. If not, replace the motor.
	4. Defective engine PWB.	Run maintenance item U135 and check if the motor operates. If not, replace the engine PWB.
(4)	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
Rotary fan motor or container fan motor does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective fan motor.	Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Rotary fan motor: YC2-1 on the main front PWB Container fan motor: YC7-2 on the main front PWB
	4. Defective main front PWB.	Run maintenance item U037 and check if following terminals on the main front PWB goes low. If not, replace the main front PWB. Rotary fan motor: YC2-1 on the main front PWB Container fan motor: YC7-2 on the main front PWB
	5. Defective engine PWB.	Run maintenance item U037 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. Rotary fan motor: YC18-A8 on the engine PWB Container fan motor: YC18-B1 on the engine PWB

Problem	Causes	Check procedures/corrective measures
(5) Developing fan motor	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
1/2 does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective fan motor.	Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Developing fan motor 1: YC9-1 on the sub front PWB Developing fan motor 2: YC9-3 on the sub front PWB
	4. Defective sub front PWB.	Run maintenance item U037 and check if following terminals on the sub front PWB goes low. If not, replace the sub front PWB. Developing fan motor 1: YC9-1 on the sub front PWB Developing fan motor 2: YC9-3 on the sub front PWB
	5. Defective engine PWB.	Run maintenance item U037 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. Developing fan motor 1: YC19-17 on the engine PWB Developing fan motor 2: YC19-16 on the engine PWB
(6)	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
Fuser fan motor, developing fan motor 5, power source fan	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
motor 1/2, LSU fan motor or transfer fan motor 1/2/3/4 does not operate.	3. Defective fan motor.	Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Fuser fan motor: YC25-B11 on the engine PWB Developing fan motor 5: YC39-2 on the engine PWB Power source fan motor 1/2: YC10-B15 on the engine PWB LSU fan motor: YC38-1 on the engine PWB Transfer fan motor 1: YC12-A7 on the engine PWB Transfer fan motor 2: YC28-B15 on the engine PWB Transfer fan motor 3: YC28-B17 on the engine PWB Transfer fan motor 4: YC12-A5 on the engine PWB
	4. Defective engine PWB.	Run maintenance item U037 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. Fuser fan motor: YC25-B11 on the engine PWB Developing fan motor 5: YC39-2 on the engine PWB Power source fan motor 1/2: YC10-B15 on the engine PWB LSU fan motor: YC38-1 on the engine PWB Transfer fan motor 1: YC12-A7 on the engine PWB Transfer fan motor 2: YC28-B15 on the engine PWB Transfer fan motor 3: YC28-B17 on the engine PWB Transfer fan motor 4: YC12-A5 on the engine PWB

Check procedures/corrective measures
Check for continuity across the coil. If none, replace the fan motor.
Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Loop fan motor: YC14-A14 on the feed PWB
Run maintenance item U037 and check if following terminals on the feed PWB goes low. If not, replace the feed PWB. Loop fan motor: YC14-A14 on the feed PWB
Run maintenance item U037 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB.

	3. Defective fan motor.	Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Loop fan motor: YC14-A14 on the feed PWB
	4. Defective feed PWB.	Run maintenance item U037 and check if following terminals on the feed PWB goes low. If not, replace the feed PWB. Loop fan motor: YC14-A14 on the feed PWB
	5. Defective engine PWB.	Run maintenance item U037 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. Loop fan motor: YC20-A2 on the engine PWB
(8)	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
Scanner fan motor does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective fan motor.	Run maintenance item U037 and check if the fan motor operates when the following terminals on the PWB goes low. If not, replace the corresponding fan motor. Scanner fan motor: YC3-2 on the ISM PWB
	4. Defective ISC PWB.	Run maintenance item U037 and check if following terminals on the ISC PWB goes high. If not, replace the ISC PWB. Scanner fan motor: YC3-24 on the ISC PWB
	5. Defective ISM PWB.	Run maintenance item U037 and check if following terminals on the ISM PWB goes low. If not, replace the ISM PWB. Scanner fan motor: YC3-2 on the ISM PWB
(9)	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
Main fan motor or developing fan motor 3/4 does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
(10)	1. Broken fan motor coil.	Check for continuity across the coil. If none, replace the fan motor.
Middle motor, scan- ner motor or transfer motor does not oper- ate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
(11)	1. Broken clutch coil.	Check for continuity across the coil. If none, replace the clutch.
Paper feed clutch 1/ 2, feed clutch 1/2 does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective feed PWB.	Run maintenance item U032 and check if following terminals on the feed PWB goes low. If not, replace the feed PWB. Paper feed clutch 1: YC5-2 on the feed PWB Paper feed clutch 2: YC1-2 on the feed PWB Feed clutch 1: YC13-3 on the feed PWB Feed clutch 2: YC13-1 on the feed PWB
	4. Defective engine PWB.	Run maintenance item U032 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. Paper feed clutch 1: YC20-B2 on the engine PWB Paper feed clutch 2: YC20-A8 on the engine PWB Feed clutch 1: YC20-B8 on the engine PWB Feed clutch 2: YC20-B7 on the engine PWB

Problem

(7) Loop fan motor does

not operate.

Causes

1. Broken fan motor coil.

2. Poor contact in the con-

nector terminals.

3. Defective fan motor.

Problem	Causes	Check procedures/corrective measures
(12)	1. Broken clutch coil.	Check for continuity across the coil. If none, replace the clutch.
MP paper feed clutch, MP paper conveying clutch or	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
fuser clutch does not operate.	3. Defective engine PWB.	Run maintenance item U032 and check if following terminals on the engine PWB goes low. If not, replace the engine PWB. MP paper feed clutch: YC23-20 on the engine PWB MP paper conveying clutch: YC10-B18 on the engine PWB Fuser clutch: YC25-B10 on the engine PWB
(13) The MP solenoid	1. Broken solenoid coil.	Check for continuity across the coil. If none, replace the MP sole- noid.
does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective engine PWB.	Run maintenance item U033 and check if the solenoid operates. If not, replace the engine PWB.
(14) The LSU cleaning	1. Broken solenoid coil.	Check for continuity across the coil. If none, replace the LSU cleaning solenoid.
solenoid does not operate.	2. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective feed PWB.	Run maintenance item U474 and check if the solenoid operates. If not, replace the feed PWB.
	4. Defective engine PWB.	Run maintenance item U474 and check if the solenoid operates. If not, replace the engine PWB.
(15) The exposure lamp does not turn on or off.	1. Poor contact in the con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective inverter PWB.	Run maintenance item U061 and check if the exposure lamp turns on with the inverter PWB go low. If not, replace the inverter PWB.
	3. Defective ISC PWB.	Run maintenance item U061 and check if YC3-23 on the ISC PWB goes high. If not, replace the ISC PWB.
	4. Defective ISM PWB.	Run maintenance item U061 and check if YC5-4 on the ISM PWB goes low. If not, replace the ISM PWB.
(16)	1. Defective drum unit.	Replace the drum unit (see page 1-5-35).
Main charging is not performed.	2. The connector terminals of the main high voltage PWB make poor contact.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective engine PWB.	Replace the engine PWB.
	 Defective main high volt- age PWB. 	Replace the main high voltage PWB.

Problem	Causes	Check procedures/corrective measures
(17) Defective developing bias output.	1. The connector terminals of the main high voltage PWB make poor contact.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. The connector terminals of the high voltage con- trol PWB make poor con- tact.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective engine PWB.	Replace the engine PWB.
	4. Defective high voltage control PWB.	Replace the high voltage control PWB.
	5. Defective main high volt- age PWB.	Replace the main high voltage PWB.
(18) Defective transfer bias output.	1. The connector terminals of the transfer high volt- age PWB 1 make poor contact.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective engine PWB.	Replace the engine PWB.
	3. Defective transfer high voltage PWB 1.	Replace the transfer high voltage PWB 1.
	4. Defective transfer belt unit.	Replace the transfer belt unit (see page 1-5-37).
(19) The original size is not detected cor- rectly.	1. Original is not placed cor- rectly.	Check the original and correct if necessary.
	2. Poor contact in the origi- nal detection switch or original size sensor con- nector terminals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	3. Defective original detec- tion switch.	If the level of YC4-2 on the ISM PWB does not go low when the original detection switch is turned on and off, replace the original detection switch.
	 Defective original size sensor. 	Check if sensor operates correctly. If not, replace it.
(20) The touch panel keys do not work.	1. Poor contact in the touch panel connector termi- nals.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective touch panel or main operation PWB.	If any keys do not work after running the maintenance item U201 to initialize the touch panel, replace the touch panel or main oper- ation unit PWB.
(21) The message requesting paper to be loaded is shown when paper is present on the cas- sette or MP tray.	 Poor contact in the con- nector terminals of paper switch 1/2 or MP paper switch. 	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective paper switch 1/ 2 or MP paper switch.	If the level of following terminal on PWB does not change when the switch is turned on and off, replace the switch. Paper switch 1: YC4-5 on the feed PWB Paper switch 2: YC4-11 on the feed PWB MP paper switch: YC23-11 on the engine PWB
	 Defective paper stop- pers. 	Remove the MP tray unit and check if the paper stoppers are dar- maged. Replace if necessary.

Problem	Causes	Check procedures/corrective measures
(22) The size of paper on the cassette or MP tray is not displayed correctly.	1. Poor contact in the con- nector terminals of paper size length switch 1/2, paper size width switch 1/2, MP paper size length switch or MP paper size width switch.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective paper size length switch 1/2, paper size width switch 1/2, MP paper size length switch or MP paper size width switch.	If the level of following terminal on PWB does not change when the switch is turned on and off, replace the switch. Paper size length switch 1: YC10-B3 on the engine PWB Paper size width switch 1: YC10-B12, B13, B14 on the engine PWB Paper size length switch 2: YC10-B5 on the engine PWB Paper size width switch 2: YC10-B8, B9, B10 on the engine PWB MP paper size length switch: YC23-2 on the engine PWB MP paper size width switch: YC23-6, 7, 8 on the engine PWB
(23) A paper jam in the paper feed, paper conveying, fuser, duplex or eject sec- tion is indicated when the main power switch is turned on.	 A piece of paper torn from copy paper is caught around feed switch 1/2/3, MP paper feed switch, MP paper conveying switch, regis- tration switch, duplex switch, eject switch, feedshift switch or loop sensor. 	Check visually and remove it, if any.
	 Defective feed switch 1/ 2/3, MP paper feed switch, MP paper con- veying switch, registra- tion switch, duplex switch, eject switch, feedshift switch or loop sensor. 	Run maintenance item U031 and turn each switch on and off manually. Replace the switch if indication of the corresponding switch on the touch panel is not displayed in reverse.
(24) The message requesting cover to be closed is dis- played when the front cover or left cover 1/3 is closed.	1. Poor contact in the con- nector terminals of front cover switch, left cover 1 switch or left cover 3 switch.	Reinsert the connector. Also check for continuity within the con- nector cable. If none, remedy or replace the cable.
	2. Defective front cover switch, left cover 1 switch or left cover 3 switch.	Check for continuity across each switch. If there is no continuity when the switch is on, replace it.
(25) Others.	1. Wiring is broken, shorted or makes poor contact.	Check for continuity. If none, repair.

Problem	Causes/check procedures	Corrective measures
(1) No primary paper feed.	Check if the surfaces of the following pulleys are dirty with paper powder: forwarding pulley, paper feed pulley, separation pulley, MP for- warding pulley, MP paper feed pulley and MP separation pulley	Clean with isopropyl alcohol.
	Check if the forwarding pulley, paper feed pulley or separation pulley is deformed.	Replace the pulley if it is deformed (see page 1-5-3).
	Check if the MP forwarding pulley, MP paper feed pulley or MP separation pulley is deformed.	Replace the pulley if it is deformed (see page 1-5-8).
	Electrical problem with the MP solenoid.	See page 1-4-72.
	Electrical problem with the following electro- magnetic clutches: paper feed clutch 1/2 and MP paper feed clutch	See page 1-4-71.
(2) No secondary paper	Check if the surfaces of the right and left reg- istration rollers are dirty with paper powder.	Clean with isopropyl alcohol.
feed.	Electrical problem with the registration clutch.	See page 1-4-71.
(3) Skewed paper feed.	Paper width guides in a cassette installed incorrectly.	Check the paper width guides visually and correct or replace if necessary.
	Deformed paper width guides in a cassette.	Check visually and replace any deformed.
	Check if a pressure spring along the paper conveying path is deformed or out of place.	Repair or replace.
	Paper width guides of MP tray installed incorrectly.	Check the paper width guides visually and correct or replace if necessary.
	Deformed paper width guides of MP tray.	Check visually and replace any deformed.
(4) The scanner does not	Check if the scanner wire is loose.	Reinstall the scanner wire (see page 1-5- 15).
travel.	The scanner motor malfunctions.	See page 1-4-71.
(5)	Paper is extremely curled.	Change the paper.
Multiple sheets of paper are fed at one time.	Paper is loaded incorrectly.	Load the paper correctly.
	Check if the separation pulley is worn.	Replace the separation pulley if it is worn (see page 1-5-3).
	Check if the MP separation pulley is worn.	Replace the MP separation pulley if it is worn (see page 1-5-8).
	Check if the spring which pressurizes the sep- aration pulley or the MP separation pulley is damaged or not in position.	Repair or replace.
(6)	Check if the paper is excessively curled.	Change the paper.
Paper jams.	Deformed guides along the paper conveying path.	Check visually and replace any deformed guides.
	Check if the contact between the right and left registration rollers is correct.	Check visually and remedy if necessary.
	Check whether or not the drive for waste toner disposal is locked.	Check the waste toner sensor visually and correct or replace if necessary.

Problem	Causes/check procedures	Corrective measures
(7) Toner drops on the paper conveying path.	Check if the developing unit is extremely dirty.	Clean the developing unit.
(8) Abnormal noise is heard.	Check if the pulleys, rollers and gears operate smoothly.	Grease the bearings and gears.
(8) Abnormal noise is heard.		Grease the bearings and gears. Correct.

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.

Turning off the main power switch before pressing the Power key to off may cause damage to the equipped hard disk. When the fax kit is installed, be sure to disconnect the modular code 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.

Never connect or disconnect the signal cable of the DP when the power is on.

(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. 2KY

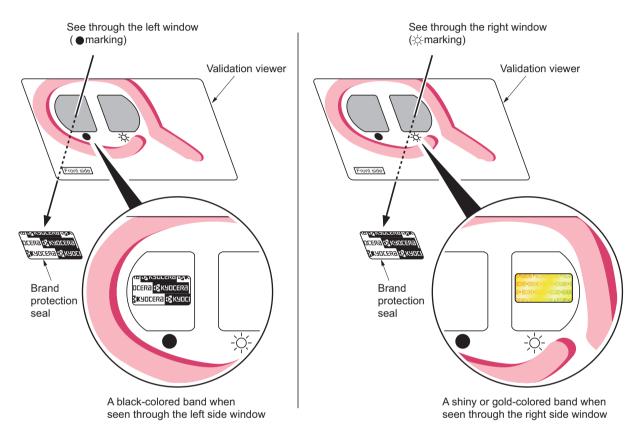
(4) How to tell a genuine Kyocera Mita toner container

As a means of brand protection, the Kyocera Mita 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 Mita branded toner container, otherwise, it is a counterfeit.





The brand protection seal has an incision as shown below to prohibit reuse.

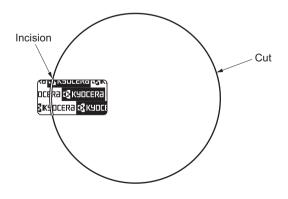


Figure 1-5-2

1-5-2 Paper feed section

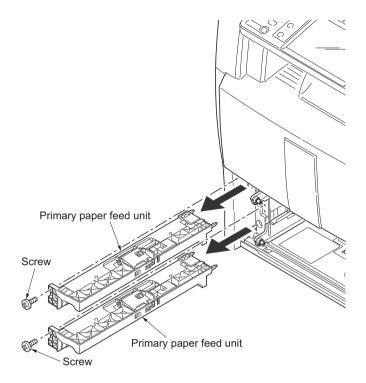
(1) Detaching and refitting the forwarding, paper feed and separation pulleys

Follow the procedure below to clean or replace the forwarding, paper feed and separation pulleys.

Procedure

Removing the primary paper feed unit

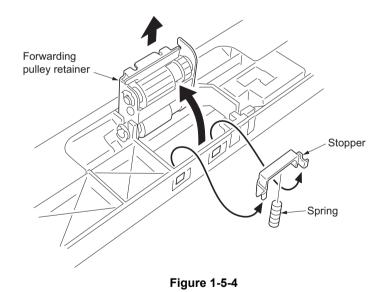
- 1. Remove cassette 1 and 2.
- 2. Remove the screw and remove the primary paper feed unit.



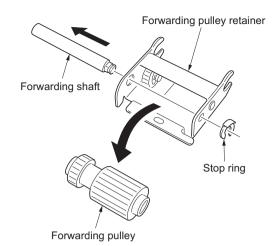


Removing the forwarding pulley

- 3. Remove the stopper and spring from the primary paper feed unit.
- 4. Raise the forwarding pulley retainer in the direction the arrow, and remove from the primary paper feed unit.



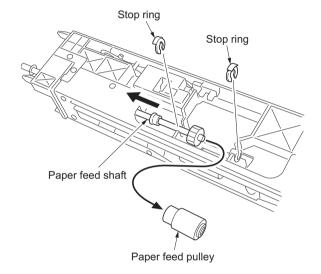
- 5. Remove the stop ring from the forwarding pulley retainer.
- 6. Remove the forwarding pulley from the forwarding shaft.





Removing the paper feed pulley

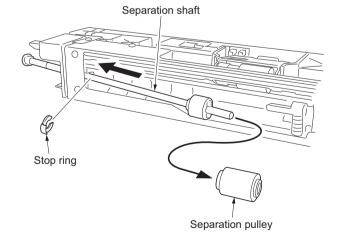
- 7. Remove two stop rings from the primary paper feed unit.
- 8. Pull the paper feed shaft in the direction of the arrow and remove the paper feed pulley.





Removing the separation pulley

- 9. Remove the stop ring from the primary paper feed unit.
- 10. Pull the separation shaft in the direction of the arrow and remove the separation pulley.





- 11. Clean or replace the forwarding, paper feed and separation pulleys.
- 12. Install the separation and paper feed pulleys to the primary paper feed unit.
- Install the forwarding pulley to the forwarding pulley retainer. When refitting the forwarding pulley, orient it correctly as shown in Figure 1-5-8.
- 14. Refit the forwarding pulley retainer to the primary paper feed unit.
- 15. Refit the primary paper feed unit.
- 16. When the forwarding pulley, paper feed pulley, separation pulley or the primary paper feed unit is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-146).

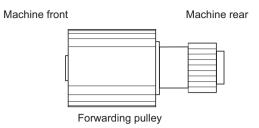


Figure 1-5-8

2KY

(2) Detaching and refitting the MP unit

Follow the procedure below to replace the MP unit.

Procedure

- 1. Open the front cover.
- 2. Remove the right filter 1 and right filter 2.
- 3. Remove five screws and remove the right cover.

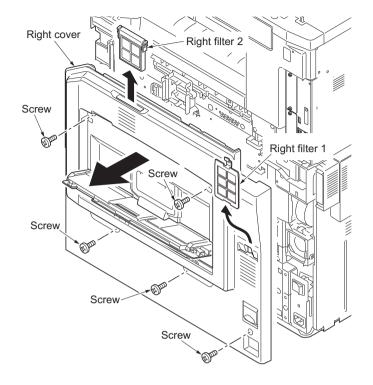
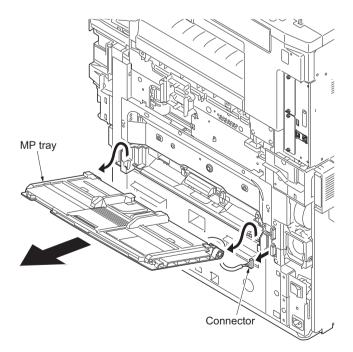


Figure 1-5-9

- 4. Remove one connector.
- 5. Remove the MP tray.





6. Remove two screws and one connector, and remove the MP unit.

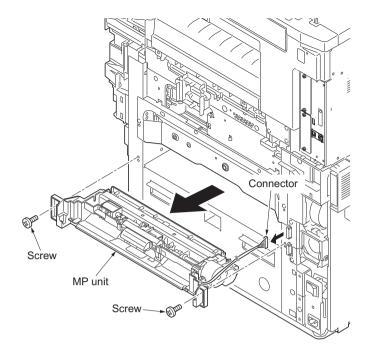


Figure 1-5-11

2KY

(3) Detaching and refitting the MP forwarding, MP paper feed and MP separation pulleys

Follow the procedure below to clean or replace the MP forwarding, MP paper feed and MP separation pulleys.

Procedure

Removing the MP forwarding and MP feed pulleys

- Remove the MP unit (see page 1-5-6).
 Remove the lever and spring from the MP unit.
- 3. Release the MP solenoid lever in the direction of the arrow.
- 4. Remove three stop rings.

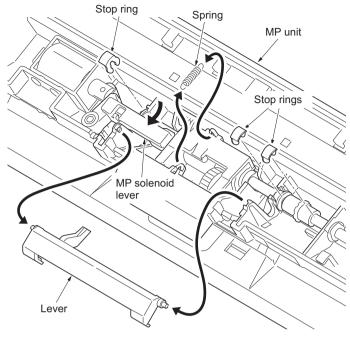


Figure 1-5-12

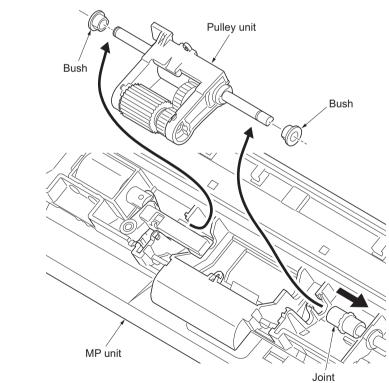
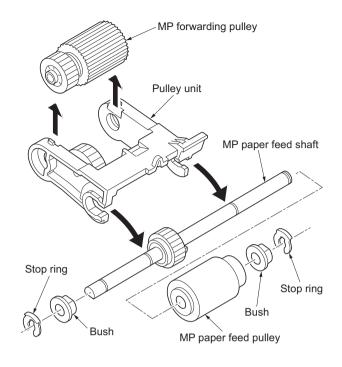


Figure 1-5-13

5. Slide the joint and remove two bushes. Remove the pulley unit from the MP unit.

- 6. Remove the inserted parts and then remove the MP forwarding pulley from the pulley unit.
- 7. Remove two stop rings and bushes.
- 8. Remove the MP paper feed pulley from the MP paper feed shaft.





Removing the MP separation pulley

- 9. Turn the MP unit over and remove the spring.
- 10. Remove the separation pulley holder from the MP unit.

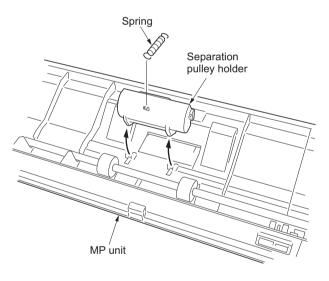


Figure 1-5-15

- 11. Remove the inserted parts and then remove the MP separation pulley from the separation pulley holder.
- 12. Clean or replace the MP forwarding, MP paper feed and MP separation pulleys.
- 13. Refit the MP separation pulley to the separation pulley holder.
- 14. Refit the MP forwarding and MP paper feed pulleys to the pulley unit.
- 15. Refit the separation pulley holder and pulley unit.
- 16. Refit the MP unit.

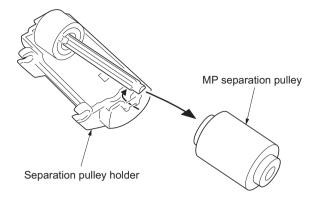


Figure 1-5-16

 When the MP forwarding pulley, MP paper feed pulley or the MP separation pulley is replaced, perform maintenance mode U903 (clearing the jam counter) (see page 1-3-146).

1-5-3 Optical section

(1) Detaching and refitting the exposure lamp

Follow the procedure below to replace the exposure lamp.

Procedure

- 1. Remove the original platen or DP.
- 2. Remove the rear upper filter cover.
- 3. Remove nine screws and remove the rear upper cover.

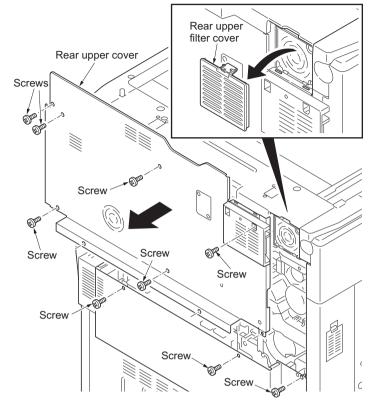


Figure 1-5-17

- 4. Open the front cover.
- 5. Remove the clip support.
- 6. Remove two screws and remove front left cover 1.

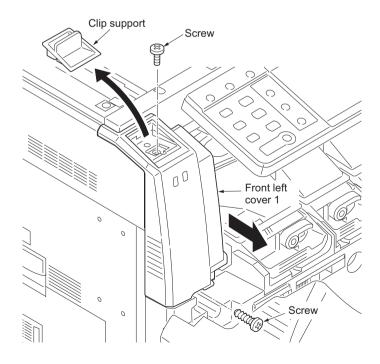


Figure 1-5-18

- Open the left cover 1.
 Remove the inserted parts and then remove the left upper cover.

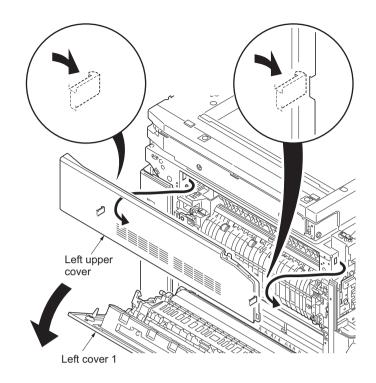


Figure 1-5-19

9. Remove two screws and remove the scanner left cover.

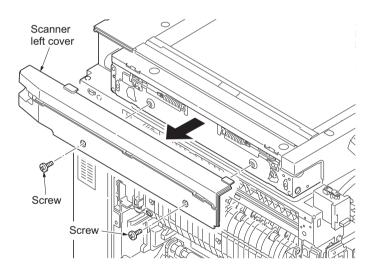
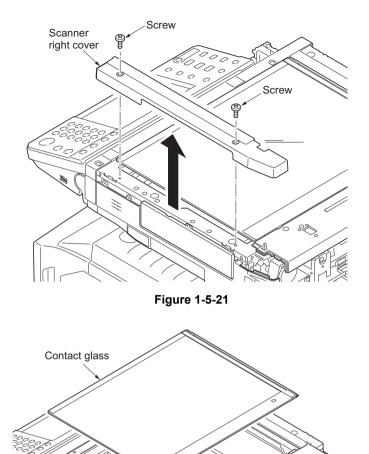
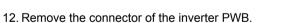


Figure 1-5-20

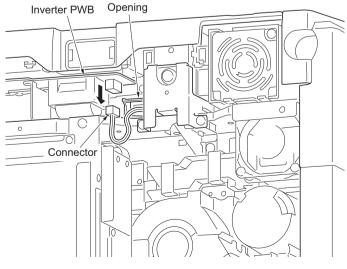
10. Remove two screws and remove the scanner right cover.



11. Remove the contact glass.



13. Draw the connector into the machine inside from opening.



22

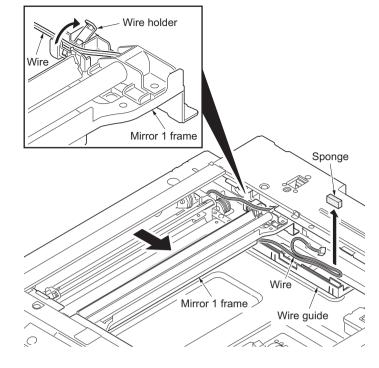
Figure 1-5-22

0

Figure 1-5-23

1-5-13

- 14. Remove the sponge from the wire guide and release the wire.
- 15. Move the mirror 1 frame to notch position.
- 16. Release the wire holder and then remove the wire.





- 17. Remove the screw and remove the exposure lamp from mirror 1 frame.
- 18. Check or replace the exposure lamp and then install the lamp.
- 19. Refit all the removed parts.

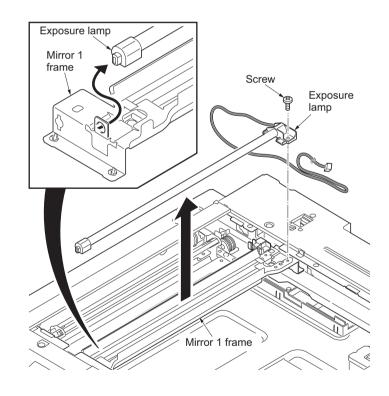


Figure 1-5-25

(2) Detaching and refitting the scanner wires

Take the following procedure when the scanner wires are broken or to be replaced.

NOTE

When fitting the wires, be sure to use those specified below. Machine front: (P/N: 302H717381), black Machine rear: (P/N: 302H717391), gray

Fitting requires the following tools

Two frame securing tools (P/N 302FZ17100) Two scanner wire stoppers (P/N 35968110)

Procedure

Detaching the scanner wires

- 1. Remove the exposure lamp (see page 1-5-11).
- 2. Remove each screw and then remove front and rear wire holder plates from mirror 1 frame.
- 3. Remove the mirror 1 frame.

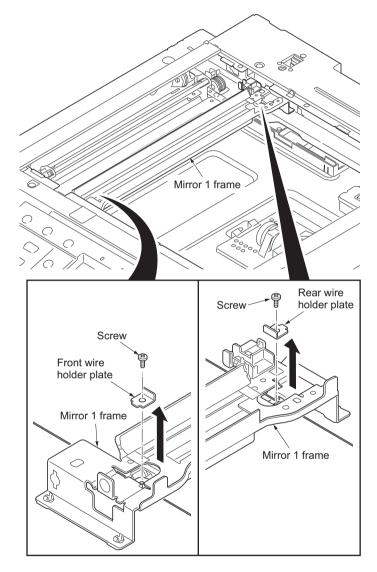


Figure 1-5-26

- 4. Remove the round terminals from the scanner wire springs on scanner unit left side.
- 5. Remove the scanner wire.

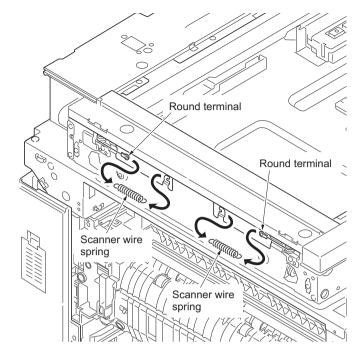


Figure 1-5-27

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.

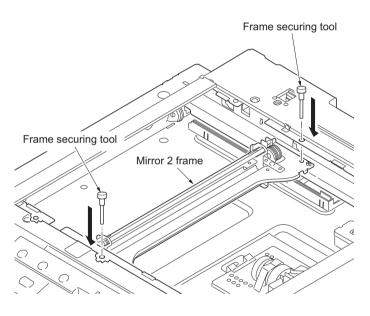


Figure 1-5-28

	Hook the round terminals onto the catches inside of the scanner unit	. ,
9.	Loop the scanner wire around the groove in the scanner wire pulley at the scanner unit right, winding from above to below.	
10.	Wind the scanner wires around the scanner wire drum five turns from the rear toward the hole	(4)
11.	in the drum.	• •
	Wind the scanner wires three turns from the inner toward the hole in the drum.	• •
	Install the scanner wire stoppers to the scanner wire drum to fix the wires	(7)
	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)
	Hook the scanner wires around the scanner wire guides at the machine left	(10)
17.	Hook the round terminal onto the scanner wire spring	(11)

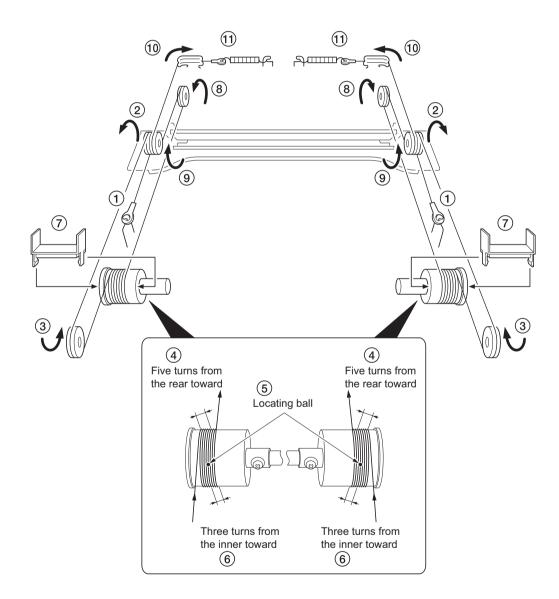


Figure 1-5-29

- 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.

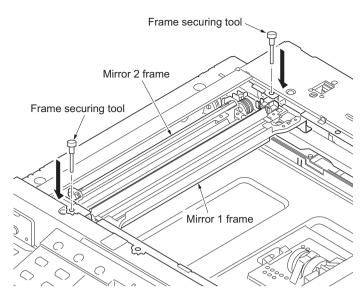


Figure 1-5-30

(3) Detaching and refitting the ISU (reference)

Follow the procedure below to replace the ISU.

Fitting requires the following tools

Two positions pins (P/N 18568120)

Procedure

Detaching the ISU

- 1. Remove the contact glass (see page 1-5-11).
- 2. Remove seven screws and then remove the ISU cover.

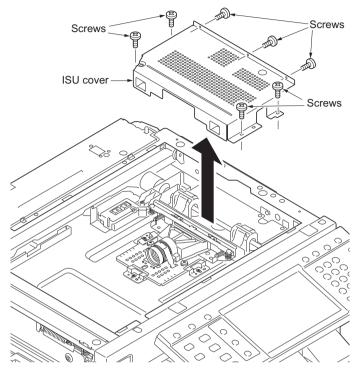
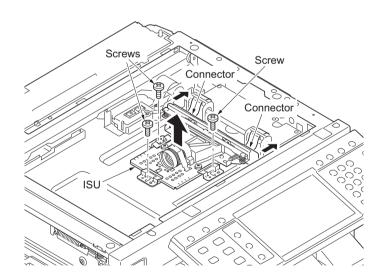


Figure 1-5-31

- 3. Remove three screws and two connectors, and then remove the ISU.
- 4. Replace the ISU.



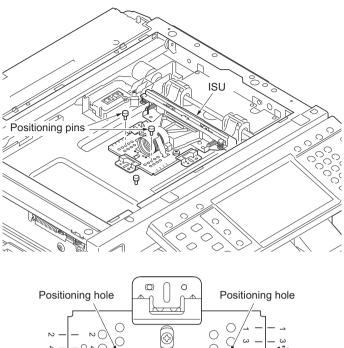


Refitting the ISU

 Adjust the position of ISU to the frame hole of number and the same number which are recorded in the lens of ISU and then insert two positioning pins.
 Example: When a lens number is 5, move

ISU so that the positioning hole of 5 of the number stamped in the scanner unit suit and insert two pins.

6. Remove two positioning pins after fixing ISU with three screws.



0 6 0 0 Ò 0 0 0 0 6 o () 0 0 ~ 0 ∞ () 51 ထ 0 0 9 0 Lens number ÷ 0 42 n

Figure 1-5-33

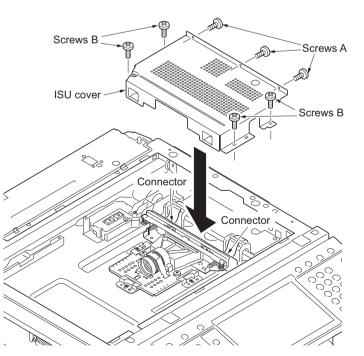


Figure 1-5-34

- 7. Refit two connectors.
- Refit the ISU cover. Screw tightening order
 Three screws A
 Four screws B
- 9. Refit the contact glass.

(4) Detaching and refitting the laser scanner unit

Follow the procedure below to replace the laser scanner unit.

Procedure

- 1. Remove the left cover 1 (see page 1-5-47).
- 2. Remove the conveying guide.

3. Open the middle guide unit.

4. Remove two pins and springs.

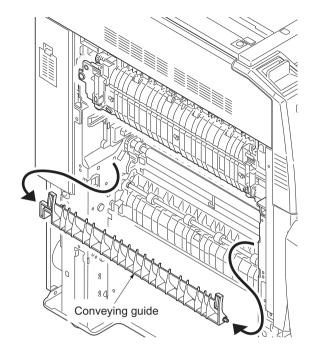


Figure 1-5-35

Pin(spring) Pin(spring) 1 œ[£] Spring Pin វា Middle guide 1 A unit C M Spring 000 Pin ſ. 6 1

Figure 1-5-36

- Remove the MP unit (see page 1-5-6).
 Remove two screws and then remove the LSU right frame.

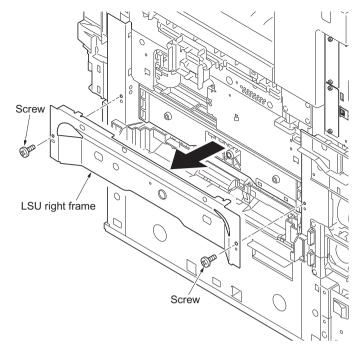


Figure 1-5-37

7. Remove the screw and then right upper cover.

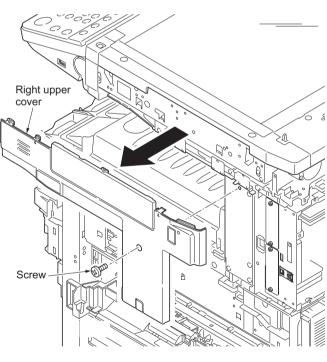


Figure 1-5-38

- 8. Remove the connector.
- Remove the relay connector.
 Release wire saddle 1 and 2, and then remove the wire.

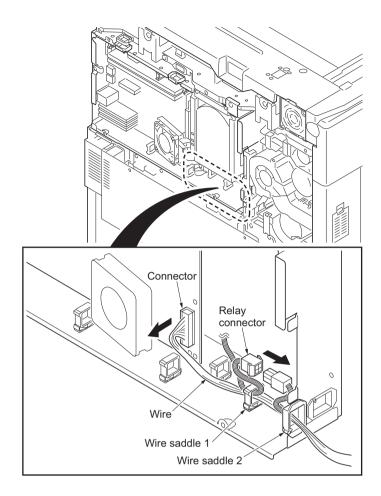


Figure 1-5-39

- 11. Remove two connectors (YC17 and YC21).
- 12. Remove the screw and then remove the clamp.
- 13. Remove the connector (YC12).
- 14. Release wire saddle 1 and 2, and then remove the wires.

- 15. While pressing and holding the lock levers, remove the three connectors (YC3, YC4 and YC11).
- 16. Release wire saddles 3 to 6, and then remove the wires.

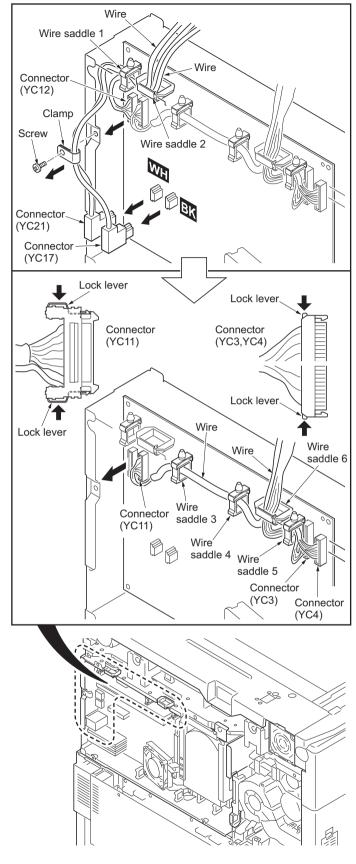


Figure 1-5-40

17. Remove three screws

18. Open the controller box.

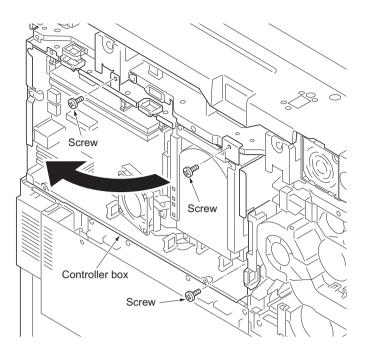


Figure 1-5-41

- 19. While holding the controller box, remove the pin. Take care not to drop the controller box.
- 20. Remove the controller box.

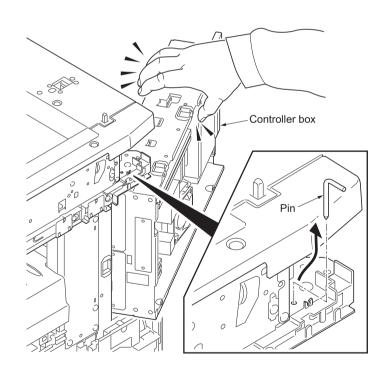


Figure 1-5-42

- 21. Remove connector A and B.
- 22. Release four wire saddles and then remove the wire.

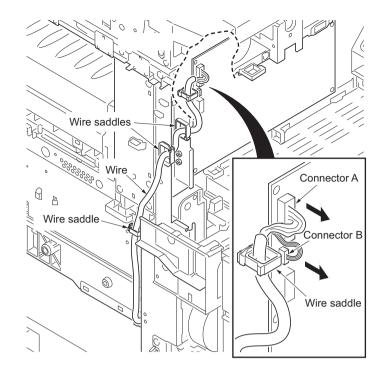
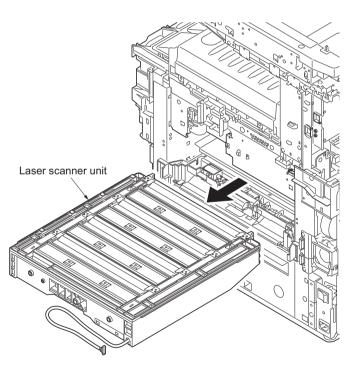


Figure 1-5-43

23. Remove the Laser scanner unit.





- 24. Check or replace the laser scanner unit and refit all the removed parts.When refitting the laser scanner unit, take care not to hit it to the rib.
- 25. When the laser scanner unit is replaced with a new one, carry out the following procedure.
- 26. Performs manual color registration adjustment (see page 1-5-28).
- 27. Perform the following image adjustment. 1)Color Calibration
 - 2)Color Registration
 - 3)Maintenance mode U412 (adjusting the uneven density) (see page 1-3-123).
 - 4)Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).

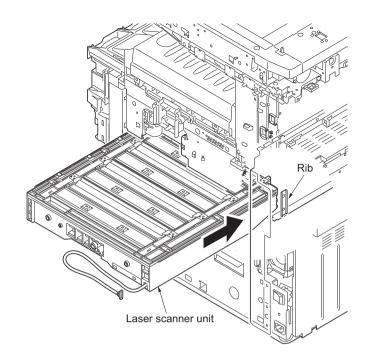


Figure 1-5-45

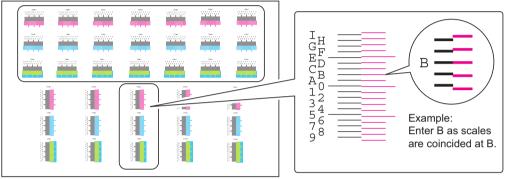
2KY

(5) Manual color registration adjustment

Follow the procedure below to replace the laser scanner unit.

Procedure

- 1. Press the system menu key.
- Press [User Adjustment]. Press [Color Calibrat.] ([Colour Calibrat.]). Press [On]. Color calibration begins.
- Press [Color Regist.] ([Colour Regist.]). Press [Configuration]. Press [PrintChart (Details)]. A chart is printed.
- 4. Press [InputValue (Details)]. Read figures at MH-1 to 7/CH-1 to 7/YH-1 to 7 and MV-3/CV-3/YV-3 of the reference chart and enter the figure marked at the scale which the BK fine line is in line with the M/C/Y fine lines, using the cursor up/down keys.
- 5. Press [Completed.] after all values have been entered. Color registration begins.

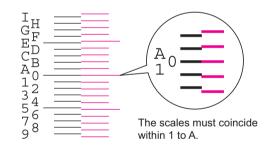


Reference chart



- 6. Press [Print Chart (Details)] to print a reference chart.
- Verify that each scale is within the range of 1 to A. If they are within the range, proceed to step 8.
 If scales are out of range, repeat steps 4

through 7.

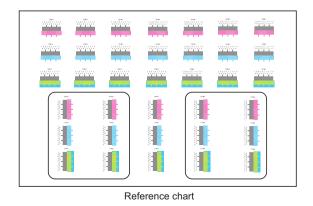




 Verify that scales of MV-1,2,4,5/CV-1,2,4,5/ YV-1,2,4,5 coincide within the range of 1 to A.

If they are within the range, adjustment is complete.

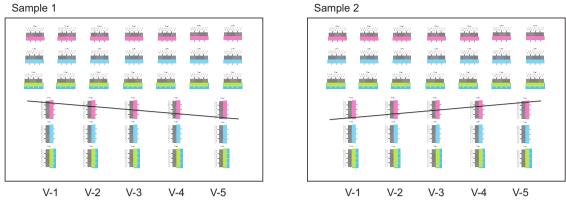
If they are out of range, proceed to step 9.





If manual color registration has failed:

9. If the balance between V-1 and V-5 is more than 2 scales (sample 1) or less than -2 scales (sample 2), perform the following steps:





- 10. Open the front cover. Push the release button and pull out the waste toner tray.
- 11. Release two hooks and then remove the waste toner tray.
- 12. Rotate the adjustment knob using a 5 mm hex wrench.

Direction of rotation

(V-1 - V-5) >= 2 scales (sample 1): rotate counterclockwise.

(V-1 - V-5) <= -2 scales (sample 2): rotate clockwise.

- Number of rotation
- (V-1- V-5) x 4 clicks
- 13. Refit the toner container and close the front cover.
- 14. Turn the main power switch off and on. Correction automatically starts.
- 15. Print a reference chart and verify the result.

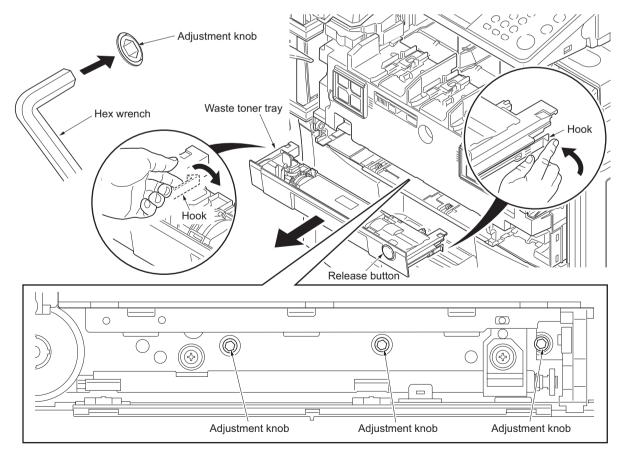


Figure 1-5-50

2KY

1-5-4 Image formation section

(1) Detaching and refitting the image formation holder

Procedure

- 1. Open the front cover.
- 2. Turn the toner container lock lever for the toner container counterclockwise to release the lock.
- 3. Remove four toner containers.

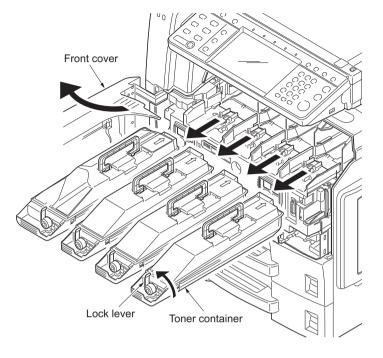


Figure 1-5-51

- 4. Push the release button and pull out the waste toner tray.
- 5. Release two hooks and then remove the waste toner tray.

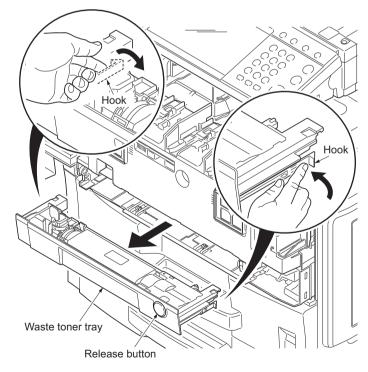


Figure 1-5-52

6. Remove the screw and then open the connector cover.

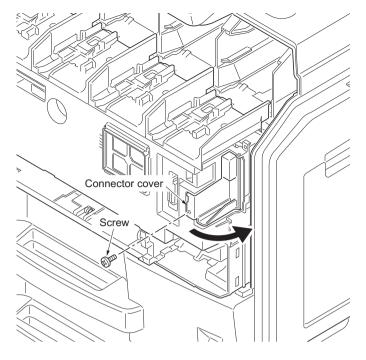


Figure 1-5-53

7. Remove the connector.

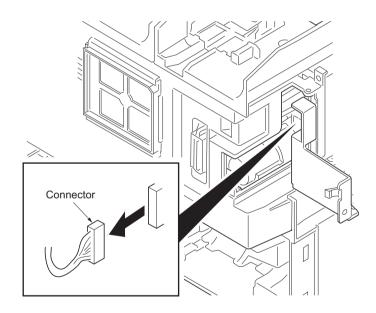


Figure 1-5-54

8. Remove five screws of the image formation holder.

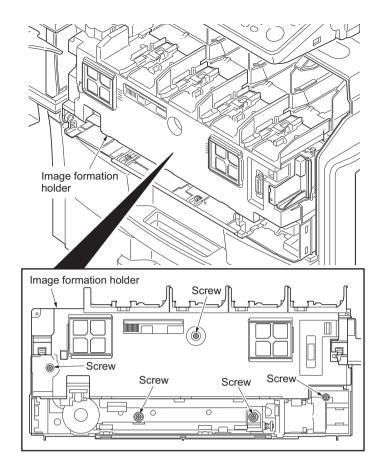
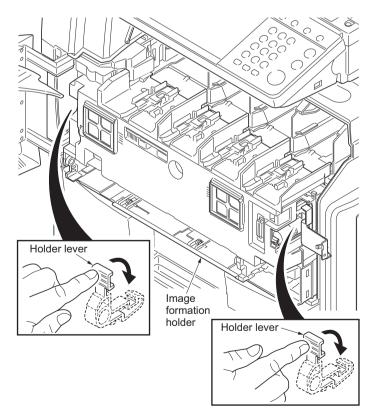


Figure 1-5-55

9. Press the two holder levers to unlock.



10. Remove the image formation holder. When refitting the image formation holder, first insert the left pin into the machine and then insert the right pin.

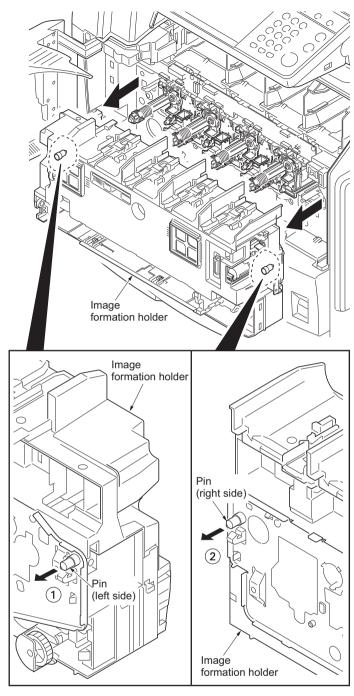


Figure 1-5-57

2KY

(2) Detaching and refitting the developing unit

Follow the procedure below to replace the developing unit.

Example of detaching and refitting: developing unit Y

Procedure

- 1. Remove the image formation holder (see page 1-5-30).
- 2. Close the toner replenishment lid.
- 3. Remove the fuser unit (see page 1-5-41).
- 4. Remove the transfer belt unit (see page 1-5-37).
- 5. Remove the connector.
- 6. Remove the screw.

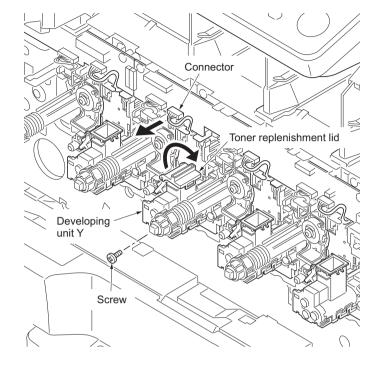


Figure 1-5-58

- 7. Remove the developing unit Y.
- Check or replace the developing unit Y and refit all the removed parts.

Caution:

When refitting the developing unit, secure the developing unit and then secure the transfer belt unit.

When securing the developing unit, be sure to insert the unit all the way into the machine and fix it using the screw.

- 9. When the developing unit is replaced with a new one, carry out the following procedure.
- 10. Perform maintenance mode U464 (AC calibration) (see page 1-3-129).
- 11. Perform the following image adjustment.1)Color Calibration
 - 2)Color Registration
 - 3)Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).

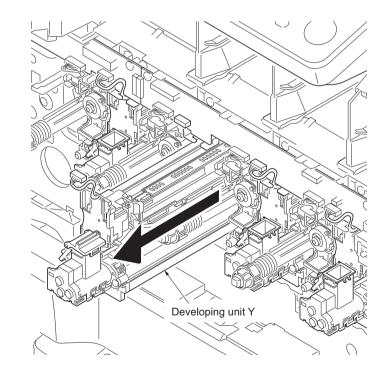


Figure 1-5-59

Follow the procedure below to replace the drum unit.

Caution

Avoid direct sunlight and strong light when detaching and refitting the drum unit. Never touch the drum surface.

Example of detaching and refitting: drum unit Y

Procedure

- 1. Remove the image formation holder (see page 1-5-30).
- 2. Remove developing units K and C that are adjacent to drum unit Y.
- 3. Remove the fuser unit (see page 1-5-41).
- Remove the transfer belt unit (see page 1-5-37).
- 5. Remove the connector.

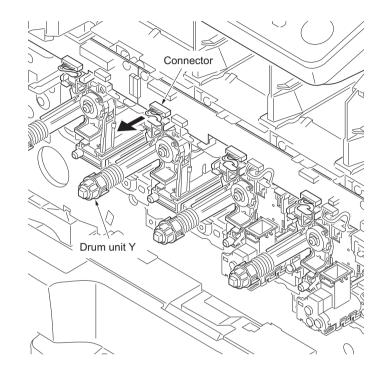


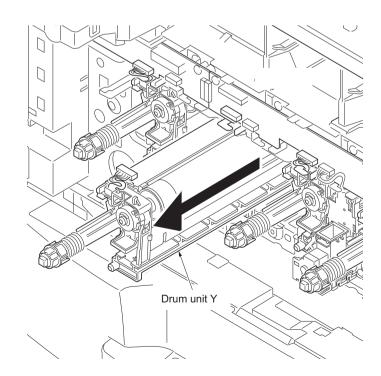
Figure 1-5-60

- 6. Remove the drum unit Y.
- 7. Check or replace the drum unit Y and refit all the removed parts.

Caution:

When refitting the drum unit, secure the developing unit and then secure the transfer belt unit.

- 8. When the drum unit is replaced with a new one, carry out the following procedure.
- Perform maintenance mode U119 (drum setup) (see page 1-3-69).
- 10. Perform maintenance mode U930 (clearing the charger roller count) (see page 1-3-153).
- 11. Perform maintenance mode U464 (AC calibration) (see page 1-3-129).
- 12. Perform the following image adjustment.
 - 1)Color Calibration
 - 2)Color Registration
 - 3)Maintenance mode U412 (adjusting the uneven density) (see page 1-3-123).
 - 4)Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).



2KY

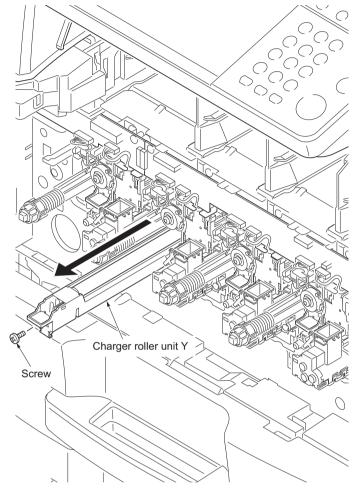
(4) Detaching and refitting the charger roller unit

Follow the procedure below to replace the charger roller unit.

Example of detaching and refitting: charger roller unit Y

Procedure

- 1. Remove the image formation holder (see page 1-5-30).
- 2. Remove the screw and then remove the charger roller unit Y.
- 3. Check or replace the charger roller unit Y and refit all the removed parts.
- 4. When the charger roller unit is replaced with a new one, carry out the following procedure.
- 5. Perform maintenance mode U930 (clearing the charger roller count) (see page 1-3-153).



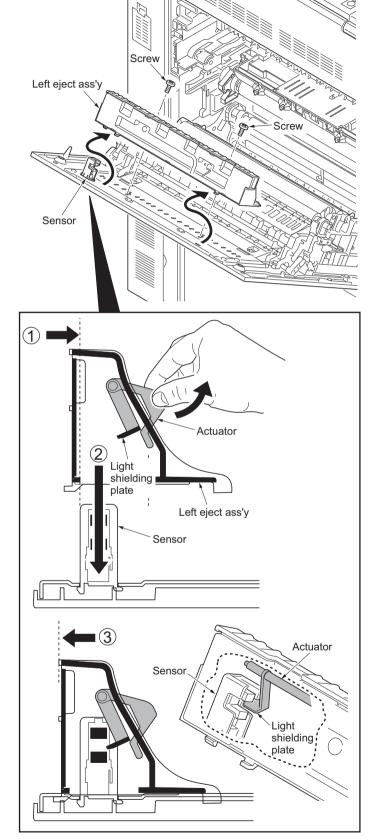
1-5-5 Transfer section

(1) Detaching and refitting the transfer belt unit

Follow the procedure below to replace the transfer belt unit.

Procedure

- 1. Remove the fuser unit (see page 1-5-41).
- 2. Remove two screws and then remove the left eject ass'y.



Caution in installation of left eject ass'y

Take care not to damage the sensor and the light shielding plate of actuator.

And also check the operation of the actuator after installing to see if the actuator operates correctly.

Figure 1-5-63

- 3. Remove the connector.
- While lifting the "A" sections, remove the transfer belt unit from the machine. Take care not to hit the transfer belt unit to the sensor.
- 5. Replace the transfer belt unit and install it in the machine in a horizontal manner.
- 6. Refit all the removed parts.
- 7. When the transfer belt unit is replaced with a new one, carry out the following procedure.
- 8. Perform the following image adjustment.
 - 1)Color Calibration
 - 2)Color Registration
 - 3)Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).

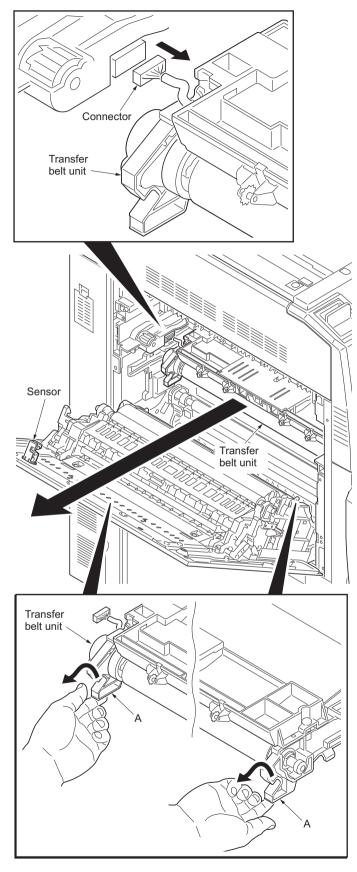


Figure 1-5-64

(2) Detaching and refitting the transfer roller

Follow the procedure below to replace the transfer roller.

Procedure

- 1. Open left cover 1.
- 2. Using a flat-blade screwdriver, remove the left transfer guide by prying the protrusion off the hole.
- 3. Remove the screw and then remove the ground terminal and varistor terminal.

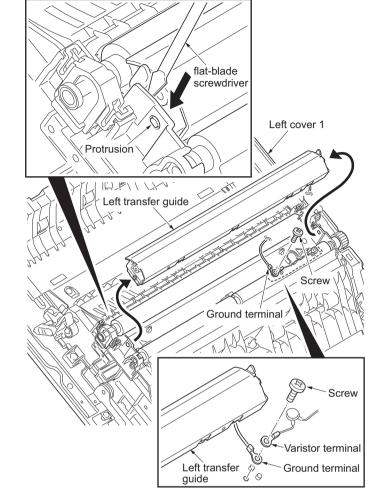
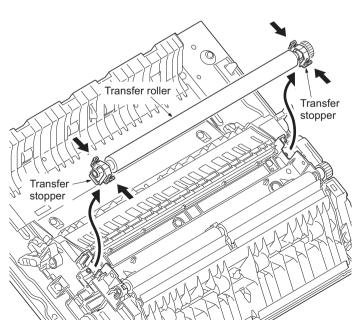


Figure 1-5-65

4. Remove the transfer roller while pressing down the transfer stopper of both ends.



- 2KY
 - 5. Remove the cut washer, bearing, stop ring, gear, pin, transfer stopper, transfer bush and argent transfer spring from the transfer roller rear.

Remove the cut washer, bearing, transfer stopper, transfer bus and black transfer spring from the transfer roller front.

- 6. Check or replace the transfer roller and refit all the removed parts.
- Transfer roller Transfer stopper Cut Cut washer washer Stop ring Transfer bush Pin Transfer stopper Bearing Transfer spring (black) Bearing Gear Transfer roller Transfer bush Transfer spring (argent)

Figure 1-5-67

7. Push in the left transfer guide to refit the guide in position.

Caution in refitting left transfer guide The ground terminal and the varistor terminal must be tightened together with a screw. Make sure that the two springs on the left transfer guide are caught with the protrusions on the paper conveying unit.

- 8. When the transfer roller is replaced with a new one, carry out the following procedure.
- 9. Perform maintenance mode U127 (clearing the transfer counter) (see page 1-3-70).
- 10. Perform the following image adjustment. 1)Color Calibration
 - 2)Color Registration
 - 3)Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).

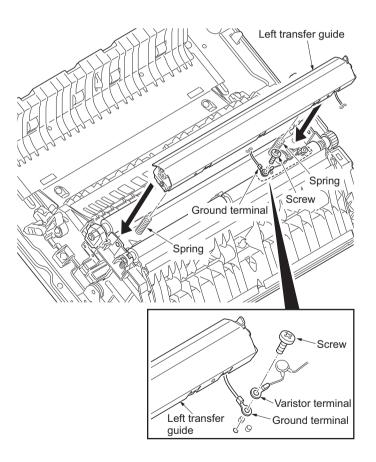


Figure 1-5-68

1-5-6 Fuser section

(1) Detaching and refitting the fuser unit

Follow the procedure below to replace the fuser unit.

Procedure

- 1. Open left cover 1.
- 2. Remove two screws and then remove the fuser unit.

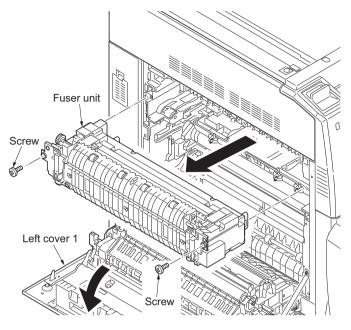


Figure 1-5-69

- Replace the fuser unit and install the unit.
 Caution
 When refitting the fuser unit, take care not to get the wire of transfer belt unit caught.
- 4. When the fuser unit is replaced with a new one, carry out the following procedure.
- 5. Perform maintenance mode U167 (clearing the fuser counter) (see page 1-3-85).
- Perform the following image adjustment.
 1)Color Calibration
 - 2)Color Registration
 - Maintenance mode U410 (Adjusting the halftone automatically) (see page 1-3-119).

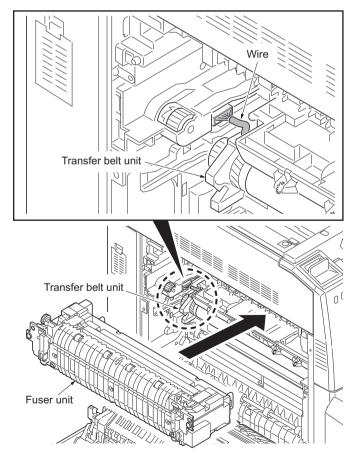


Figure 1-5-70

1-5-7 Other

(1) Detaching and refitting the left filter, rear upper filter 1/2, right filter 1/2, rear lower filter, front filter and duct filter

Follow the procedure below to replace the left filter, rear upper filter 1/2, right filter 1/2, rear lower filter, front filter and duct filter.

Procedure

- 1. Remove the rear upper filter cover from the machine rear upper side.
- 2. Remove the rear upper filter 1 from the rear upper filter cover.
- 3. Clean or replace the rear upper filter 1 and refit the filter.
- 4. Remove the rear upper filter 2.
- 5. Clean or replace the rear upper filter 2 and refit the filter.
- Remove the left filter cover from machine left side.
 For a machine with an optional duct unit installed, remove the two screws and
- remove duct unit B. 7. Remove the left filter.
- 8. Clean or replace the left filter and refit the filter.

Only machine with an optional duct unit

- 9. Remove the duct filter cover.
- 10. Remove the duct filter.
- 11. Clean or replace the duct filter and refit the filter.

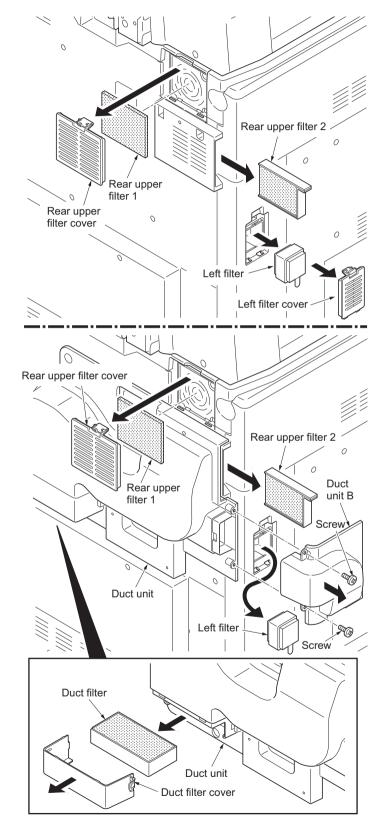
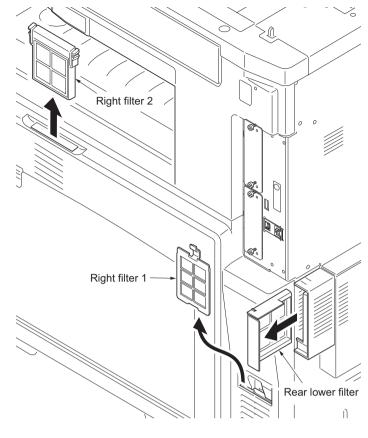


Figure 1-5-71

- 12. Remove the right filter 1 from machine right side.
- 13. Clean or replace the right filter 1 and refit the filter.
- 14. Remove the right filter 2 from machine right side.
- 15. Clean or replace the right filter 2 and refit the filter.
- 16. Remove the rear lower filter from machine rear lower side.
- 17. Clean or replace the rear lower filter and refit the filter.



- 18. Open the front cover.
- 19. Remove the front filters from the machine front side.
- 20. Clean or replace the front filters and refit the filters.

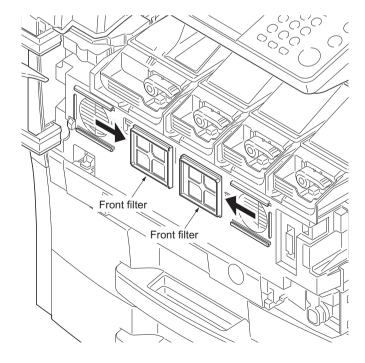


Figure 1-5-73

2KY

(2) Detaching and refitting the hard disk unit

Follow the procedure below to replace the hard disk unit.

Procedure

- 1. Perform maintenance mode U917 (backup data reading) (see page 1-3-150).
- 2. Remove the upper rear cover (see page 1-5-21).
- 3. Remove two cable clamps.
- 4. Pressing the lock lever and remove two connectors.

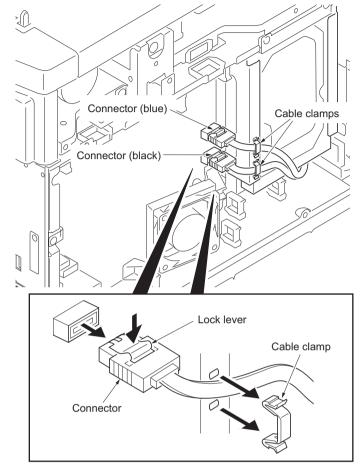


Figure 1-5-74

- 5. Remove the connector.
- 6. Release the wire saddle and then remove the wire.
- 7. Remove two screws.

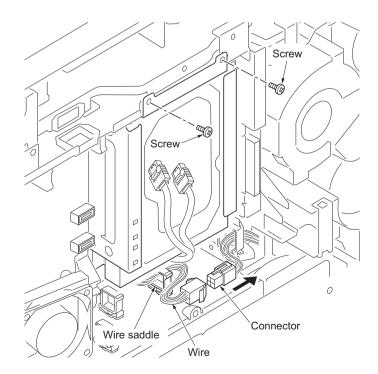


Figure 1-5-75

8. Remove four hooks and then remove the hard disk unit.

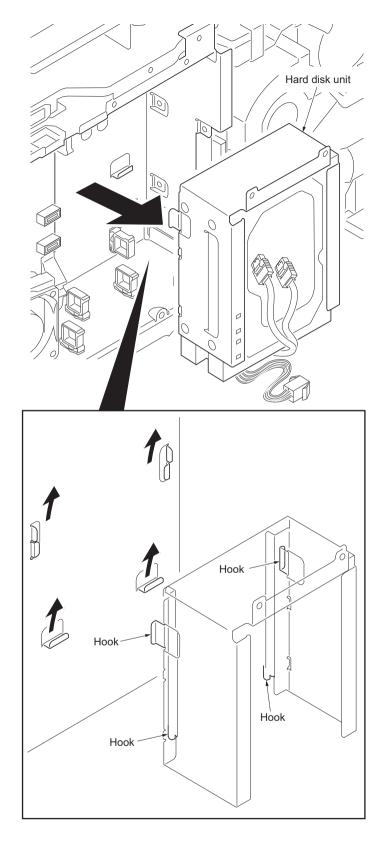


Figure 1-5-76

- Pressing the lock lever and remove the following connectors. Two power connectors, connector (blue) and connector (black)
- 10. Replace the hard disk unit and refit all the removed parts.
- 11. Perform maintenance mode U024 (HDD initializing) (see page 1-3-24).
- 12. Perform maintenance mode U917 (backup data writing) (see page 1-3-150).

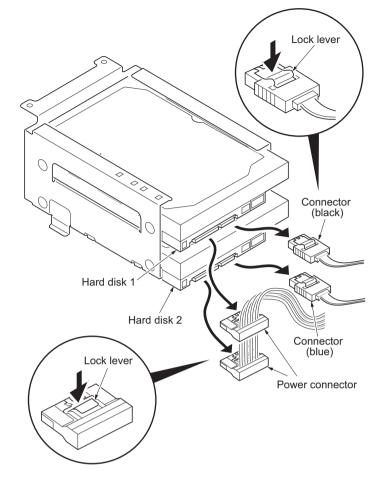


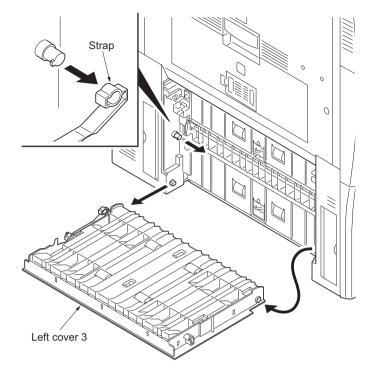
Figure 1-5-77

(3) Detaching and refitting the left cover 1 (paper conveying unit)

Follow the procedure below to replace the left cover 1 (paper conveying unit).

Procedure

- 1. Open the left cover 3.
- 2. Remove two straps and then remove left cover 3.



- 3. Open the left cover 1 (paper conveying unit).
- 4. Remove three screws and then remove the left lower cover 2.

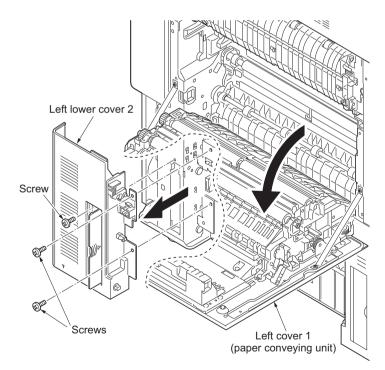


Figure 1-5-79

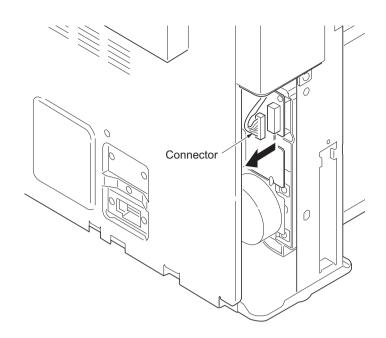


Figure 1-5-80

- 6. Release the wire saddle and pull the connector out of the machine rear frame.
- 7. Remove the spring.

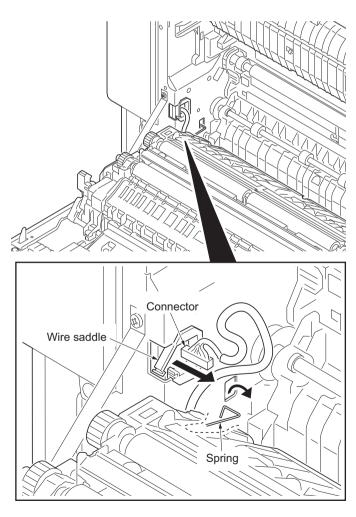


Figure 1-5-81

2KY

- 8. Remove cassette 1 and 2.
- 9. Remove two screws.
- 10. Release the hook and then remove the front left cover 2.

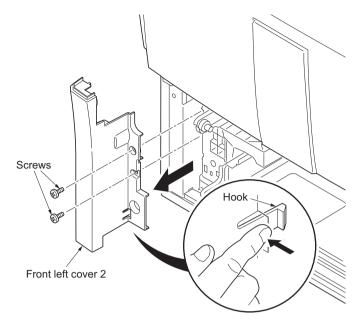


Figure 1-5-82

- 11. Close the left cover 1 (paper conveying unit).
- 12. Remove two screws and then remove the left lower cover 1.

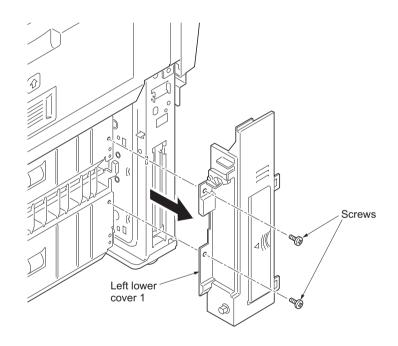


Figure 1-5-83

- 13. Remove the screw and then remove the terminal.
- 14. Remove the wire from two hooks.

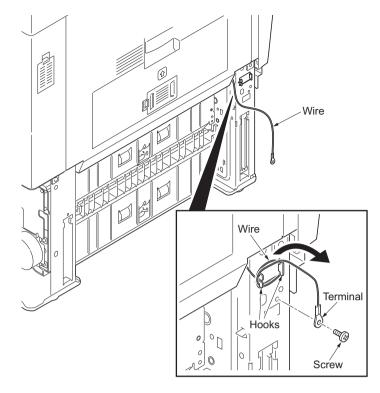
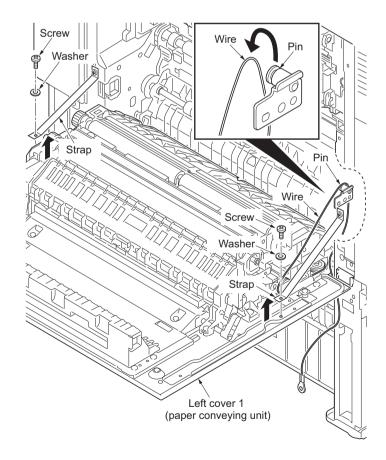


Figure 1-5-84

- 15. Open the left cover 1 (paper conveying unit).
- 16. Remove the wire from pin.
- 17. Remove two screws and two washers and then remove two straps.



- 18. Raise the pin and slide it.19. Remove the left cover 1 (paper conveying unit).
- 20. Replace the left cover 1 (paper conveying unit) and refit all the removed parts.

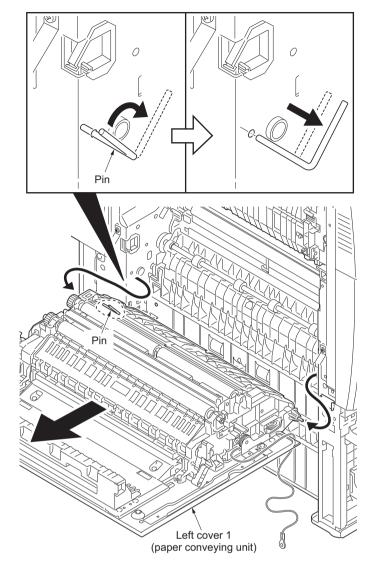


Figure 1-5-86

2KY

(4) Direction of installing the principal fan motors

When detaching or refitting the fan motors, be careful of the airflow direction (intake or exhaust).

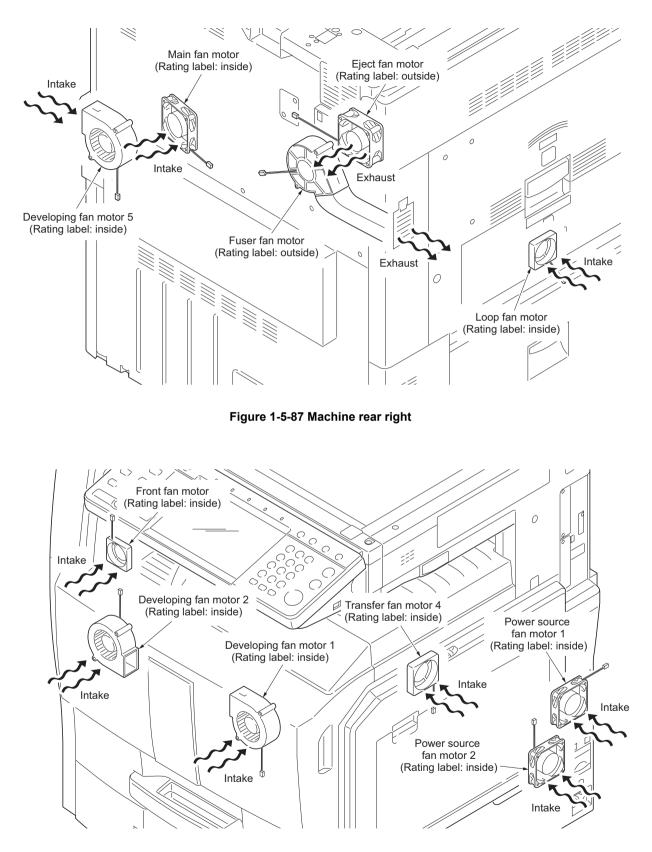


Figure 1-5-88 Machine front left

Follow the procedure below to upgrade the firmware of main PWB, engine PWB, MMI, scanner and option.

Procedure

1. Check the ROM version

Perform maintenance item U000 (maintenance report output) and check U019 ROM version.

2. Insert USB memory

Press the power key on the operation panel, and after verifying the power indicator has gone off, switch off the main power switch. And then unplug the power cable from the wall outlet.

Insert the USB memory in which the firmware has been written into a notch hole of the machine. (see the Figure 1-6-1).

Caution:

For batch upgrading, use USB memory that has a capacity of 256 MB or more.

Write the firmware files into the same directory as USB memory.

3. Perform the upgrade

Insert the power plug and turn the main power switch on. Upgrading firmware starts. (For batch upgrading, 30 minutes are required at the maximum.)

[100% Completed] is displayed on the touch panel when upgrading is complete.

If a problem occurs during upgrade, error code is displayed (see the error codes table).

Caution:

Never turn the main power switch off during upgrading.

Never turn the main power switch off before upgrading the MMI software for panel because the screen changes. When upgrading the engine firmware, open the front cover and turn off the safety switch.

4. Remove USB memory

Press the power key on the operation panel, and after verifying the power indicator has gone off, switch off the main power switch. And then unplug the power cable from the wall outlet.

Wait for several seconds and then remove the USB memory from the machine.

5. Check the ROM version

Insert the power plug and turn the main power switch on.

Perform maintenance item U000 (maintenance report output) and check that U019 ROM version has been upgraded.

Error codes

Codes	Description	Corrective measures
CF000	Operation panel PWB communica- tion error	Execute again upgrading.
		Replace the main firmware DIMM with the latest one and then execute again upgrading.
CF040	Engine PWB communication error	Only for engine firmware, execute upgrading using USB memory in which software is stored individually.

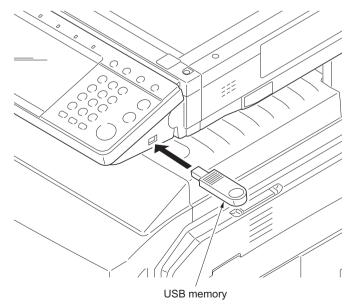


Figure 1-6-1

1-6-2 Remarks on main PWB replacement

When replacing the main PWB, remove the EEPROM from the main PWB that has been removed and then reattach it to the new main PWB.

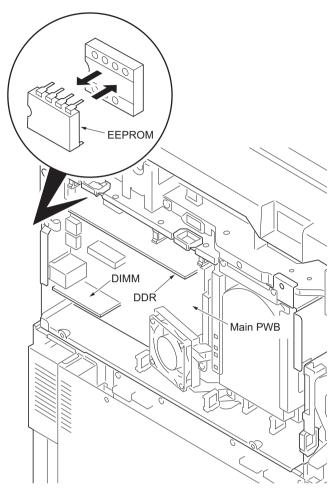


Figure 1-6-2

When refitting DIMM, check "CODE" and "FLS" marked on the PWB and refit them to the original positions.

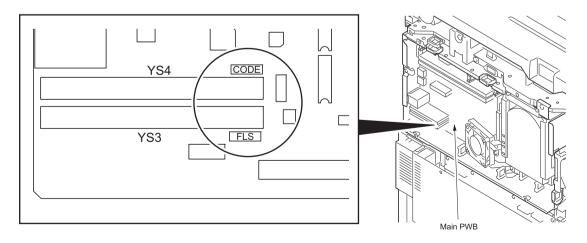
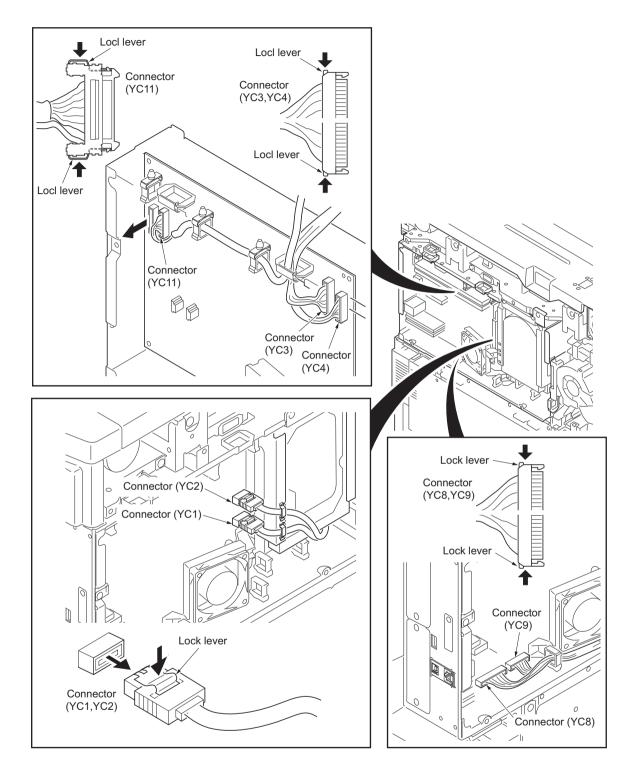


Figure 1-6-3



When removing YC1, YC2, YC3, YC4, YC8, YC9 and YC11 from the main PWB, press the lock lever.

Figure 1-6-4

When connecting the hard disk cables (YC1, YC2) to the PWB, match "BLACK" and "BLUE" marked on the PWB with the connector colors.

When connecting the USB cables (YC17, YC21) to the PWB, match "BK" and "WH" marked on the PWB with the connector colors.

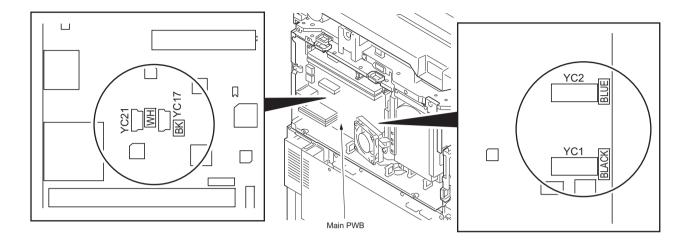


Figure 1-6-5

1-6-3 Remarks on engine PWB replacement

When replacing the engine PWB, remove the EEPROM from the engine PWB that has been removed and then reattach it to the new engine PWB.

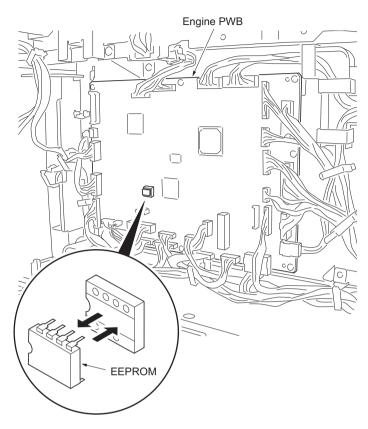


Figure 1-6-6

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2-1-1 Paper feed 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.

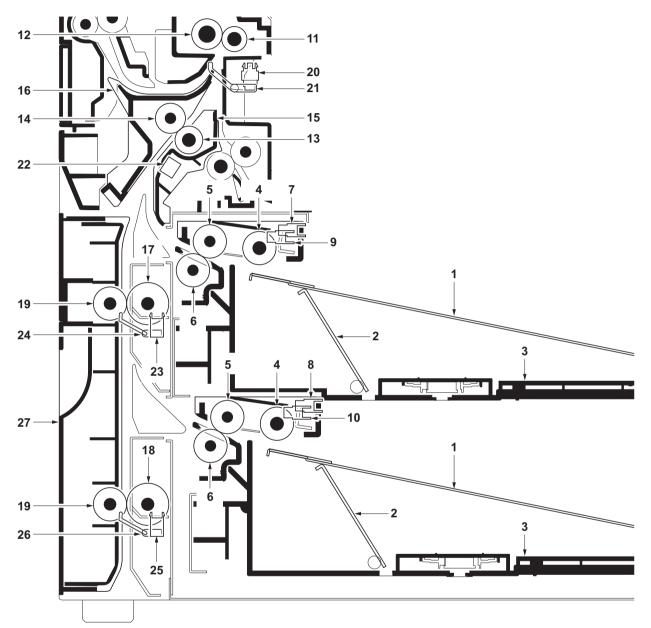


Figure 2-1-1 Cassette paper feed section

- (1) Cassette base
- (2) Cassette operation plate
- (3) Cassette
- (4) Forwarding pulley
- (5) Paper feed pulley
- (6) Separation pulley
- (7) Paper switch 1 (PSW1)
- (8) Paper switch 2 (PSW2)
- (9) Lift switch 1 (LSW1)
- (10) Lift switch 2 (LSW2)
- (11) Right registration roller
- (12) Left registration roller
- (13) Middle roller
- (14) Middle pulley
- (15) MIddle right guide
- (16) Middle left guide
- (17) Upper feed roller
- (18) Lower feed roller

- (19) Feed pulley
- (20) Registration switch (RSW)
- (21) Actuator (registration switch)
- (22) Feed switch 1 (FSW1)
- (23) Feed switch 2 (FSW2)
- (24) Actuator (Feed switch 2)
- (25) Feed switch 3 (FSW3)
- (26) Actuator (Feed switch 3)
- (27) Left cover 3

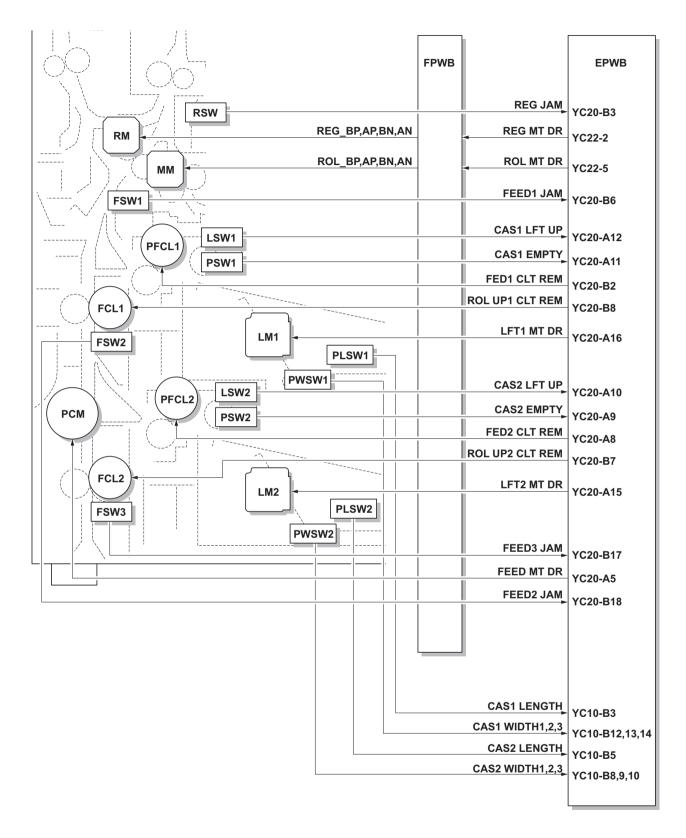


Figure 2-1-2 Cassette paper feed section block diagram

(2) MP tray paper feed section

Pressing the start key activates the MP solenoid (MPSOL) to release the paper stopper, which in turn causes the MP forwarding pulley mounted on the MP support to descend. In turn, the MP forwarding pulley comes in contact with the paper placed on the MP tray is fed forward as the MP forward pulley rotates and forwarded to the MP paper feed pulley and the MP separation pulley. Also during paper feed, the MP separation pulley prevents multiple sheets from being fed at one time by the torque limiter.

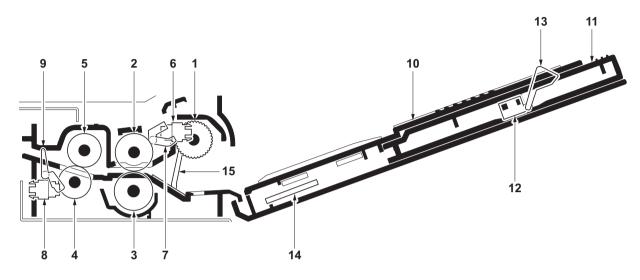


Figure 2-1-3 MP tray paper feed section (1)

- (1) MP forwarding pulley
- (2) MP paper feed pulley
- (3) MP separate pulley
- (4) MP middle roller
- (5) MP middle pulley
- (6) MP paper switch (MPPSW)
- (7) Actuator (MP paper switch)
- (8) MP paper feed switch (MPPFSW)
- (9) Actuator (MP paper feed switch)
- (10) MP table
- (11) MP tray extension
- (12) MP paper size length switch
- (MPPLSW)
- (13) Actuator
- (MP paper size length switch) (14) MP paper size width switch
- (MPPWSW) (15) Paper stopper

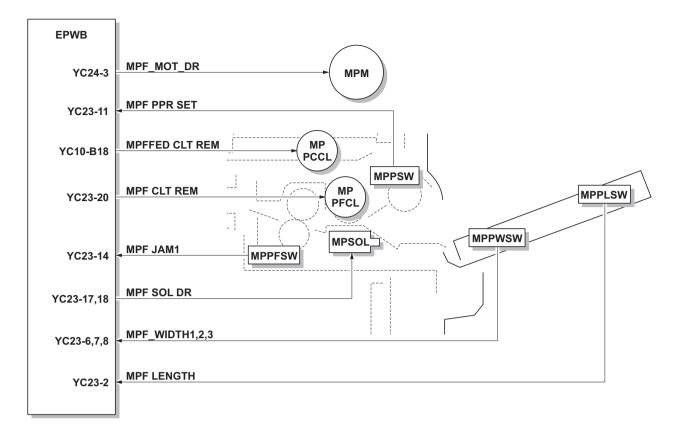


Figure 2-1-4 MP tray paper feed section block diagram (1)

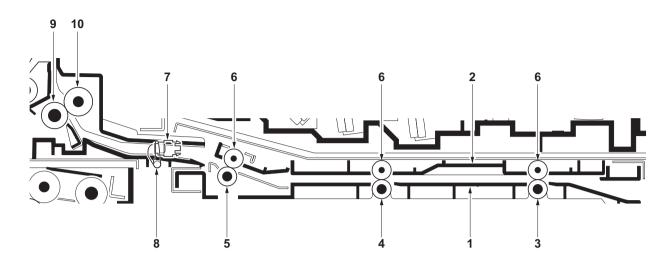


Figure 2-1-5 MP tray paper feed section (2)

- (1) MP paper conveying base
- (2) MP paper conveying cover
- (3) MP paper conveying roller 1
- (4) MP paper conveying roller 2
- (5) MP paper conveying roller 3
- (6) MP paper conveying pulley
- (7) MP paper conveying switch (MPPCSW)
- (8) Actuator
- (MP paper conveying switch)
- (9) Middle roller
- (10) Middle pulley

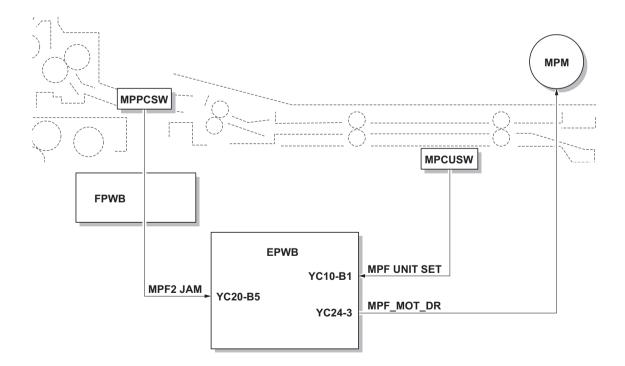


Figure 2-1-6 MP tray paper feed section block diagram (2)

2-1-2 Drum section

(1) 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.

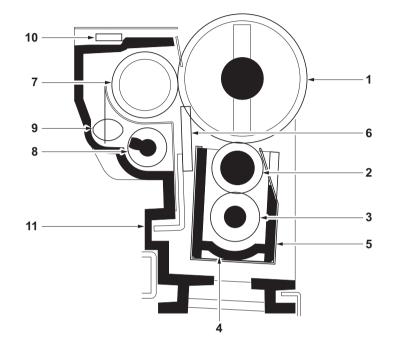


Figure 2-1-7 Drum section

- (1) Drum
- (2) Charger roller
- (3) Charger cleaning roller
- (4) Charger roller holder
- (5) Charger shield
- (6) Cleaning blade

- (7) Cleaning roller
- (8) Drum screw
- (9) Drum roller
- (10) Cleaning lamp (CL)
- (11) Drum frame

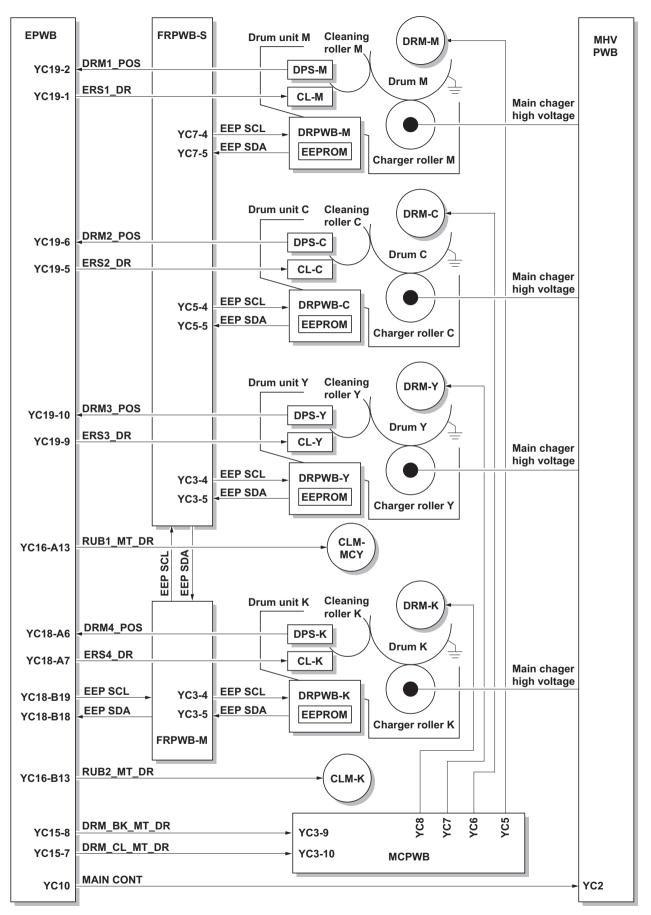
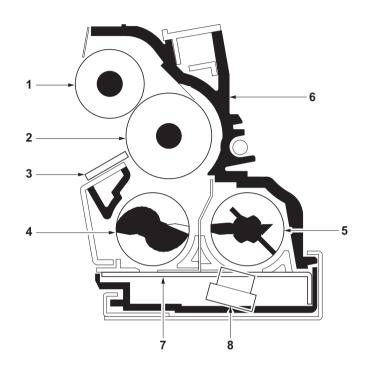


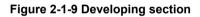
Figure 2-1-8 Drum section block diagram

2-1-3 Developing section

(1) Developing section

The dual component developing system develops magnetic brushes (of developer) around the magnet roller. The toner moves onto the sleeve roller which is positioned parallel to the drum and generates a thin layer of toner. The sleeve roller is pressed against the drum with the DS pulley for developing static latent image.





- (1) Sleeve roller
- (2) Magnet roller
- (3) Developing blade
- (4) Developing screw A
- (5) Developing screw B
- (6) Developing case
- (7) Developing lid
- (8) Toner sensor (TS)

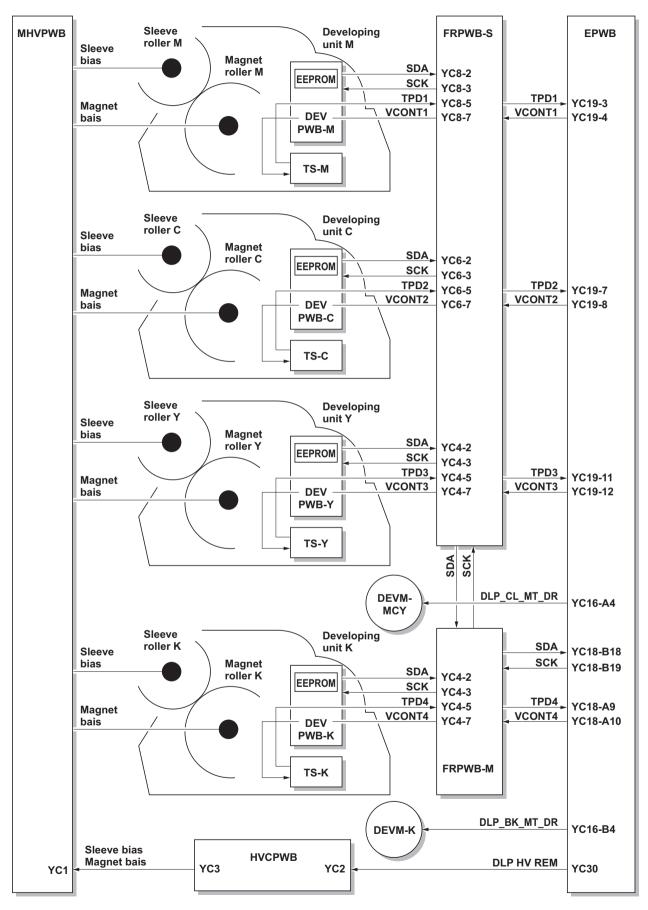


Figure 2-1-10 Developing section block diagram

2-1-4 Optical section

The optical section consists of the scanner, mirror frame and image scanner section for scanning and the laser scanner unit for printing.

(1) Image scanner section

The original image is illuminated by the exposure lamp (EL) and scanned by the CCD in the CCD PWB (CCDPWB) via the three mirrors and 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.

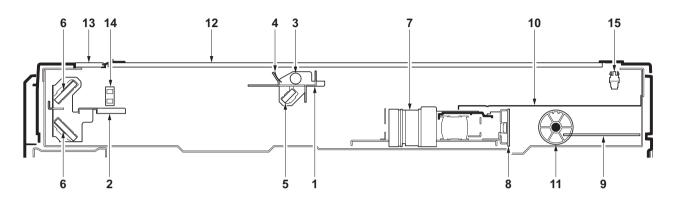


Figure 2-1-11 Image scanner section

- (1) Mirror frame A
- (2) Mirror frame B
- (3) Exposure lamp (EL)
- (4) Scanner reflector
- (5) Mirror A
- (6) Mirror B
- (7) ISU lens
- (8) CCD PWB (CCDPWB)

- (9) ISC PWB (ISCPWB)
- (10) ISU cover
- (11) Scanner wire drum
- (12) Contact glass
- (13) Slit glass
- (14) Home position switch (HPSW)
- (15) Original detection switch (ODSW)

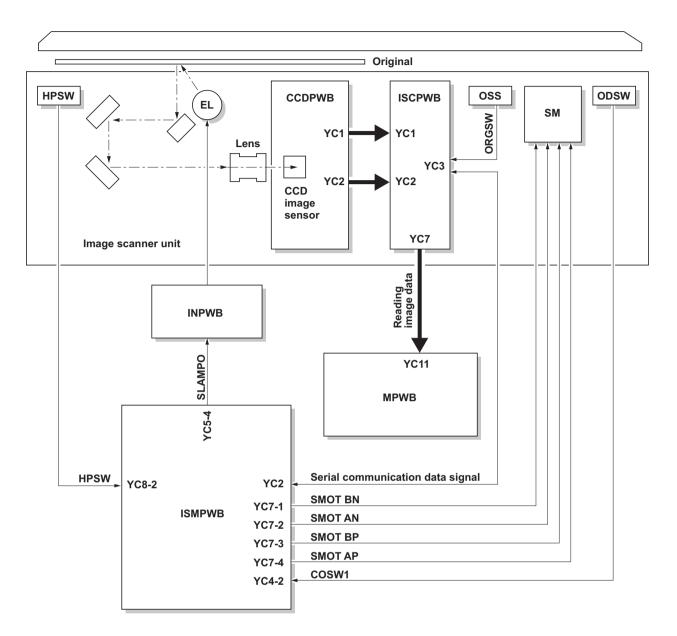


Figure 2-1-12 Image scanner section block diagram

(2) Laser scanner section

The image data scanned by the CCD PWB (CCDPWB) is processed on the main PWB (MPWB) and transmitted from engine PWB (EPWB) as image printing data to the laser scanner unit (LSU). By repeatedly turning the laser on and off, the laser scanner unit forms a latent image on the drum surface.

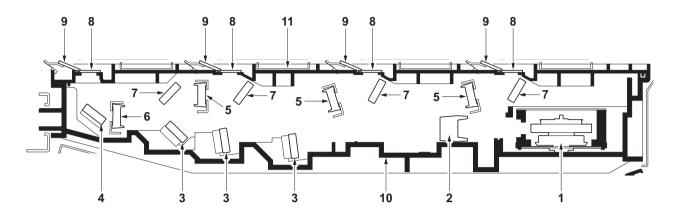


Figure 2-1-13 Laser scanner section

- (1) Polygon motor (PM)
- (2) Lens A
- (3) Mirror A
- (4) Mirror K
- (5) Lens B
- (6) Lens K

- (7) Mirror B
- (8) Dust shield glass
- (9) LSU blade
- (10) Scanner frame
- (11) Scanner lid

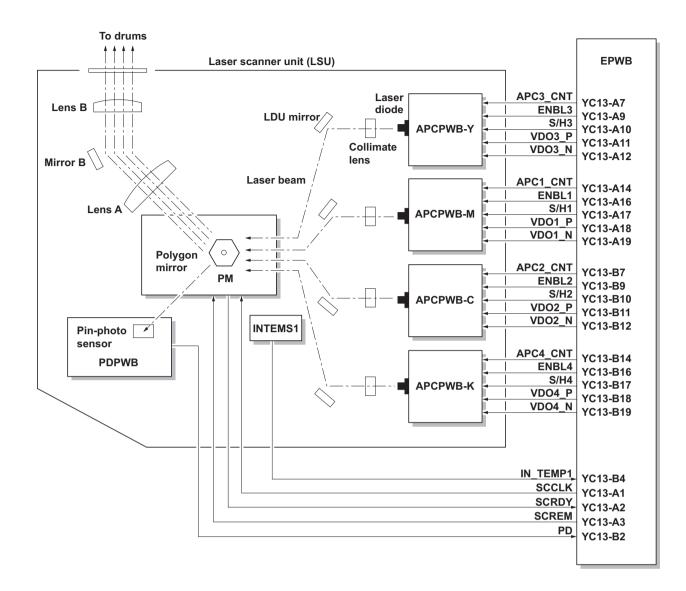


Figure 2-1-14 Laser scanner section block diagram

2-1-5 Transfer/separation section

(1) Primary transfer section

There are four primary transfer rollers opposed to each color drum inside of transfer belt, toner on the drum is transferred to transfer belt by impressed bias voltage (minus). Remaining toner on the transfer belt is cleaned by fur brush.

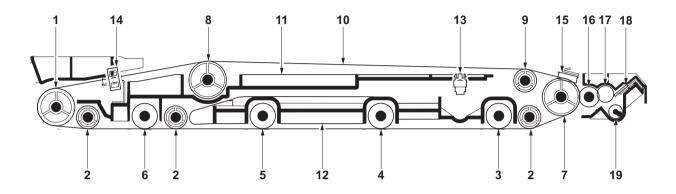


Figure 2-1-15 Primary transfer section

- (1) Drive roller
- (2) Backup roller
- (3) Primary transfer roller M
- (4) Primary transfer roller C
- (5) Primary transfer roller Y
- (6) Primary transfer roller K
- (7) Tension roller
- (8) Sensor belt roller
- (9) Idle roller
- (10) Transfer belt

- (11) Transfer frame
- (12) Transfer inner frame
- (13) Color release sensor (CRS)
- (14) Transfer position sensor (TPS)
- (15) Pre brush
- (16) Fur brush
- (17) Sweep roller
- (18) ICL blade
- (19) ICL screw

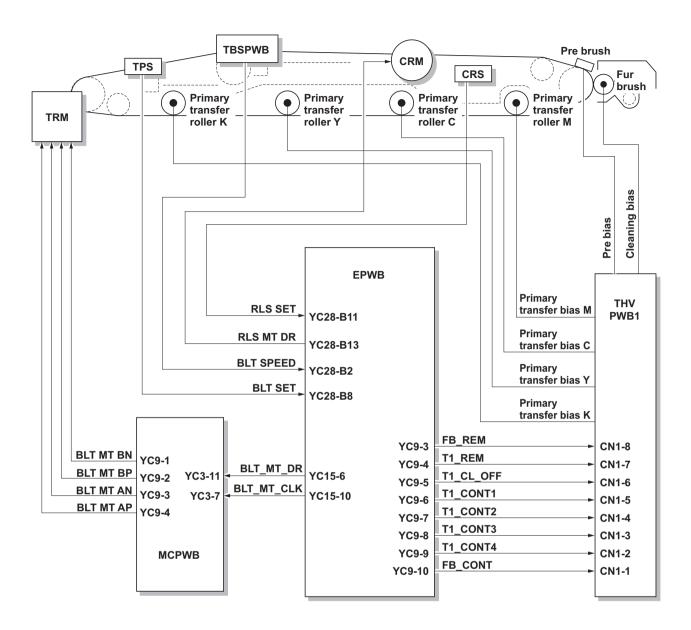


Figure 2-1-16 Primary transfer section block diagram

(2) Secondary transfer/separation section

The secondary transfer/separation section consists mainly of the transfer (TC) roller and separation discharge plate. A high voltage generated by the transfer high voltage PWB 2 (THVPWB2) is applied to the transfer (TC) roller for secondary transfer charging. Paper after secondary transfer is separated from the transfer (TC) roller by applying separation bias that is output from the transfer high voltage PWB 2 (THVPWB2) to the separation discharge plate.

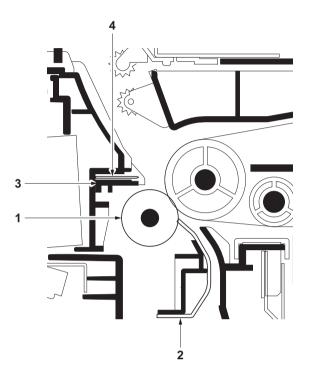


Figure 2-1-17 Secondary transfer/separation section

- (1) Secondary transfer roller
- (2) Left transfer guide
- (3) Discharge holder
- (4) Separation discharge plate

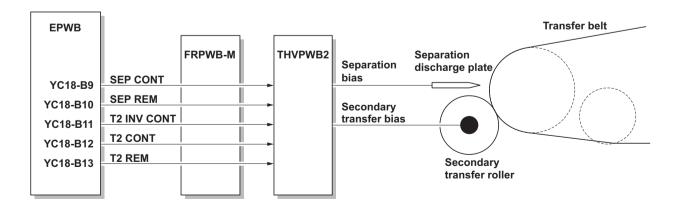


Figure 2-1-18 Secondary transfer /separation section block diagram

2-1-6 Fuser section

(1) Fuser section

The fuser section consists of the parts shown in figure below. When paper reaches the fuser section after the secondary transfer process, it passes between the press roller and melt belt. Pressure is applied by the fuser unit pressure springs so that the toner on the paper is melted, fused and fixed onto the paper. The melt belt is heated by fuser heaters 1 (FH1) or 2 (FH2) inside the heat roller. The press roller is heated by fuser heater 3 (FH3).

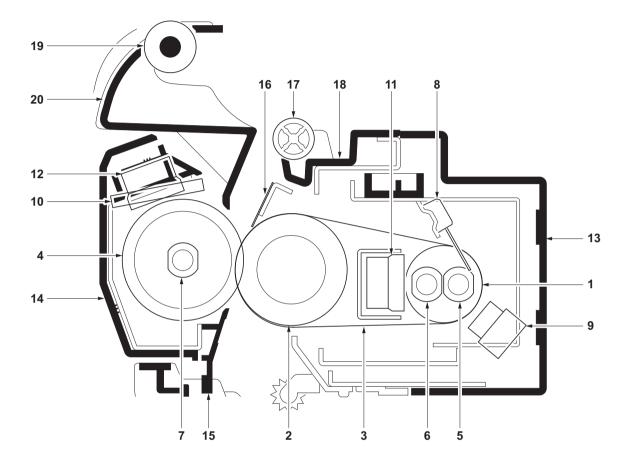


Figure 2-1-19 Fuser section

- (1) Heat roller
- (2) Fuser roller
- (3) Melt belt
- (4) Press roller
- (5) Fuser heater 1 (FH1)
- (6) Fuser heater 2 (FH2)
- (7) Fuser heater 3 (FH3)
- (8) Fuser thermistor 1 (FTH1)
- (9) Fuser thermistor 2 (FTH2)
- (10) Fuser thermistor 3 (FTH3)

- (11) Fuser thermostat 1 (FTS1)
- (12) Fuser thermostat 2 (FTS2)
- (13) Right fuser cover
- (14) Left fuser cover
- (15) Fuser entry guide
- (16) Fuser charge erasing brush
- (17) Fuser eject pulley
- (18) Right eject guide
- (19) Feedshift roller
- (20) Left eject guide

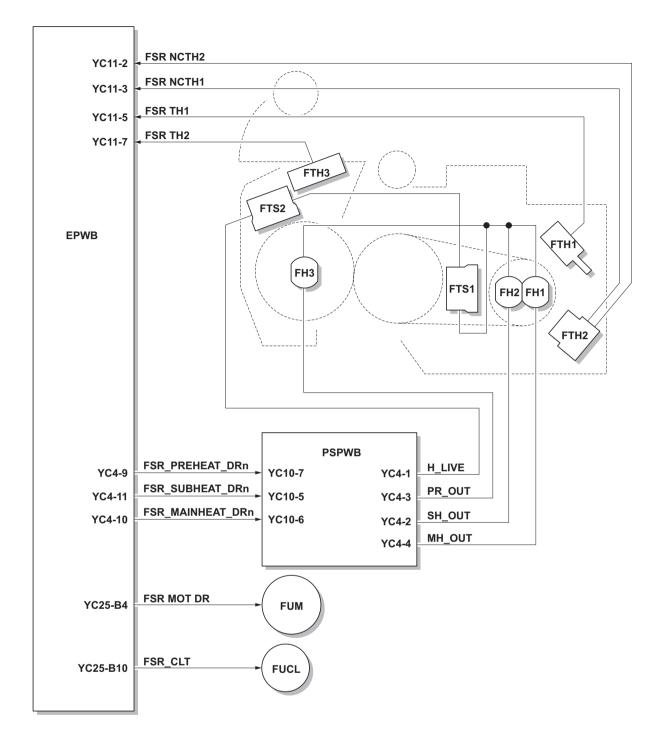


Figure 2-1-20 Fuser section block diagram

2-1-7 Eject/feedshift section

(1) Eject/feedshift section

The eject/feedshift sections switch the paper path based on the copy mode and eject paper or convey the paper to the duplex section or job separator. For duplex copy mode, the paper for which copying on the rear side has been completed is conveyed to the duplex section by the feedshift section operation.

When paper is ejected to the finisher or the job separator tray, the paper path is switched by rotation of the rotary guide to convey the paper into the job separator.

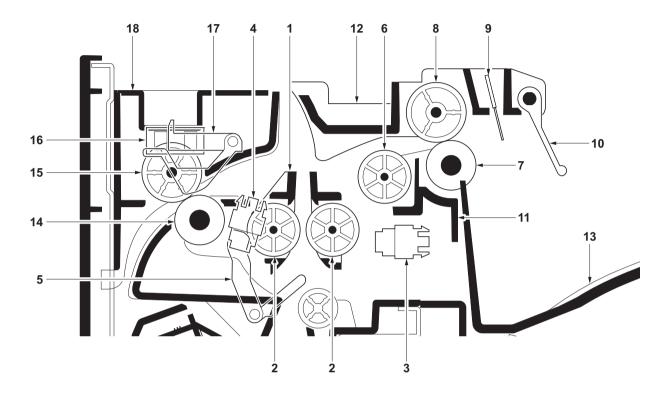


Figure 2-1-21 Eject/feedshift section

- (1) Rotary guide
- (2) Eject pulley
- (3) Rotary guide sensor (RGS)
- (4) Eject switch (ESW)
- (5) Actuator (eject switch)
- (6) Eject pulley
- (7) Eject roller
- (8) Eject pulley B
- (9) Eject charge erasing brush

- (10) Actuator (paper full sensor)
- (11) Lower eject frame
- (12) Upper eject frame
- (13) Output tray
- (14) Feedshift roller
- (15) Middle pulley
- (16) Feedshift switch (FSSW)
- (17) Actuator (feedshift switch)
- (18) Left eject frame

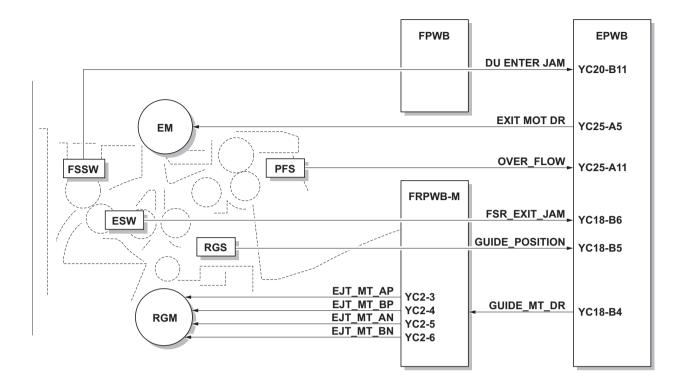


Figure 2-1-22Eject/feedshift section block diagram

2-1-8 Duplex section

(1) Duplex section

In duplex mode, after printing on to the reverse face of the paper, the paper is reversed in the feedshift section and conveyed to the duplex section. The paper is then conveyed to the paper feed section by the duplex B roller and duplex A roller.

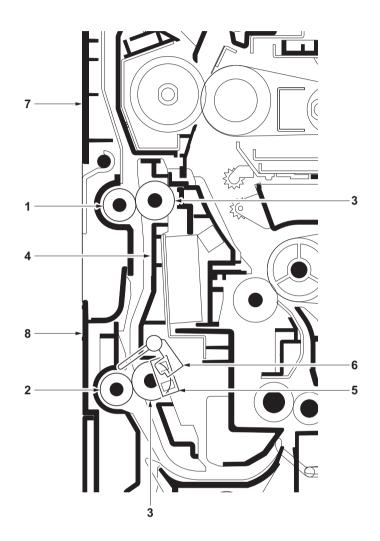


Figure 2-1-23 Duplex section

- (1) Duplex A roller
- (2) Duplex B roller
- (3) Middle pulley
- (4) Duplex frame
- (5) Duplex switch (DUSW)
- (6) Actuator (duplex switch)
- (7) Left cover 1
- (8) Left cover 2

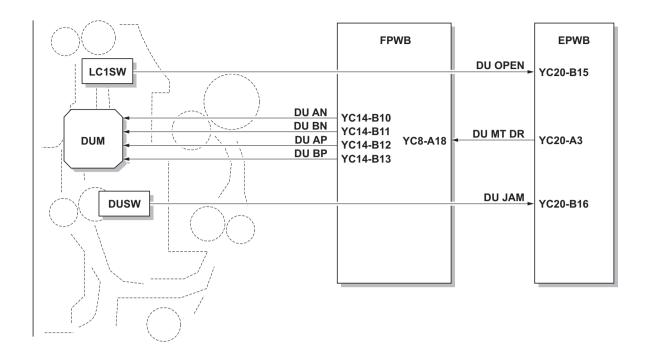


Figure 2-1-24 Duplex section block diagram

2-2-1 **Electrical parts layout**

(1) PWBs

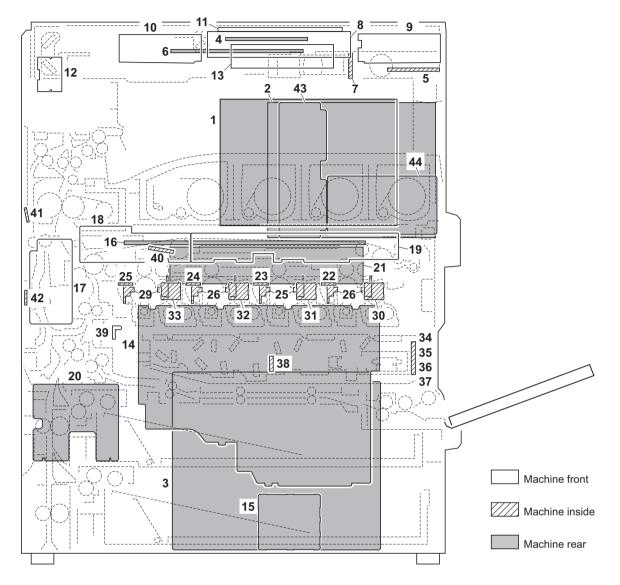


Figure 2-2-1 PWBs

- 1. Engine PWB (EPWB)..... Controls the other PWBs, electrical components and optional devices.
- 2. Main PWB (MPWB) Controls the image processing and operation panel.
- Power source PWB (PSPWB) Generates +24 V DC, +12 V DC and 5 V DC; controls the fuser heaters. 3. ISM PWB (ISMPWB) Controls the scanner section. 4
- ISC PWB (ISCPWB) Controls the shading correction and AGC of CCD. 5.
- Inverter PWB (INPWB) Controls the exposure lamp. 6. 7. CCD PWB (CCDPWB)...... Reads the image of originals.
- 8. Main operation PWB (OPWB-M) Controls touch panel and LCD indication.
- 9. Right operation PWB (OPWB-R) Consists of the operation keys and display LEDs.
- 10. Left operation PWB (OPWB-L) Consists of the operation keys and display LEDs.
- 11. Upper operation PWB (OPWB-U)..... Consists of the operation keys and display LEDs.
- 12. Front operation PWB (OPWB-F)..... Consists of the display LEDs.
- 13. LCD PWB (LCDPWB)..... Controls LCD indication.
- 14. Main high voltage PWB (MHVPWB) Generates high voltage for main charger high voltage and developing bias.
- 15. High voltage control PWB (HVCPWB)....... Controls high voltage for developing bias.
- 16. Transfer high voltage PWB 1 (THVPWB1) .. Generates high voltage for primary transfer bias and primary transfer cleaning bias.

2KY

		. Generates high voltage for secondary transfer bias and separation bias.
18.	Main front PWB (FRPWB-M)	. Consists of wiring relay circuit between engine PWB and developing unit
		K and each electrical component.
19.	Sub front PWB (FRPWB-S)	. Consists of wiring relay circuit between engine PWB and developing unit
		M,C,Y and each electrical component.
20.	Feed PWB (FPWB)	. Consists of wiring relay circuit between engine PWB and each electrical
		component (paper feed section and etc.).
21.	Motor control PWB (MCPWB)	. Consists of wiring relay circuit between engine PWB and drum motors
		and transfer motor.
		. Drum individual information in EEPROM storage on the drum unit M.
23.	Drum PWB C (DRPWB-C)	. Drum individual information in EEPROM storage on the drum unit C.
24.	Drum PWB Y (DRPWB-Y)	. Drum individual information in EEPROM storage on the drum unit Y.
25.	Drum PWB K (DRPWB-K)	. Drum individual information in EEPROM storage on the drum unit K.
26.	Encoder PWB M (ECPWB-M)	. Controls the drum motor M.
27.	Encoder PWB C (ECPWB-C)	. Controls the drum motor C.
28.	Encoder PWB Y (ECPWB-Y)	. Controls the drum motor Y.
29.	Encoder PWB K (ECPWB-K)	. Controls the drum motor K.
30.	Developing PWB M (DEVPWB-M)	. Relays wirings from electrical components on the developing unit M.
		. Relays wirings from electrical components on the developing unit C.
32.	Developing PWB Y (DEVPWB-Y)	. Relays wirings from electrical components on the developing unit Y.
33.	Developing PWB K (DEVPWB-K)	. Relays wirings from electrical components on the developing unit K.
34.	APC PWB M (APCPWB-M)	. Generates and controls the laser beam. (Magenta)
35.	APC PWB C (APCPWB-C)	. Generates and controls the laser beam. (Cyan)
		. Generates and controls the laser beam. (Yellow)
		. Generates and controls the laser beam. (Black)
		. Detects horizontal synchronizing timing of laser beam.
	Waste toner full PWB (WTFPWB)	
40.	Transfer belt speed PWB (TBSPWB)	. Detects the rotation speed of the transfer belt.
41.	JAM LED PWB 1 (JLEDPWB1)	. Controls LED indication.
	JAM LED PWB 2 (JLEDPWB2)	
		. Consists of wiring relay circuits between main PWB and Fax control
	· · · · ·	PWB.
44.	Fax control PWB (FCPWB)*	. Modulates, demodulates, compresses, decompresses and smoothes out
		image data, and converts resolution of image data.

*: Option

No.	Name used in service manual	Name used in parts list
1	Engine PWB (EPWB)	PARTS PWB ENGINE ASSY SP
2	Main PWB (MPWB)	PARTS PWB MAIN ASSY SP
3	Power source PWB (PSPWB)	PARTS UNIT LOW VOLTAGE
4	ISM PWB (ISMPWB)	PARTS PWB ISM ASSY SP
5	ISC PWB (ISCPWB)	PARTS PWB ISC ASSY SP
6	Inverter PWB (INPWB)	PARTS UNIT LAMP INVERTER
7	CCD PWB (CCDPWB)	-
8	Main operation PWB (OPWB-M)	PARTS PWB PANEL MAIN ASSY SP
9	Right operation PWB (OPWB-R)	PARTS PWB PANEL RIGHT ASSY SP
10	Left operation PWB (OPWB-L)	PARTS PWB PANEL LEFT ASSY SP
11	Upper operation PWB (OPWB-U)	OPERATION UPPER PWB ASS'Y
12	Front operation PWB (OPWB-F)	OPERATION FRONT PWB ASS'Y
13	LCD PWB (LCDPWB)	PARTS LCD OPERATION SP
14	Main high voltage PWB (MHVPWB)	PARTS UNIT HIGH VOLTAGE MAIN
15	Main high voltage PWB (MHVPWB)	PARTS UNIT HIGH VOLTAGE MAIN
16	High voltage control PWB (HVCPWB)	PARTS PWB HVU CONTROL ASSY SP
17	Transfer high voltage PWB 1 (THVPWB1)	PARTS UNIT HIGH VOLTAGE TRANSFER1
18	Transfer high voltage PWB 2 (THVPWB2)	PARTS HVU HIGH VOLTAGE TRANSFER 2 SP
19	Main front PWB (FRPWB-M)	PARTS PWB FRONT MAIN ASSY SP
20	Sub front PWB (FRPWB-S)	PARTS PWB FRONT SUB ASSY SP
21	Feed PWB (FPWB)	PARTS PWB FEED ASSY SP
22	Motor control PWB (MCPWB)	PARTS PWB MOTOR CONTROL ASSY SP
23	Drum PWB M (DRPWB-M)	-
24	Drum PWB C (DRPWB-C)	-
25	Drum PWB Y (DRPWB-Y)	-
26	Drum PWB K (DRPWB-K)	-
27	Encoder PWB M (ECPWB-M)	-
28	Encoder PWB C (ECPWB-C)	-
29	Encoder PWB Y (ECPWB-Y)	-
30	Encoder PWB K (ECPWB-K)	-
31	Developing PWB M (DEVPWB-M)	-
32	Developing PWB C (DEVPWB-C)	-
33	Developing PWB Y (DEVPWB-Y)	-
34	Developing PWB K (DEVPWB-K)	-
35	APC PWB M (APCPWB-M)	-
36	APC PWB C (APCPWB-C)	-
37	APC PWB Y (APCPWB-Y)	-
38	APC PWB K (APCPWB-K)	-
39	PD PWB (PDPWB)	-
40	Waste toner full PWB (WTFPWB)	PRINTED W.BOARD TONER FULL ASSY
41	Transfer belt speed PWB (TBSPWB)	-
42	JAM LED PWB 1 (JLEDPWB1)	PARTS PWB LED ASSY SP
43	JAM LED PWB 2 (JLEDPWB2)	PARTS PWB LED ASSY SP
44	Fax control PWB (FCPWB)	-

(2) Switches and sensors

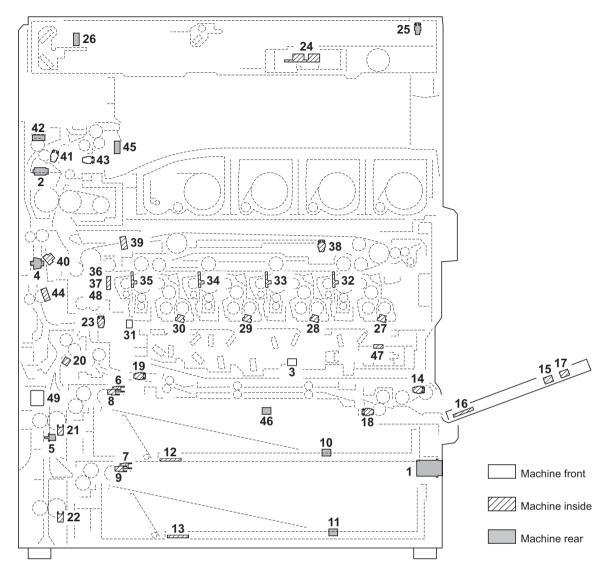


Figure 2-2-2 Switches and sensors

2. 3. 4. 5. 6.	Front cover switch (FCSW) Left cover 1 switch (LC1SW) Left cover 3 switch (LC3SW) Lift switch 1 (LSW1)	Turns the AC power for the fuser heaters on and off. Breaks the safety circuit when the front cover is opened. Breaks the safety circuit when the left cover 1 is opened. Breaks the safety circuit when the left cover 3 is opened. Detects cassette 1 cassette reaching the upper limit.
8. 9. 10. 11.	Paper switch 1 (PSW1) Paper switch 2 (PSW2) Paper size length switch 1 (PLSW1) Paper size length switch 2 (PLSW2)	Detects the presence of paper in cassette 2. Detects the length of paper in cassette 1. Detects the length of paper in cassette 2.
 13. 14. 15. 16. 17. 18. 19. 	MP paper size length switch (MPPLSW) MP paper size width switch (MPPWSW) MP tray switch (MPTSW) MP paper feed switch (MPPFSW) MP paper conveying switch (MPPCSW)	Detects the width of paper in cassette 2. Detects the presence of paper on the MP tray. Detects the length of paper on the MP tray. Detects the width of paper on the MP tray.

21.	Feed switch 2 (FSW2)	Detects a paper misfeed in the paper cassette paper feed section.
		Detects a paper misfeed in the paper cassette paper feed section.
		Controls the secondary paper feed start timing.
	Original size sensor (OSS)	
	•	Detects the opening/closing of the original platen (or DP).
		Detects the optical system in the home position.
		Detects the toner density in the developing unit M.
		Detects the toner density in the developing unit C.
		Detects the toner density in the developing unit Y.
		Detects the toner density in the developing unit K.
	Waste toner sensor (WTS)	
		Detects positioning of drum rotation (drum unit M).
33.	Drum position sensor C (DPS-C)	Detects positioning of drum rotation (drum unit C).
34.	Drum position sensor Y (DPS-Y)	Detects positioning of drum rotation (drum unit Y).
35.	Drum position sensor K (DPS-K)	Detects positioning of drum rotation (drum unit K).
36.	ID sensor 1 (IDS1)	Measures image density for color registration.
37.	ID sensor 2 (IDS2)	Measures image density for color registration.
38.	Color release sensor (CRS)	Detects separation of secondary transfer rollers M, C, and Y.
39.	Transfer position sensor (TPS)	Detects positioning of transfer belt rotation.
40.	Loop sensor (LS)	Detects a paper misfeed. Controls the fuser motor.
41.	Eject switch (ESW)	Detects a paper misfeed in the paper eject section.
42.	Feedshift switch (FSSW)	Detects a paper misfeed in the paper feedshift section.
43.	Rotary guide sensor (RGS)	Detects positioning of rotary guide rotation.
44.	Duplex switch (DUSW)	Detects a paper misfeed in the duplex section.
45.	Paper full sensor (PFS)	Detects whether the output tray is full.
46.	MP conveying unit switch (MPCUSW)	Detects the MP conveying unit.
	Inner temperature sensor 1 (INTEMS1)	
48.	Inner temperature sensor 2 (INTEMS2)	Detects the inside temperature.
49	Outer temperature sensor (OUTTEMS)	Detects the outside temperature and humidity

49. Outer temperature sensor (OUTTEMS)...... Detects the outside temperature and humidity.

(3) Motors

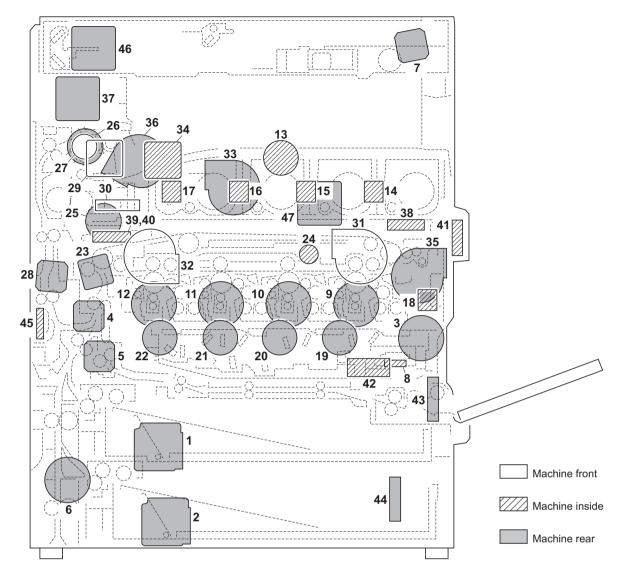


Figure 2-2-3 Motors

1.	Lift motor 1 (LM1)	Drives the cassette operation plate and detects the paper level in cas- sette 1.
2.	Lift motor 2 (LM2)	. Drives the cassette operation plate in and detects the paper level in cassette 2.
3.	MP motor (MPM)	Drives the MP tray paper feed section.
4.	Registration motor (RM)	. Drives the registration section.
5.	Middle motor (MM)	Drives the paper conveying section.
6.	Paper conveying motor (PCM)	Drives the paper feed and paper conveying section.
7.	Scanner motor (SM)	Drives the optical system.
8.	Polygon motor (PM)	Drives the polygon mirror.
9.	Drum motor M (DRM-M)	Drives the drum unit M.
10.	Drum motor C (DRM-C)	Drives the drum unit C.
11.	Drum motor Y (DRM-Y)	Drives the drum unit Y.
12.	Drum motor K (DRM-K)	Drives the drum unit K.
13.	Toner container motor (TCM)	Drives the toner container.
14.	Toner motor M (TM-M)	. Replenishes toner to developing unit M
15.	Toner motor C (TM-C)	. Replenishes toner to developing unit C
	Toner motor Y (TM-Y)	
17.	Toner motor K (TM-K)	. Replenishes toner to developing unit K
18.	Waste toner motor (WTM)	Drives the waste toner conveying system.

19.	Developing motor MCY (DEVM-MCY)	Drives the developing units M,C,Y.
20.	Cleaning motor MCY (CLM-MCY)	Drives the cleaning rollers M,C,Y.
21.	Developing motor K (DEVM-K)	Drives the developing unit K.
22.	Cleaning motor K (CLM-K)	Drives the cleaning roller K.
	Transfer motor (TRM)	
		Drives separation of secondary transfer rollers M, C, and Y.
	Fuser motor (FUM)	
26.	Eject motor (EM)	Drives the eject section.
27.	Rotary guide motor (RGM)	Drives the rotary guide.
	Duplex motor (DUM)	
29.	Rotary fan motor (RFM)	Cools the rotary guide section.
30.	Container fan motor (CFM)	Cools the toner container section.
31.	Developing fan motor 1 (DEVFM1)	Cools the developing section.
32.	Developing fan motor 2 (DEVFM2)	Cools the developing section.
33.	Developing fan motor 3 (DEVFM3)	Cools the developing section.
34.	Developing fan motor 4 (DEVFM4)	Cools the toner container section.
35.	Developing fan motor 5 (DEVFM5)	Cools the transfer belt section.
36.	Fuser fan motor (FUFM)	Cools the fuser section.
37.	Eject fan motor (EFM)	Cools the eject section.
38.	Transfer fan motor 1 (TRFM1)	Cools the transfer belt.
39.	Transfer fan motor 2 (TRFM2)	Stabilizes the paper conveying in the transfer section.
40.	Transfer fan motor 3 (TRFM3)	Stabilizes the paper conveying in the transfer section.
41.	Transfer fan motor 4 (TRFM4)	Cools the transfer belt.
42.	LSU fan motor (LSUFM)	Cools the LSU.
		Cools the high voltage PWB and power source PWB.
44.	Power source fan motor 2 (PSFM2)	Cools the high voltage PWB and power source PWB.
45.	Loop fan motor (LFM)	Cools the loop sensor.
46.	Scanner fan motor (SFM)	Cools the optical section.
17	Main fan motor (MEM)	Cools the main PWB

47. Main fan motor (MFM) Cools the main PWB.

(4) Others

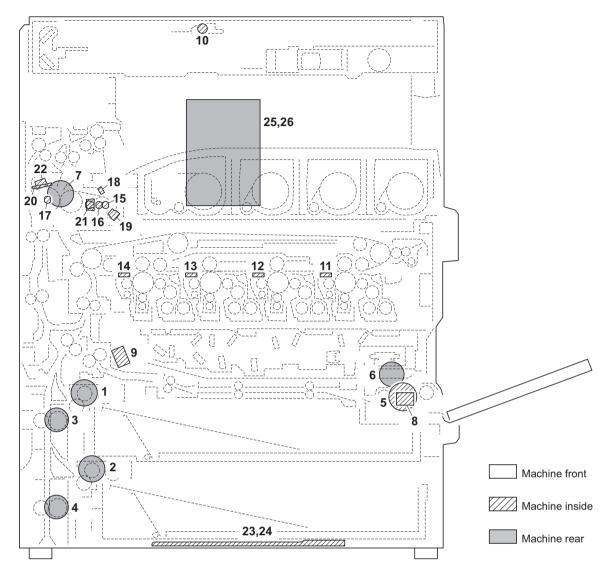


Figure 2-2-4 Others

- 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. Feed clutch 1 (FCL1) Controls the drive of upper feed roller.
- 4. Feed clutch 2 (FCL2) Controls the drive of lower feed roller.
- 5. MP paper feed clutch (MPPFCL) Controls primary paper feed from the MP tray.
- 6. MP paper conveying clutch (MPPCCL) Controls the drive of MP feed roller.
- 7. Fuser clutch (FUCL)..... Controls the fuser section.
- 8. MP solenoid (MPSOL) Operates up/down of the MP forwarding pulley.
- 9. LSU cleaning solenoid (LSUCSOL) Operates the LSU blade for dust shield glass cleaning.
- 10. Exposure lamp (EL) Exposes originals.
- 11. Cleaning lamp M (CL-M)..... Removes residual charge from the drum surface (Magenta).
- 12. Cleaning lamp C (CL-C)...... Removes residual charge from the drum surface (Cyan).
- 13. Cleaning lamp Y (CL-Y) Removes residual charge from the drum surface (Yellow).
- 16. Fuser heater 2 (FH2) Heats the melt belt (heat roller).
- 18. Fuser thermistor 1 (FTH1) Detects the melt belt (heat roller) temperature.
- 19. Fuser thermistor 2 (FTH2) Detects the melt belt (heat roller) temperature.
- 20. Fuser thermistor 3 (FTH3) Detects the press roller temperature.

21. Fuser thermostat 1 (FTS1) Prevents overheating of the melt belt (heat	roller).
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- 22. Fuser thermostat 2 (FTS2)..... Prevents overheating of the press roller.
- 23. Cassette heater 1 (CH1)..... Dehumidifies the cassette section.

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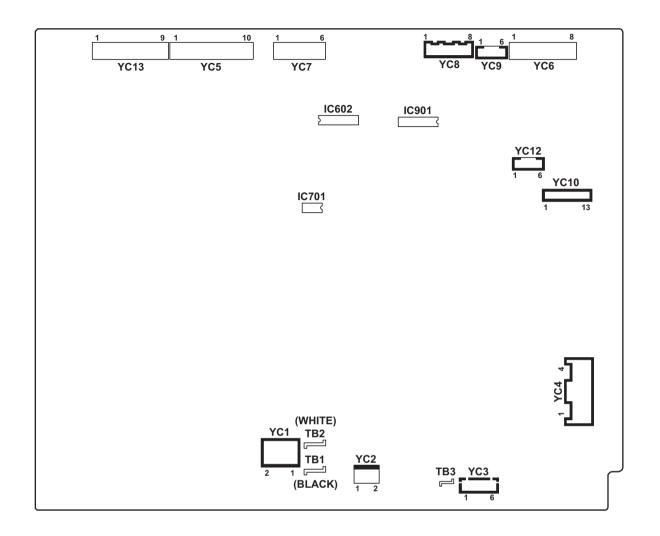
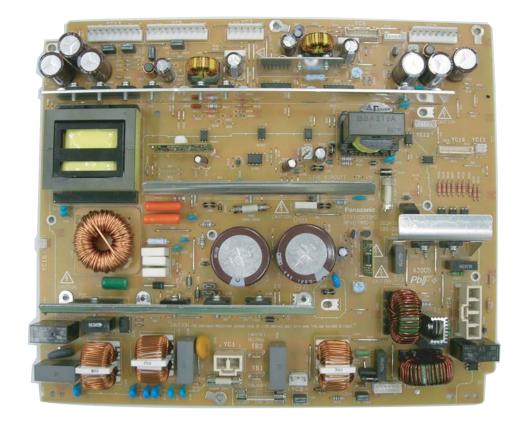


Figure 2-3-1 Power source PWB silk-screen diagram



Power source PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
тв	1	AC_LIVE	I	120 V AC 220-240 V AC	AC power input
Connected to the inlet and	2	AC_NEUTRAL	I	120 V AC 220-240 V AC	AC power input
main power switch	3	HEATER LIVE	-	-	Not used
YC1	1	MSW_IN	I	120 V AC 220-240 V AC	AC power input from MSW
Connected to the main power switch	2	MSW_OUT	0	120 V AC 220-240 V AC	AC power input from MSW
YC3	1	DH3_LIVE	0	120 V AC 220-240 V AC	AC power output to CH1
Connected to the cassette	2	DH3_LIVE	0	120 V AC 220-240 V AC	AC power output to CH2
heater 1/2	3	NC	-	-	Not used
	4	NC	-	-	Not used
	5	DH3_NEUTRAL	0	120 V AC 220-240 V AC	AC power output to CH1
	6	DH3_NEUTRAL	0	120 V AC 220-240 V AC	AC power output to CH2
YC4	1	H_LIVE	0	120 V AC 220-240 V AC	AC power to FH1/2/3
Connected to the fuser	2	SH_OUT	0	120 V AC 220-240 V AC	FH2: On/Off
heater 1/2/3	3	PR_OUT	ο	120 V AC 220-240 V AC	FH3: On/Off
	4	MH_OUT	0	120 V AC 220-240 V AC	FH1: On/Off
YC5	1	24V1	0	24 V DC	24 V DC power to ISMPWB
Connected to	2	24V1	0	24 V DC	24 V DC power to DPDPWB
the ISM PWB	3	12V1	0	12 V DC	12 V DC power to ISMPWB
and optional DP	4	5V1	-	-	Not used
	5	5V1	0	5 V DC	5 V DC power to DPDPWB
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	GND	-	-	Ground
	10	GND	-	-	Ground
YC6	1	5V	0	5 V DC	5 V DC power to MPWB
Connected to	2	5V	0	5 V DC	5 V DC power to MPWB
the main PWB	3	5V	0	5 V DC	5 V DC power to MPWB
	4	5V	0	5 V DC	5 V DC power to MPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground

Connector	Pin No.	Signal	I/O	Voltage	Description
YC7	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
the engine	3	GND	-	-	Ground
PWB	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	+5V1	0	5 V DC	5 V DC power to EPWB
YC8	1	+12V	0	12 V DC	24 V DC power to HDD1
Connected to	2	+12V	0	12 V DC	24 V DC power to HDD1
the hard disk 1/2	3	+5V	0	5 V DC	5 V DC power to HDD1
1/2	4	+5V	0	5 V DC	5 V DC power to HDD1
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
YC9	1	+12V1	0	12 V DC	12 V DC power to OPWB-M
Connected to	2	+5V3	0	5 V DC	5 V DC power to OPWB-M
the main operation	3	+5V3	0	5 V DC	5 V DC power to OPWB-M
PWB	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	GND	-	-	Ground
YC10	1	FSR_RELAY	Ι	0/3.3 V DC	Relay signal
Connected to	2	24V2IN	Ι	24 V DC	24 V DC power input (via left cover 1 switch)
the engine PWB	3	SLEEPN	Ι	0/3.3 V DC	Sleep signal: On/Off
	4	ZCROSSC	0	0/3.3 V DC (pulse)	Zero-cross signal
	5	S_HEATN	Ι	0/3.3 V DC	FH2: On/Off
	6	M_HEATN	Ι	0/3.3 V DC	FH1: On/Off
	7	PR_HEATN	Ι	0/3.3 V DC	FH3: On/Off
	8	FAN_REM	Ι	0/24 V DC	PSFM: On/Off
	9	GND	-	-	Ground
	10	GND	-	-	Ground
	11	5V3	0	5 V DC	5 V DC power to EPWB
	12	5V3	0	5 V DC	5 V DC power to EPWB
	13	D_HEATN	-	-	Not used
YC12	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
the optional document fin-	3	GND	-	-	Ground
isher	4	GND	-	-	Ground
	5	GND	-	-	Ground
	6	GND	-	-	Ground

Connector	Pin No.	Signal	I/O	Voltage	Description
YC13	1	+24V1	0	24 V DC	24 V DC power to paper feeder
Connected to	2	+24V1	0	24 V DC	24 V DC power to document finisher
the optional	3	GND	-	-	Ground
paper feeder and optional	4	GND	-	-	Ground
document fin-	5	GND	-	-	Ground
isher	6	GND	-	-	Ground
	7	+5V1	0	5 V DC	5 V DC power to paper feeder
	8	+5V1	0	5 V DC	5 V DC power to document finisher
	9	NC	-	-	Not used

2-3-2 Engine PWB

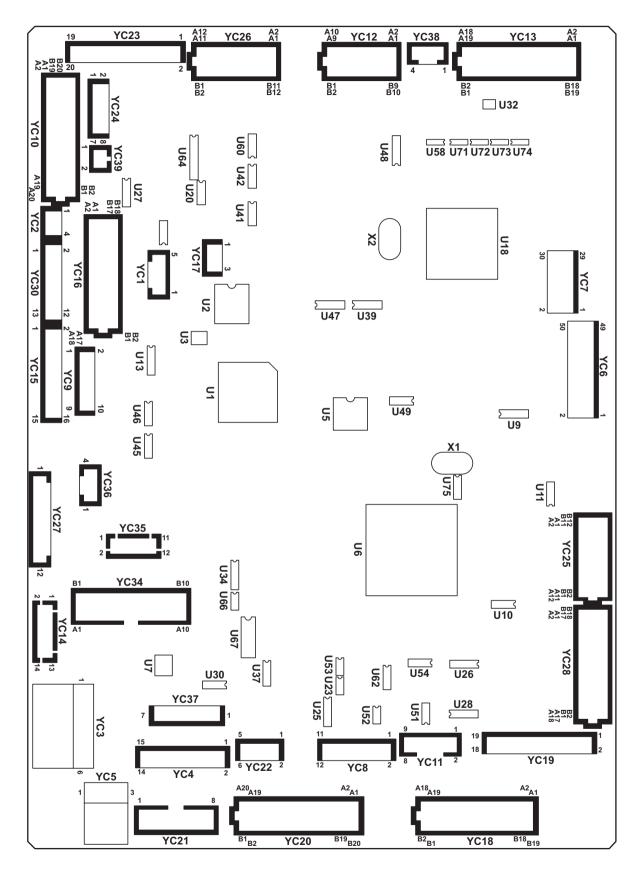
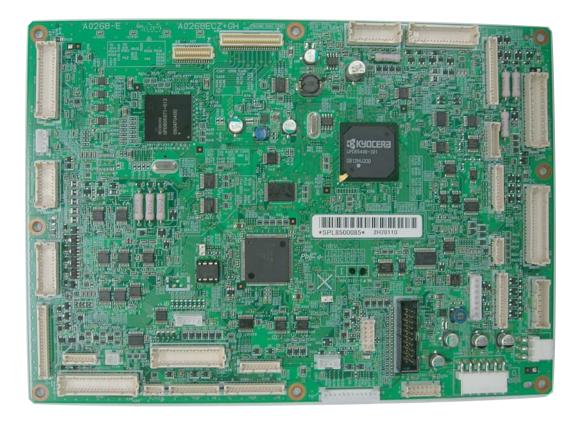


Figure 2-3-2 Engine PWB silk-screen diagram



Engine PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC2	1	DISCHARGE1	Ι	0/3.3 V DC	Main charger M control signal
Connected to	2	DISCHARGE2	I	0/3.3 V DC	Main charger C control signal
the main high	3	DISCHARGE3	Ι	0/3.3 V DC	Main charger Y control signal
voltage PWB	4	DISCHARGE4	Ι	0/3.3 V DC	Main charger K control signal
YC3	1	+5V1	I	5 V DC	5 V DC power from PSPWB
Connected to	2	GND	-	-	Ground
the power source PWB	3	GND	-	-	Ground
Source PVVB	4	GND	-	-	Ground
	5	+24V1	Ι	24 V DC	24 V DC power from PSPWB
	6	+24V1	Ι	24 V DC	24 V DC power from PSPWB
YC4	1	LVU_FAN_REM	-	-	Not used
Connected to	2	DRM_HEAT_DR	-	-	Not used
the power source PWB	3	5∨3	Ι	5 V DC	5 V DC power from PSPWB
Source PVVB	4	5V3	Ι	5 V DC	5 V DC power from PSPWB
	5	5V3	Ι	5 V DC	5 V DC power from PSPWB
	6	PGND	-	-	Ground
	7	PGND	-	-	Ground
	8	LVU FAN REM	-	-	Not used
	9	FSR_PREHEAT_ DRn	0	0/3.3 V DC	FH3: On/Off
	10	FSR_MAINHEAT_ DRn	0	0/3.3 V DC	FH1: On/Off
	11	FSR_SUBHEAT_ DRn	0	0/3.3 V DC	FH2: On/Off
	12	ZEROC	I	0/3.3 V DC (pulse)	Zero-cross signal
	13	SLEEP_ENG	0	0/3.3 V DC	Sleep signal: On/Off
	14	24V2	0	24 V DC	24 V DC power output (via left cover 1 switch)
	15	FSR_RELAY	0	0/3.3 V DC	Relay signal
YC5	1	+24V1	0	24 V DC	24 V DC to ILSW
Connected to	2	NC	-	-	Not used
the interlock switch	3	+24V2	I	24 V DC	24 V DC power input from ILSW (via left cover 1 switch)
YC6	1	G6_EG_SCLOK	I	0/3.3 V DC (pulse)	MPWB clock signal
Connected to	2	HLD_ENG	Ι	0/3.3 V DC	MPWB hold signal
the main PWB	3	G6_EG_SI	Ι	0/3.3 V DC (pulse)	MPWB serial communication data signal
	4	SLEEP_ENG	Ι	0/3.3 V DC	MPWB sleep signal: On/Off
	5	SGND	-	-	Ground
	6	SGND	-	-	Ground
	7	MRE_AN	Ι	0/3.3 V DC (pulse)	Image control signal
	8	MRE_DP	Ι	0/3.3 V DC (pulse)	Image control signal
	9	MRE_AP	Ι	0/3.3 V DC (pulse)	Image control signal
	10	MRE_DN	Ι	0/3.3 V DC (pulse)	Image control signal
	11	VD_AP0	Ι	0/3.3 V DC (pulse)	Image control signal
	12	_ VD_DP0	Ι		Image control signal
	13	_ VD_AN0	I		Image control signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC6	14	VD_DN0	I	0/3.3 V DC (pulse)	Image control signal
Connected to	15	VD_AP1	I	0/3.3 V DC (pulse)	Image control signal
the main	16	VD_DP1	I	0/3.3 V DC (pulse)	Image control signal
PWB	17	VD_AN1	I	0/3.3 V DC (pulse)	Image control signal
	18	VD_DN1	I	0/3.3 V DC (pulse)	Image control signal
	19	VD_AP2	I	0/3.3 V DC (pulse)	Image control signal
	20	VD_DP2	I	0/3.3 V DC (pulse)	Image control signal
	21	VD_AN2	I	0/3.3 V DC (pulse)	Image control signal
	22	VD_DN2	I	0/3.3 V DC (pulse)	Image control signal
	23	VD_AP3	I	0/3.3 V DC (pulse)	Image control signal
	24	VD_DP3	I	0/3.3 V DC (pulse)	Image control signal
	25	VD_AN3	I	0/3.3 V DC (pulse)	Image control signal
	26	VD_DN3	I	0/3.3 V DC (pulse)	Image control signal
	27	MRE_BN	I	0/3.3 V DC (pulse)	Image control signal
	28	MRE_CP	I	0/3.3 V DC (pulse)	Image control signal
	29	MRE_BP	I	0/3.3 V DC (pulse)	Image control signal
	30	 MRE_CN	I		Image control signal
	31	VD_BP0	I		Image control signal
	32	VD_CP0	I		Image control signal
	33	VD_BN0	I		Image control signal
	34	VD_CN0	1		Image control signal
	35	VD_BP1	I		Image control signal
	36	VD_CP1	I		Image control signal
	37	VD_BN1	I		Image control signal
	38	VD CN1			Image control signal
	39	VD_BP2	1	. , , , , , , , , , , , , , , , , , , ,	Image control signal
	40	VD CP2	I		Image control signal
	41	VD_BN2	·	. , , , , , , , , , , , , , , , , , , ,	Image control signal
	42	VD_CN2			Image control signal
	43	VD_BP3			Image control signal
	44	VD_CP3		. , , , , , , , , , , , , , , , , , , ,	Image control signal
	45	VD_BN3			Image control signal
	46	VD_CN3			Image control signal
	47	VCLKN			Image control signal
	48	SGND	-		Ground
	49	VCLKN	1	0/3.3 V DC (pulse)	Image control signal
	50	SGND			Ground
	50		_	-	

Connector	Pin No.	Signal	I/O	Voltage	Description
YC7	1	SGND	-	-	Ground
Connected to	2	SGND	-	-	Ground
the main PWB	3	HSYNC_DP	0	0/3.3 V DC (pulse)	Image control signal
	4	VSYNC_DP	0	0/3.3 V DC (pulse)	Image control signal
	5	HSYNC_DN	0	0/3.3 V DC (pulse)	Image control signal
	6	VSYNC_DN	0	0/3.3 V DC (pulse)	Image control signal
	7	HSYNC_CP	0	0/3.3 V DC (pulse)	Image control signal
	8	VSYNC_CP	0	0/3.3 V DC (pulse)	Image control signal
	9	HSYNC_CN	0	0/3.3 V DC (pulse)	Image control signal
	10	VSYNC_CN	0	0/3.3 V DC (pulse)	Image control signal
	11	HSYNC_BP	0	0/3.3 V DC (pulse)	Image control signal
	12	VSYNC_BP	0	0/3.3 V DC (pulse)	Image control signal
	13	HSYNC_BN	0	0/3.3 V DC (pulse)	Image control signal
	14	VSYNC_BN	0	0/3.3 V DC (pulse)	Image control signal
	15	HSYNC_AP	0	0/3.3 V DC (pulse)	Image control signal
	16	VSYNC_AP	0	0/3.3 V DC (pulse)	Image control signal
	17	HSYNC_AN	0	0/3.3 V DC (pulse)	Image control signal
	18	VSYNC_AN	0	0/3.3 V DC (pulse)	Image control signal
	19	SGND	-	-	Ground
	20	SGND	-	-	Ground
	21	G6_EG_IRN	0	0/3.3 V DC	MPWB interrupt signal
	22	NC	-	-	Not used
	23	G6_EG_SO	0	0/3.3 V DC (pulse)	MPWB serial communication data signal
	24	NC	-	-	Not used
	25	G6_EG_SDIR	0	0/3.3 V DC	MPWB communication direction signal
	26	NC	-	-	Not used
	27	G6_EG_SBSY	0	0/3.3 V DC	MPWB busy signal
	28	NC	-	-	Not used
	29	24DOWN	0	0/3.3 V DC	MPWB 24 V down signal
	30	NC	-	-	Not used
YC8	1	+5V3	0	5 V DC	5 V DC power to INTEMS2
Connected to	2	DLP_TEMP	I	Analog	INTEMS2 detection signal
the inner tem- perature sen-	3	+5V1	0	5 V DC	5 V DC power to IDS1
sor 2 and ID	4	GND	-	-	Ground
sensor 1/2	5	REG_1S	Ι	Analog	IDS1 detection signal
	6	REG_1P	I	Analog	IDS1 detection signal
	7	REG_LED1	0	Analog	IDS1 control signal
	8	+5V1	0	5 V DC	5 V DC power to IDS2
	9	GND	-	-	Ground
	10	REG_2S	Ι	Analog	IDS2 detection signal
	11	REG_2P	Ι	Analog	IDS2 detection signal
	12	REG_LED2	0	Analog	IDS2 control signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC9	1	+24V1	0	24 V DC	24 V DC power to THVPWB1
Connected to	2	PGND	-	-	Ground
the transfer	3	FB_REM	0	0/3.3 V DC	Primary transfer cleaning bias: On/Off
high voltage PWB 1	4	T1_REM	0	0/3.3 V DC	Primary transfer bias: On/Off
	5	T1_CL_OFF	0	0/3.3 V DC	Primary transfer control signal
	6	T1_CONT1	0	Analog	Primary transfer bias M control voltage
	7	T1_CONT2	0	Analog	Primary transfer bias C control voltage
	8	T1_CONT3	0	Analog	Primary transfer bias Y control voltage
	9	T1_CONT4	0	Analog	Primary transfer bias K control voltage
	10	FB_CONT	0	Analog	Primary transfer cleaning bias control voltage
YC10	A1	PGND	-	-	Ground
Connected to	A2	PGND	-	-	Ground
the main high voltage PWB,	A3	PGND	-	-	Ground
MP conveying	A4	+24V1	0	24 V DC	24 V DC power to MHVPWB
unit switch,	A5	+24V1	0	24 V DC	24 V DC power to MHVPWB
paper size length switch	A6	+24V1	0	24 V DC	24 V DC power to MHVPWB
1/2, paper	A7	MAIN IDC4	Ι	Analog	Main charger K control signal
size width	A8	MAIN IDC3	Ι	Analog	Main charger Y control signal
switch 1/2, power source	A9	MAIN IDC2	Ι	Analog	Main charger C control signal
fan motor 1/2	A10	MAIN IDC1	Ι	Analog	Main charger M control signal
and MP paper	A11	DC MAIN CONT4	0	Analog	Main charger K DC control voltage
conveying clutch	A12	AC MAIN CONT4	0	Analog	Main charger K AC control voltage
	A13	DC MAIN CONT3	0	Analog	Main charger Y DC control voltage
	A14	AC MAIN CONT3	0	Analog	Main charger Y AC control voltage
	A15	DC MAIN CONT2	0	Analog	Main charger C DC control voltage
	A16	AC MAIN CONT2	0	Analog	Main charger C AC control voltage
	A17	DC MAIN CONT1	0	Analog	Main charger M DC control voltage
	A18	AC MAIN CONT1	0	Analog	Main charger M AC control voltage
	A19	AC MAIN CLK	0	0/3.3 V DC (pulse)	Main charger AC clock signal
	A20	DC MAIN REM	0	0/3.3 V DC	Main charger DC: On/Off
	B1	PF UNIT SET	Ι	0/3.3 V DC	MPCUSW: On/Off
	B2	SGND	-	-	Ground
	B3	CAS1 LENGTH	Ι	0/3.3 V DC	PLSW1: On/Off
	B4	SGND	-	-	Ground
	B5	CAS2 LENGTH	I	0/3.3 V DC	PLSW2: On/Off
	B6	SGND	-	-	Ground
	B7	SGND	-	-	Ground
	B8	CAS2 WIDTH3	Ι	0/3.3 V DC	PWSW2: On/Off

Connector	Pin No.	Signal	I/O	Voltage	Description
YC10	B9	CAS2 WIDTH2	Ι	0/3.3 V DC	PWSW2: On/Off
Connected to	B10	CAS2 WIDTH1	I	0/3.3 V DC	PWSW2: On/Off
the main high	B11	SGND	-	-	Ground
voltage PWB, MP conveying	B12	CAS1 WIDTH3	I	0/3.3 V DC	PWSW1: On/Off
unit switch,	B13	CAS1 WIDTH2	I	0/3.3 V DC	PWSW1: On/Off
paper size	B14	CAS1 WIDTH1	I	0/3.3 V DC	PWSW1: On/Off
length switch 1/2, paper	B15	HVU FAN REM	0	0/24 V DC	PSFM1/2: On/Off
size width	B16	+24V1	0	24 V DC	24 V DC power to PSFM1/2
switch 1/2,	B17	+24V1	0	24 V DC	24 V DC power to MPPCCL
power source fan motor 1/2	B18	MPFFED CLT	0	0/24 V DC	MPPCCL: On/Off
and MP paper		REM			
conveying	B19	NC	-	-	Not used
clutch	B20	NC	-	-	Not used
YC11	1	SGND	-	-	Ground
Connected to	2	FSR NCTH2	Ι	Analog	FTH2 detection signal
the fuser ther-	3	FSR NCTH1	I	Analog	FTH2 detection signal
mistor 1/2/3	4	+3.3V1	0	3.3 V DC	3.3 V DC power to FTH1
	5	FSR TH1	I	Analog	FTH1 detection signal
	6	+3.3V1	0	3.3 V DC	3.3 V DC power to FTH3
	7	FSR TH2	I	Analog	FTH3 detection signal
	8	SGND	-	-	Ground
	9	FSR SET	I	0/3.3 V DC	Fuser unit set signal
YC12	A5	FAN_SP	0	0/24 V DC	TRFM4: On/Off
Connected to	A6	+24V1	0	24 V DC	24 V DC power to TRFM4
the transfer	A7	SIDE BELT FAN	0	0/24 V DC	TRFM1: On/Off
fan motor 1/4 and waste	A8	+24V1	0	24 V DC	24 V DC power to TRFM1
toner motor	A9	WT MT RTN	1	Analog	WTM return signal
	A10	WT MT DR	0	0/24 V DC	WTM: On/Off
	B1	FAN_SP	-	-	Not used
	B2	+24V1	-	_	Not used
	B3	SGND	-	_	Not used
	B4	CONTAIN1_SET	-	_	Not used
	B5	SGND	_	_	Not used
	B6	CONTAIN2_SET	-	_	Not used
	B7	SGND	_	_	Not used
	B8	CONTAIN3_SET	-		Not used
	B9	SGND			Not used
	вэ B10	CONTAIN4_SET	-		Not used
	ы	CONTAIN4_SET	-	-	Notused

Connector	Pin No.	Signal	I/O	Voltage	Description
YC13	A1	SCCLK	0	0/3.3 V DC (pulse)	PM clock signal
Connected to	A2	SCRDY	Ι	0/3.3 V DC	PM ready signal
the polygon	A3	SCREM	0	0/3.3 V DC	PM: On/Off
motor, APC PWBM/C/Y/K	A4	SGND	-	-	Ground
and PD PWB	A5	+24V1	0	24 V DC	24 V DC power to PM
	A6	+5V2	0	5 V DC	5 V DC power to APCPWB-Y
	A7	APC3 CNT	0	Analog	APCPWB-Y control signal
	A8	SGND	-	-	Ground
	A9	ENBL3	0	0/3.3 V DC	APCPWB-Y enable signal
	A10	S/H3	0	0/3.3 V DC	APCPWB-Y sample/hold signal
	A11	VDO3 P	0	0/3.3 V DC (pulse)	Video data signal (P)
	A12	VDO3 N	0	0/3.3 V DC (pulse)	Video data signal (N)
	A13	+5V2	0	5 V DC	5 V DC power to APCPWB-M
	A14	APC1 CNT	0	Analog	APCPWB-M control signal
	A15	SGND	-	-	Ground
	A16	ENBL1	0	0/3.3 V DC	APCPWB-M enable signal
	A17	S/H1	0	0/3.3 V DC	APCPWB-M sample/hold signal
	A18	VDO1 P	0	0/3.3 V DC (pulse)	Video data signal (P)
	A19	VDO1 N	0	0/3.3 V DC (pulse)	Video data signal (N)
	B1	+5V2	0	5 V DC	5 V DC power to PDPWB
	B2	PD	Ι	0/3.3 V DC (pulse)	PD signal
	B3	SGND	-	-	Ground
	B4	NC	-	-	Not used
	B5	NC	-	-	Not used
	B6	+5V2	0	5 V DC	5 V DC power to APCPWB-C
	B7	APC2 CNT	0	Analog	APCPWB-C control signal
	B8	SGND	-	-	Ground
	B9	ENBL2	0	0/3.3 V DC	APCPWB-C enable signal
	B10	S/H2	0	0/3.3 V DC	APCPWB-C sample/hold signal
	B11	VDO2 P	0		Video data signal (P)
	B12	VDO2 N	0	0/3.3 V DC (pulse)	
	B13	+5V2	0	5 V DC	5 V DC power to APCPWB-K
	B14	APC4 CNT	0	Analog	APCPWB-K control signal
	B15	SGND	-	-	Ground
	B16	ENBL4	0	0/3.3 V DC	APCPWB-K enable signal
	B17	S/H4	0	0/3.3 V DC	APCPWB-K sample/hold signal
	B18	VDO4 P	0	0/3.3 V DC (pulse)	
	B19	VDO4 N	0	0/3.3 V DC (pulse)	Video data signal (N)
				I	1

Connector	Pin No.	Signal	I/O	Voltage	Description
YC14	1	PGND	-	-	Ground
Connected to	2	PGND	-	-	Ground
the motor control PWB	3	PGND	-	-	Ground
	4	+24V1	0	24 V DC	24 V DC power to MCPWB
	5	+24V1	0	24 V DC	24 V DC power to MCPWB
	6	+24V1	0	24 V DC	24 V DC power to MCPWB
	7	+24V1	0	24 V DC	24 V DC power to MCPWB
	8	+24V1	0	24 V DC	24 V DC power to MCPWB
	9	+24V1	0	24 V DC	24 V DC power to MCPWB
	10	PGND	-	-	Ground
	11	PGND	-	-	Ground
	12	PGND	-	-	Ground
	13	PGND	-	-	Ground
	14	+5V1	0	5 V DC	5 V DC power to MCPWB
YC15	1	DRM4_POSITON	0	0/3.3 V DC	DRM-K control signal
Connected to	2	DRM3_POSITON	0	0/3.3 V DC	DRM-Y control signal
the motor	3	DRM2_POSITON	0	0/3.3 V DC	DRM-C control signal
control PWB	4	DRM1_POSITON	0	0/3.3 V DC	DRM-M control signal
	5	MT_CONT_ENB	0	0/3.3 V DC	MCPWB control signal
	6	BLT_MT_DR	0	0/3.3 V DC	TRM: On/Off
	7	DRM_CL_MT_DR	0	0/3.3 V DC	DRM-MCY: On/Off
	8	DRM_BK_MT_DR	0	0/3.3 V DC	DRM-K: On/Off
	9	REF_CLK	0	0/3.3 V DC (pulse)	Clock signal
	10	BLT_MT_CLK	0	0/3.3 V DC (pulse)	TRM clock signal
	11	PWB_RDY_BUF	Ι	0/3.3 V DC	MCPWB ready signal
	12	MT_SEL_BUF	0	0/3.3 V DC	MCPWB select signal
	13	PWB_SDI_BUF	Ι	0/3.3 V DC (pulse)	MCPWB serial communication data signal
	14	PWB_SDO_BUF	0	0/3.3 V DC (pulse)	MCPWB serial communication data signal
	15	PWB_SCLK_BUF	0	0/3.3 V DC (pulse)	MCPWB clock signal
	16	INTER_LOCK	0	0/3.3 V DC	MCPWB interlock signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC16	A1	NC	-	-	Not used
Connected to	A2	DLP_CL_MT_CLK	0	0/3.3 V DC (pulse)	DEVM-MCY clock signal
the develop-	A3	DLP_CL_MT_DIR	0	0/3.3 V DC	DEVM-MCY drive switch signal
ing motor MCY, clean-	A4	DLP_CL_MT_DR	0	0/3.3 V DC	DEVM-MCY: On/Off
ing motor	A5	DLP_CL_MT_RDY	I	0/3.3 V DC	DEVM-MCY ready signal
MCY, devel- oping motor	A6	PGND	-	-	Ground
K, cleaning	A7	PGND	-	-	Ground
motor K	A8	+24V1	0	24 V DC	24 V DC power to DEVM-MCY
	A9	+24V1	0	24 V DC	24 V DC power to DEVM-MCY
	A10	NC	-	-	Not used
	A11	RUB1_MT_CLK	0	0/3.3 V DC (pulse)	CLM-MCY clock signal
	A12	RUB1_MT_DIR	0	0/3.3 V DC	CLM-MCY drive switch signal
	A13	RUB1_MT_DR	0	0/3.3 V DC	CLM-MCY: On/Off
	A14	RUB1_MT_RDY	Ι	0/3.3 V DC	CLM-MCY ready signal
	A15	PGND	-	-	Ground
	A16	PGND	-	-	Ground
	A17	+24V1	0	24 V DC	24 V DC power to CLM-MCY
	A18	+24V1	0	24 V DC	24 V DC power to CLM-MCY
	B1	NC	-	-	Not used
	B2	DLP_BK_MT_CLK	0	0/3.3 V DC (pulse)	DEVM-K clock signal
	B3	DLP_BK_MT_DIR	0	0/3.3 V DC	DEVM-K drive switch signal
	B4	DLP_BK_MT_DR	0	0/3.3 V DC	DEVM-K: On/Off
	B5	DLP_BK_MT_RD Y	Ι	0/3.3 V DC	DEVM-K ready signal
	B6	PGND	-	-	Ground
	B7	PGND	-	-	Ground
	B8	+24V1	0	24 V DC	24 V DC power to DEVM-K
	B9	+24V1	0	24 V DC	24 V DC power to DEVM-K
	B10	NC	-	-	Not used
	B11	RUB2_MT_CLK	0	0/3.3 V DC (pulse)	CLM-K clock signal
	B12	RUB2_MT_DIR	0	0/3.3 V DC	CLM-K drive switch signal
	B13	RUB2_MT_DR	0	0/3.3 V DC	CLM-K: On/Off
	B14	RUB2_MT_RDY	Ι	0/3.3 V DC	CLM-K ready signal
	B15	PGND	-	-	Ground
	B16	PGND	-	-	Ground
	B17	+24V1	0	24 V DC	24 V DC power to CLM-K
	B18	+24V1	0	24 V DC	24 V DC power to CLM-K

Connector	Pin No.	Signal	I/O	Voltage	Description
YC18	A1	+24V2	0	24 V DC	24 V DC power to FRPWB-M
Connected to	A2	+24V2	0	24 V DC	24 V DC power to FRPWB-M
the main front	A3	+24V2	0	24 V DC	24 V DC power to FRPWB-M
PWB	A4	SGND	-	-	Ground
	A5	+3.3V1	0	3.3 V DC	3.3 V DC power to FRPWB-M
	A6	ERS4_DR	0	24/0 V DC	CL-K: On/Off
	A7	DRM4_POSITION	I	0/3.3 V DC	DPS-K: On/Off
	A8	FRONT_FAN	0	0/24 V DC	RFM: On/Off
	A9	TPD4	I	Analog	TS-K detection signal
	A10	DLP_VCONT4	0	Analog	TS-K control signal
	A11	+5V1	0	5 V DC	5 V DC power to FRPWB-M
	A12	SGND	-	-	Ground
	A13	SGND	-	-	Ground
	A14	+5V3	0	5 V DC	5 V DC power to FRPWB-M
	A15	PGND	-	-	Ground
	A16	+24V1	0	24 V DC	24 V DC power to FRPWB-M
	A17	PGND	-	-	Ground
	A18	PGND	-	-	Ground
	A19	PGND	-	-	Ground
	B1	CONTAIN FAN	0	0/24 V DC	CFM: On/Off
	B2	GUIDE_MT_DIR	0	0/3.3 V DC	RGM drive switch signal
	B3	GUIDE_MT_CLK	0	0/3.3 V DC (pulse)	RGM clock signal
	B4	GUIDE_MT_DR	0	0/3.3 V DC	RGM: On/Off
	B5	GUIDE_POSITIO N	I	0/3.3 V DC	RGS: On/Off
	B6	FSR_EXIT_JAM	Ι	0/3.3 V DC	ESW: On/Off
	B7	JOB_EXIST	Ι	0/3.3 V DC	JEPSW: On/Off
	B8	JOB_LED	-	-	Not used
	B9	SP_CONT	0	Analog	Separation bias control voltage
	B10	SEP_REM	0	0/3.3 V DC	Separation bias control voltage: On/Off
	B11	T2_INV_CONT	0	Analog	Secondary transfer (reverse) bias control volt- age
	B12	T2_CONT	0	Analog	Secondary transfer bias control voltage
	B13	T2_REM	0	0/3.3 V DC	Secondary transfer bias: On/Off
	B14	GUIDE_MT_PD	0	0/3.3 V DC	RGM control signal
	B15	I2C_SDA4	Ι	0/3.3 V DC (pulse)	OUTTEMS EEPROM data signal
	B16	I2C_SCL4	0	0/3.3 V DC (pulse)	OUTTEMS EEPROM clock signal
	B17	FRONT_OPEN	Ι	0/3.3 V DC	FCSW: On/Off
	B18	EEP_SDA3	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	B19	EEP_SCL3	0	0/3.3 V DC (pulse)	EEPROM clock signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC19	1	ERS1_DR	0	24/0 V DC	CL-M: On/Off
Connected to	2	DRM1_POSITION	I	0/3.3 V DC	DPS-M: On/Off
the sub front	3	TPD1	I	Analog	TS-M detection signal
PWB	4	DLP_VCONT1	0	Analog	TS-M control signal
	5	ERS2_DR	0	24/0 V DC	CL-C: On/Off
	6	DRM2_POSITION	I	0/3.3 V DC	DPS-C: On/Off
	7	TPD2	I	Analog	TS-C detection signal
	8	DLP_VCONT2	0	Analog	TS-C control signal
	9	ERS3_DR	0	24/0 V DC	CL-Y: On/Off
	10	DRM3_POSITION	I	0/3.3 V DC	DPS-Y: On/Off
	11	TPD3	I	Analog	TS-Y detection signal
	12	DLP_VCONT3	0	Analog	TS-Y control signal
	13	WTNR_SET	-	-	Not used
	14	WTNER_CHECK	I	Analog	WTS detection signal
	15	WTNR_LED	0	0/5 V DC (pulse)	WTLED LED emitter signal
	16	FRONTDLP2_FAN	0	0/24 V DC	DEVFM2: On/Off
	17	FRONTDLP1_FAN	0	0/24 V DC	DEVFM1: On/Off
	18	PAPER FAN	-	-	Not used
	19	24V1	-	-	Not used
YC20	A1	DU MT CLK	0	0/3.3 V DC (pulse)	DUM clock signal
Connected to	A2	LOOP FAN	0	0/3.3 V DC	LFM: On/Off
the feed PWB	A3	DU MT DR	0	0/3.3 V DC	DUM: On/Off
	A4	FEED MT RDY	I	0/3.3 V DC	PCM ready signal
	A5	FEED MT DR	0	0/3.3 V DC	PCM: On/Off
	A6	FEED MT DIR	0	0/3.3 V DC	PCM drive switch signal
	A7	FEED MT CLK	0	0/3.3 V DC (pulse)	PCM clock signal
	A8	FED2 CLT REM	0	0/24 V DC	PFCL2: On/Off
	A9	CAS2 EMPTY	I	0/3.3 V DC	PSW2: On/Off
	A10	CAS2 LIFT UP	Ι	0/3.3 V DC	LSW2: On/Off
	A11	CAS1 EMPTY	I	0/3.3 V DC	PSW1: On/Off
	A12	CAS1LIFT UP	I	0/3.3 V DC	LSW1: On/Off
	A13	LFT2 MT LOCK	Ι	0/3.3 V DC	LM2 lock signal
	A14	LFT1 MT LOCK	I	0/3.3 V DC	LM1 lock signal
	A15	LFT2 MT DR	0	0/24 V DC	LM2: On/Off
	A16	LFT1 MT DR	0	0/24 V DC	LM1: On/Off
	A17	LFT2 MT SIG1	Ι	0/3.3 V DC	LM2 paper gauge signal
	A18	LFT2 MT SIG2	I	0/3.3 V DC	LM2 paper gauge signal
	A19	LFT1 MT SIG1	I	0/3.3 V DC	LM1 paper gauge signal
	A20	LFT1 MT SIG2		0/3.3 V DC	LM1 paper gauge signal
	B1	MT_PD	0	0/3.3 V DC	PCM current control signal
	B2	FED1 CLT REM	0	0/24 V DC	PFCL1: On/Off
	B3	REG JAM		0/3.3 V DC	RSW: On/Off
	B4	LSU SOL DR	0	0/24 V DC	LSUCSOL: On/Off

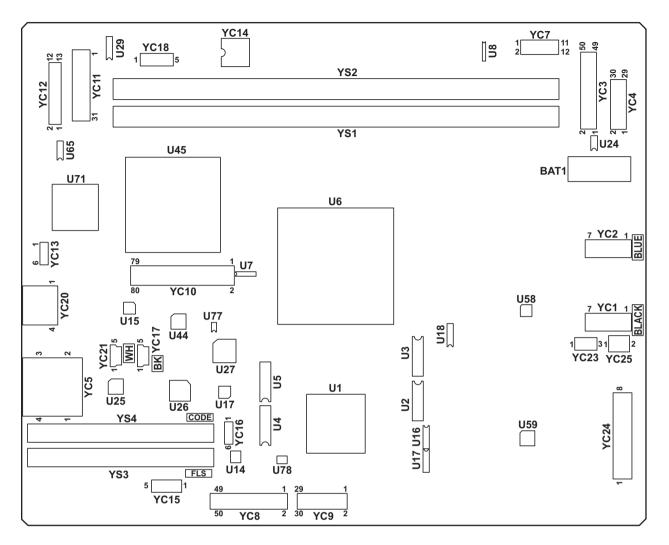
Connector	Pin No.	Signal	I/O	Voltage	Description
YC20	B5	MPF2 JAM	I	0/3.3 V DC	MPPCSW: On/Off
Connected to	B6	FEED1 JAM	Ι	0/3.3 V DC	FSW1: On/Off
the feed PWB	B7	ROL UP2 CLT REM	0	0/24 V DC	MCL: On/Off
	B8	REG UP1 CLT REM	0	0/24 V DC	RCL: On/Off
	B9	LOOP SENS	Ι	0/3.3 V DC	LS: On/Off
	B10	BELT JAM	Ι	0/3.3 V DC	JDS: On/Off
	B11	DU ENTER JAM	I	0/3.3 V DC	FSSW: On/Off
	B12	JAM1 LED	0	0/3.3 V DC	JLEDPWB1 LED emitter signal
	B13	JAM2 LED	0	0/3.3 V DC	JLEDPWB2 LED emitter signal
	B14	COV FAN REM	0	0/24 V DC	PCFM1,2: On/Off
	B15	DU OPEN	Ι	0/3.3 V DC	LC1SW: On/Off
	B16	DU JAM	I	0/3.3 V DC	DUSW: On/Off
	B17	FEED3 JAM	Ι	0/3.3 V DC	FSW3: On/Off
	B18	FEED2 JAM	Ι	0/3.3 V DC	FSW2: On/Off
	B19	CAS OPEN	Ι	0/3.3 V DC	LC2SW: On/Off
	B20	DU MT PD	0	0/3.3 V DC	DUM current control signal
YC21	1	+24V2	0	24 V DC	24 V DC power to FPWB
Connected to	2	+24V2	0	24 V DC	24 V DC power to FPWB
the feed PWB	3	+24V2	0	24 V DC	24 V DC power to FPWB
	4	PGND	-	-	Ground
	5	PGND	-	-	Ground
	6	PGND	-	-	Ground
	7	PGND	-	-	Ground
	8	+5V1	0	5 V DC	5 V DC power to FPWB
YC22	1	REG MT CLK	0	0/3.3 V DC (pulse)	RM clock signal
Connected to	2	REG MT DR	0	0/3.3 V DC	RM: On/Off
the feed PWB	3	REG MT PD	0	0/3.3 V DC	RM current control signal
	4	ROL MT CLK	0	0/3.3 V DC (pulse)	-
	5	ROL MT DR	0	0/3.3 V DC	MM: On/Off
	6	ROL MT PD	0	0/3.3 V DC	MM current control signal
YC23	1	5V SENSOR LED	0	5 V DC	5 V DC power to MPPLSW
Connected to	2	MPF LENGTH	I	0/3.3 V DC	MPPLSW: On/Off
the MP paper	3	PGND	-	-	Ground
size length switch, MP	4	MPF TABLE	I	0/3.3 V DC	MPTSW: On/Off
tray switch,	5	PGND	-	-	Ground
MP paper	6	MPF_WIDTH1	Ι	0/3.3 V DC	MPPWSW: On/Off
size width switch, MP	7	MPF_WIDTH2	Ι	0/3.3 V DC	MPPWSW: On/Off
paper switch,	8	_ MPF_WIDTH3	Ι	0/3.3 V DC	MPPWSW: On/Off
MP paper	9	PGND	_	-	Ground
feed switch, MP solenoid	10	PGND	-	-	Ground
and Mp paper	11	MPF PPR SET	I	0/3.3 V DC	MPPSW: On/Off
feed clutch	12	+5V1	0	5 V DC	5 V DC power to MPPSW
			-		
				1	1

Connector	Pin No.	Signal	I/O	Voltage	Description
YC23	13	PGND	-	-	Ground
Connected to	14	MPF JAM1	Ι	0/3.3 V DC	MPPFSW: On/Off
the MP paper	15	+5V1	0	5 V DC	5 V DC power to MPPFSW
size length switch, MP	16	+24V1	0	24 V DC	24 V DC power to MPSOL
tray switch,	17	MPF SOL1 DR	0	0/24 V DC	MPSOL: On/Off (ACT)
MP paper	18	MPF SOL2 DR	0	0/24 V DC	MPSOL: On/Off (REV)
size width switch, MP	19	+24V1	0	24 V DC	24 V DC power to MPPFCL
paper switch,	20	MPF CLT REM	0	0/24 V DC	MPPFCL: On/Off
MP paper					
feed switch, MP solenoid					
and Mp paper					
feed clutch					
YC24	1	MPF_MOT_CLK	0	0/3.3 V DC (pulse)	, and the second s
Connected to the MP motor	2	MPF_MOT_DIR	0	0/3.3 V DC	MPM drive switch signal
	3	MPF_MOT_DR	0	0/3.3 V DC	MPM: On/Off
	4	MPF_MOT_RDY	I	0/3.3 V DC	MPM ready signal
	5	PGND	-	-	Ground
	6	PGND	-	-	Ground
	7	+24V1	0	24 V DC	24 V DC power to MPM
	8	+24V1	0	24 V DC	24 V DC power to MPM
YC25	A1	NC	-	-	Not used
Connected to the eject	A2	+24V2	0	24 V DC	24 V DC power to EM
motor, paper	A3	GND	-	-	Ground
full sensor,	A4	+5V1	0	5 V DC	5 V DC power to EM
fuser motor, fuser clutch	A5	EXIT MOT DR	0	0/3.3 V DC	EM: On/Off
and fuser fan	A6	EXIT MOT CLK	0	0/3.3 V DC (pulse)	-
motor	A7	EXIT MOT DIR	0	0/3.3 V DC	EM drive switch signal
	A8	EXIT MOT LOCK	I	0/3.3 V DC	EM lock signal
	A9	EXIT MOT GAIN	0	0/3.3 V DC	EM gain signal
	A10	GND	-	-	Ground
	A11	OVER_FLOW	I	0/3.3 V DC	PFS: On/Off
	A12	+5V1	0	5 V DC	5 V DC power to PFS
	B1	+24V2	0	24 V DC	24 V DC power to FUM
	B2	SGND	-	-	Ground
	B3	+5V1	0	5 V DC	5 V DC power to FUM
	B4	FSR MOT DR	0	0/3.3 V DC	FUM: On/Off
	B5	FSR MOT CLK	0		FUM clock signal
	B6	FSR MOT DIR	0	0/3.3 V DC	FUM drive switch signal
	B7	FSR MOT LOCK	Ι	0/3.3 V DC	FUM lock signal
	B8	FSR MOT GAIN	0	0/3.3 V DC	FUM gain signal
	B9	+24V2	0	24 V DC	24 V DC power to FUCL
	B10	FSR_CLT	0	0/24 V DC	FUCL: On/Off
	B11	FSR_FAN	0	0/24 V DC	FUFM: On/Off
	B12	+24V2	0	24 V DC	24 V DC power to FUFM

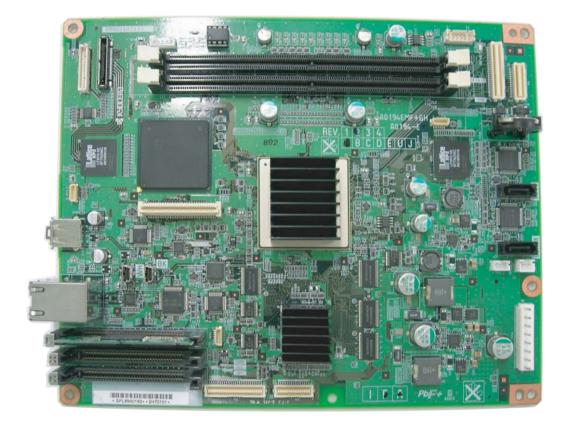
Connector	Pin No.	Signal	I/O	Voltage	Description
YC26	A5	CONTAIN_MT_CL	0	0/3.3 V DC (pulse)	TCM clock signal
Connected to the toner con-	A6	K CONTAIN_MT_DI R	0	0/3.3 V DC	TCM drive switch signal
tainer motor,	A7	CONTAIN_MT_DR	0	0/3.3 V DC	TCM: On/Off
developing fan motor 3/4 and toner	A8	CONTAIN_MT_RD	I	0/3.3 V DC	TCM ready signal
motor M/C/Y/	A9	PGND	-	-	Ground
к	A10	PGND	-	-	Ground
	A11	+24V1	0	24 V DC	24 V DC power to TCM
	A12	+24V1	0	24 V DC	24 V DC power to TCM
	B1	SUB_DLP_FAN	0	0/24 V DC	DEVFM4: On/Off
	B2	+24V1	0	24 V DC	24 V DC power to DEVFM4
	B3	TMOT1 DR	0	0/24 V DC	TM-M: On/Off
	B4	TMOT1RTN	Ι	Analog	TM-M return signal
	B5	TMOT2 DR	0	0/24 V DC	TM-C: On/Off
	B6	TMOT2RTN	I	Analog	TM-C return signal
	B7	TMOT3 DR	0	0/24 V DC	TM-Y: On/Off
	B8	RMOT3RTN	Ι	Analog	TM-Y return signal
	B9	TMOT4 DR	0	0/24 V DC	TM-K: On/Off
	B10	TMOT4RTN	Ι	Analog	TM-K return signal
	B11	REAR DLP FAN	0	0/24 V DC	DEVFM3: On/Off
	B12	+24V1	0	24 V DC	24 V DC power to DEVFM3
YC27	1	EH RDY (PFRDY)	Ι	0/5 V DC	Paper feeder ready signal
Connected to	2	EH RDY (DF RDY)	Ι	0/5 V DC	Document finisher ready signal
the optional paper feeder	3	PF FEED	0	0/5 V DC	Paper feeder control signal
and optional	4	PF SEL	0	0/5 V DC	Paper feeder select signal
document fin-	5	DF SEL	0	0/5 V DC	Document finisher select signal
isher	6	EH SCLK (PFS- CLK)	0	0/5 V DC (pulse)	Paper feeder clock signal
	7	EH SCLK (DFS- CLK)	0	0/5 V DC (pulse)	Document finisher clock signal
	8	EHSDI (PFSDI)	I	0/5 V DC (pulse)	Serial communication data signal
	9	EH SDI (DFSDI)	Ι	0/5 V DC (pulse)	Serial communication data signal
	10	EH SDO (PFSDO)	0	0/5 V DC (pulse)	Serial communication data signal
	11	EH SDO (DFSDO)	0	0/5 V DC (pulse)	Serial communication data signal
	12	DF DET	Ι	0/5 V DC	Document finisher set signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC28	A1	+5V1	0	5 V DC	5 V DC power to JMPWB
Connected to	A2	JOB EXIT JAM2	Ι	0/5 V DC	JESW: On/Off
the optional	A3	JOB EXIT JAM1	Ι	0/5 V DC	FESW: On/Off
job separator, eject fan	A4	SGND	-	-	Ground
motor, trans-	A5	PGND	-	-	Ground
fer belt speed PWB, trans-	A6	PGND	-	-	Ground
fer position	A7	JOB EJECT	Ι	0/5 V DC	JPFSW: On/Off
sensor, color	A8	JOB SOL2 DR	0	0/24 V DC	JFSSOL: On/Off (ACT)
release sen- sor, color	A9	JOB SOL1 DR	0	0/24 V DC	JFSSOL: On/Off (REV)
release motor	A10	+24V2	0	24 V DC	24 V DC power to JMPWB
and transfer	A11	+24V2	0	24 V DC	24 V DC power to JMPWB
fan motor 2/3	A12	JOB MOT DR	0	0/24 V DC	JEM: On/Off
	A13	JOB MOT CLK	0	0/5 V DC (pulse)	JEM clock signal
	A14	JOB MOT MODE	0	0/5 V DC	JEM mode signal
	A15	JOB MOT DIR	0	0/5 V DC	JEM drive switch signal
	A16	JOB_SET	Ι	0/5 V DC	Job separator set signal
	A17	REAR_FAN	0	0/24 V DC	EFM: On/Off
	A18	24V1	0	24 V DC	24 V DC power to EFM
	B1	+5V1	0	5 V DC	5 V DC power to TBSPWB
	B2	BLT SPEED	Т	0/3.3 V DC (pulse)	TBSPWB detection signal
	B3	+3.3V1	0	3.3 V DC	3.3 V DC power to TBSPWB
	B4	EEP SDA0	I/O	0/3.3 V DC (pulse)	TBSPWB EEPROM data signal
	B5	EEP SCL0	0	0/3.3 V DC (pulse)	TBSPWB EEPROM clock signal
	B6	SGND	-	-	Ground
	B7	SGND	-	-	Ground
	B8	BLT SET	Ι	0/5 V DC	TPS: On/Off
	B9	+5V1	0	5 V DC	5 V DC power to TPS
	B10	SGND	-	-	Ground
	B11	RLS SET	Ι	0/5 V DC	CRS: On/Off
	B12	+5V1	0	5 V DC	5 V DC power to CRS
	B13	+24V2	0	24 V DC	24 V DC power to CRM
	B14	RLS MT DR	0	0/24 V DC	CRM: On/Off
	B15	BLT FAN1	0	0/24 V DC	TRFM2: On/Off
	B16	+24V2	0	24 V DC	24 V DC power to TRFM2
	B17	BLT FAN2	0	0/24 V DC	TRFM3: On/Off
	B18	+24V2	0	24 V DC	24 V DC power to TRFM3

Connector	Pin No.	Signal	I/O	Voltage	Description
YC30	1	+5V1	0	5 V DC	5 V DC power to HVCPWB
Connected to	2	+5V1	0	5 V DC	5 V DC power to HVCPWB
the high volt-	3	SGND	-	-	Ground
age control PWB	4	SGND	-	-	Ground
	5	PWB SCLK BUF	0	0/3.3 V DC (pulse)	HVCPWB clock signal
	6	PWB SDI BUF	Ι	0/3.3 V DC (pulse)	HVCPWB serial communication data signal
	7	PWB SDO BUF	0	0/3.3 V DC (pulse)	HVCPWB serial communication data signal
	8	HVU SEL BUF	0	0/3.3 V DC	HVCPWB select signal
	9	PWB RDY BUF	Ι	0/3.3 V DC	HVCPWB ready signal
	10	DLP1 HV REM	0	0/3.3 V DC	Developing bias M: On/Off
	11	DLP2 HV REM	0	0/3.3 V DC	Developing bias C: On/Off
	12	DLP3 HV REM	0	0/3.3 V DC	Developing bias Y: On/Off
	13	DLP4 HV REM	0	0/3.3 V DC	Developing bias K: On/Off
YC36	1	SGND	-	-	Ground
Connected to	2	DC1_SET	Ι	0/3.3 V DC	Key counter installing detecting signal
the optional	3	24V	0	24 V DC	24 V DC power to the key counter
key counter	4	DC1_COUNT	0	0/3.3 V DC	Key counter count signal
YC38	1	LSU FAN REM	0	0/24 V DC	LSUFM: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power to LSUFM
the LSU fan	3	SGND	-	-	Ground
motor and inner temper-	4	POLYGON TEMP	Ι	Analog	INTEMS1 detection signal
ature sensor					
1		. 0.1) (1	0	041450	
YC39	1	+24V1	0	24 V DC	24 V DC power to DEVFM5
Connected to the develop-	2	SIDE_DLP_FAN	0	0/24 V DC	DEVFM5: On/Off
ing fan motor					
5					







Main PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	GND	-	-	Ground
Connected to	2	TXP	0	0/3.3 V DC (pulse)	Transmission data
the hard disk	3	TXN	0	0/3.3 V DC (pulse)	Transmission data
1	4	GND	-	-	Ground
	5	RXN	Ι	0/3.3 V DC (pulse)	Received data
	6	RXP	Ι	0/3.3 V DC (pulse)	Received data
	7	GND	-	-	Ground
YC2	1	GND	-	-	Ground
Connected to	2	TXP	0	0/3.3 V DC (pulse)	Transmission data
the hard disk	3	TXN	0	0/3.3 V DC (pulse)	Transmission data
2	4	GND	-	-	Ground
	5	RXN	Ι	0/3.3 V DC (pulse)	Received data
	6	RXP	I	0/3.3 V DC (pulse)	Received data
	7	GND	-	-	Ground
YC3	1	EG_SCLK	0	0/3.3 V DC (pulse)	EPWB clock signal
Connected to	2	HLD_ENG	0	0/3.3 V DC	EPWB hold signal
the engine	3	EG_SI	0	0/3.3 V DC (pulse)	EPWB serial communication data signal
PWB	4	SLEEP	0	0/3.3 V DC	EPWB sleep signal: On/Off
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	VMREA N	0	0/3.3 V DC (pulse)	Image control signal
	8	VMRED P	0		Image control signal
	9	VMREA P	0		Image control signal
	10	VMRED N	0		Image control signal
	11	VD A0 P	0		Image control signal
	12	VD D0 P	0	0/3.3 V DC (pulse)	Image control signal
	13	VD A0 N	0	0/3.3 V DC (pulse)	Image control signal
	14	VD D0 N	0	0/3.3 V DC (pulse)	Image control signal
	15	VD A1 P	0	0/3.3 V DC (pulse)	Image control signal
	16	VD D1 P	0	0/3.3 V DC (pulse)	Image control signal
	17	VD A1 N	0	0/3.3 V DC (pulse)	Image control signal
	18	VD D1 N	0	0/3.3 V DC (pulse)	Image control signal
	19	VD A2 P	0	0/3.3 V DC (pulse)	Image control signal
	20	VD D2 P	0	0/3.3 V DC (pulse)	Image control signal
	21	VD A2 N	0	0/3.3 V DC (pulse)	Image control signal
	22	VD D2 N	0	0/3.3 V DC (pulse)	Image control signal
	23	VD A3 P	0	0/3.3 V DC (pulse)	Image control signal
	24	VD D3 P	0	0/3.3 V DC (pulse)	Image control signal
	25	VD A3 N	0	0/3.3 V DC (pulse)	Image control signal
	26	VD D3 N	0	0/3.3 V DC (pulse)	Image control signal
	27	VMREB N	0	0/3.3 V DC (pulse)	Image control signal
	28	VMREC P	0	0/3.3 V DC (pulse)	Image control signal
	29	VMREB P	0	0/3.3 V DC (pulse)	Image control signal
	30	VMREC N	0	0/3.3 V DC (pulse)	Image control signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC3	31	VD B0 P	0	-	Image control signal
Connected to	32	VD C0 P	0	0/3.3 V DC (pulse)	Image control signal
the engine	33	VD B0 N	0	0/3.3 V DC (pulse)	Image control signal
PWB	34	VD C0 N	0	0/3.3 V DC (pulse)	Image control signal
	35	VD B1 P	0	0/3.3 V DC (pulse)	Image control signal
	36	VD C1 P	0	0/3.3 V DC (pulse)	Image control signal
	37	VD B1 N	0	0/3.3 V DC (pulse)	Image control signal
	38	VD C1 N	0	0/3.3 V DC (pulse)	Image control signal
	39	VD B2 P	0	0/3.3 V DC (pulse)	Image control signal
	40	VD C2 P	0	0/3.3 V DC (pulse)	Image control signal
	41	VD B2 N	0	0/3.3 V DC (pulse)	Image control signal
	42	VD C2 N	0	0/3.3 V DC (pulse)	Image control signal
	43	VD B3 P	0	0/3.3 V DC (pulse)	Image control signal
	44	VD C3 P	0	0/3.3 V DC (pulse)	Image control signal
	45	VD B3 N	0	0/3.3 V DC (pulse)	Image control signal
	46	VD C3 N	0	0/3.3 V DC (pulse)	Image control signal
	47	VCLKOUT P	0	0/3.3 V DC (pulse)	Image control signal
	48	GND	-	-	Ground
	49	VCLKOUT N	0	0/3.3 V DC (pulse)	Image control signal
	50	GND	-	-	Ground
YC4	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
the engine PWB	3	HSYNCDN P	Ι	0/3.3 V DC (pulse)	Image control signal
1 110	4	VSYNCD P	Ι	0/3.3 V DC (pulse)	Image control signal
	5	HSYNCDN N	Ι	0/3.3 V DC (pulse)	Image control signal
	6	VSYNCD N	Ι	0/3.3 V DC (pulse)	Image control signal
	7	HSYNCCN P	Ι	0/3.3 V DC (pulse)	Image control signal
	8	VSYNCC P	Ι	0/3.3 V DC (pulse)	Image control signal
	9	HSYNCCN N	Ι	0/3.3 V DC (pulse)	Image control signal
	10	VSYNCC N	Ι	0/3.3 V DC (pulse)	Image control signal
	11	HSYNCBN P	Ι	0/3.3 V DC (pulse)	Image control signal
	12	VSYNCB P	Ι	0/3.3 V DC (pulse)	Image control signal
	13	HSYNCBN N	Ι	0/3.3 V DC (pulse)	Image control signal
	14	VSYNCB N	I	0/3.3 V DC (pulse)	Image control signal
	15	HSYNCAN P	Ι	0/3.3 V DC (pulse)	Image control signal
	16	VSYNCA P	Ι	0/3.3 V DC (pulse)	Image control signal
	17	HSYNCAN N	Ι	0/3.3 V DC (pulse)	Image control signal
	18	VSYNCA N	Ι	0/3.3 V DC (pulse)	Image control signal
	19	GND	-	-	Ground
	20	GND	-	-	Ground
	21	EG_IRN	Ι	0/3.3 V DC	EPWB interrupt signal
	22	NC	-	-	Not used
	23	EG_SO	Ι	0/3.3 V DC (pulse)	EPWB serial communication data signal
	24	NC	-	-	Not used

Connector	Pin No.	Signal	I/O	Voltage	Description
YC4	25	EG_SDIR	Ι	0/3.3 V DC	EPWB communication direction signal
Connected to	26	NC	-	-	Not used
the engine	27	EG_SBSY	Ι	0/3.3 V DC	EPWB busy signal
PWB	28	NC	-	-	Not used
	29	+24V DOWN	Ι	0/3.3 V DC	EPWB 24 V down signal
	30	NC	-	-	Not used
YC5-1	1	СТ	0	3.3 V DC	3.3 V DC power output
Connected to	2	TD+	0	0/3.3 V DC (pulse)	Transmission data
the ethernet	3	TD-	0	0/3.3 V DC (pulse)	Transmission data
	4	RD+	Ι	0/3.3 V DC (pulse)	Received data
	5	RD-	Ι	0/3.3 V DC (pulse)	Received data
	6	СТ	0	3.3 V DC	3.3 V DC power output
	7	CAT PHY	0	0/3.3 V DC	Control signal
	8	ANO PHY	0	3.3 V DC	3.3 V DC power output
	9	CAT MAC	-	-	Ground
	10	ANO MAC	0	0/3.3 V DC	Control signal
YC5-2	U1	VBUS	I	5 V DC	5 V DC power input
Connected to	U2	DATA-	I/O	-	USB data signal
the USB	U3	DATA+	I/O	-	USB data signal
	U4	GND	-	-	Ground
YC8	1	GND	-	-	Ground
Connected to	2	AUDIO	I	Analog	AUDIO signal
the interface	3	SEL AUDIO0	0	0/3.3 V DC	SEL AUDIO0 signal
PWB	4	SEL AUDIO1	0	0/3.3 V DC	SEL AUDIO1 signal
	5	_REG	I	0/3.3 V DC	REG signal
	6	A8	0	0/3.3 V DC (pulse)	Address bus signal
	7	A15	0	0/3.3 V DC (pulse)	Address bus signal
	8	A7	0	0/3.3 V DC (pulse)	Address bus signal
	9	A14	0	0/3.3 V DC (pulse)	Address bus signal
	10	A6	0	0/3.3 V DC (pulse)	Address bus signal
	11	A13	0	0/3.3 V DC (pulse)	Address bus signal
	12	A5	0	0/3.3 V DC (pulse)	Address bus signal
	13	A12	0	0/3.3 V DC (pulse)	Address bus signal
	14	A4	0	0/3.3 V DC (pulse)	Address bus signal
	15	A11	0	0/3.3 V DC (pulse)	Address bus signal
	16	A3	0	0/3.3 V DC (pulse)	Address bus signal
	17	A10	0	0/3.3 V DC (pulse)	Address bus signal
	18	A2	0		Address bus signal
	19	A9	0	0/3.3 V DC (pulse)	Address bus signal
	20	A1	0	0/3.3 V DC (pulse)	Address bus signal
	21	GND	-	-	Ground
	22	GND	-	-	Ground
	23	D8	I/O	0/3.3 V DC (pulse)	Data bus signal
	24	D0	I/O	0/3.3 V DC (pulse)	-
	25	D9	I/O	0/3.3 V DC (pulse)	-

Connector	Pin No.	Signal	I/O	Voltage	Description
YC8	26	D1	I/O	0/3.3 V DC (pulse)	Data bus signal
Connected to	27	D10	I/O	0/3.3 V DC (pulse)	Data bus signal
the interface	28	D2	I/O	0/3.3 V DC (pulse)	Data bus signal
PWB	29	D11	I/O	0/3.3 V DC (pulse)	Data bus signal
	30	D3	I/O	0/3.3 V DC (pulse)	Data bus signal
	31	GND	-	-	Ground
	32	GND	-	-	Ground
	33	D12	I/O	0/3.3 V DC (pulse)	Data bus signal
	34	D4	I/O	0/3.3 V DC (pulse)	Data bus signal
	35	D13	I/O	0/3.3 V DC (pulse)	Data bus signal
	36	D5	I/O	0/3.3 V DC (pulse)	Data bus signal
	37	D14	I/O	0/3.3 V DC (pulse)	Data bus signal
	38	D6	I/O	0/3.3 V DC (pulse)	Data bus signal
	39	D15	I/O	0/3.3 V DC (pulse)	Data bus signal
	40	D7	I/O	0/3.3 V DC (pulse)	Data bus signal
	41	GND	-	-	Ground
	42	GND	-	-	Ground
	43	KUIODREQT0	I	0/3.3 V DC (pulse)	KUIODREQT0 signal
	44	KUIODREQT1	Ι	0/3.3 V DC (pulse)	KUIODREQT1 signal
	45	KUIODREQR0	I	0/3.3 V DC (pulse)	KUIODREQR0 signal
	46	KUIODREQR1	Ι	0/3.3 V DC (pulse)	KUIODREQR1 signal
	47	KUIOIORN0	0	0/3.3 V DC (pulse)	KUIOIORN0 signal
	48	KUIOIORN1	0	0/3.3 V DC (pulse)	KUIOIORN1 signal
	49	KUIOIOWN0	0	0/3.3 V DC (pulse)	KUIOIOWN0 signal
	50	KUIOIOWN1	0	0/3.3 V DC (pulse)	KUIOIOWN1 signal
YC9	1	KUIOCSN0	0	0/3.3 V DC (pulse)	KUIOCSN0 signal
Connected to	2	KUIOCSN1	0	0/3.3 V DC (pulse)	KUIOCSN1 signal
the interface PWB	3	KUIOACKN0	Ι		KUIOACKN0 signal
	4	KUIOACKN1	I		KUIOACKN1 signal
	5	KUIOIRN0	I	0/3.3 V DC	KUIOIRN0 signal
	6	KUIOIRN1	I	0/3.3 V DC	KUIOIRN1 signal
	7	KUIORDY0	0	0/3.3 V DC	KUIORDY0 signal
	8	KUIORDY1	0	0/3.3 V DC	KUIORDY1 signal
	9	GND	-	-	Ground
	10	GND	-	-	Ground
	11	KUIODACKRN0	0		KUIODACKRN0 signal
	12	KUIODACKRN1	0		KUIODACKRN1 signal
	13	KUIODACKTN0	0		
	14	KUIODACKTN1	0	0/3.3 V DC (pulse)	KUIODACKTN1 signal
	15	KUIORSTN0	0	0/3.3 V DC	KUIORSTN0 signal
	16	KUIORSTN1	0	0/3.3 V DC	KUIORSTN1 signal
	17	GND	-	-	Ground
	18	GND	-	-	Ground
	19	SLEEP	0	0/3.3 V DC	SLEEP signal
	20	CFOEN0	0	0/3.3 V DC (pulse)	CFOEN0 signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC9	21	EXTBOEN	0	0/3.3 V DC (pulse)	EXTBOEN signal
Connected to	22	CFWEN0	0	0/3.3 V DC (pulse)	CFWEN0 signal
the interface	23	EXTBDIR	0	0/3.3 V DC (pulse)	EXTBDIR signal
PWB	24	CFRST0	0	0/3.3 V DC	CFRST0 signal
	25	CF0CSN0	0	0/3.3 V DC (pulse)	CF0CSN0 signal
	26	CFWAITN0	Ι	0/3.3 V DC	CFWAITN0 signal
	27	CF0CSN1	0	0/3.3 V DC (pulse)	CF0CSN1 signal
	28	CF0CDET1	Ι	0/3.3 V DC	CF0CDET1 signal
	29	GND	-	-	Ground
	30	CF0CDET2	Ι	0/3.3 V DC	CF0CDET2 signal
YC10	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
the optional	3	3.3V	0	3.3 V DC	3.3 V DC power to DPRPWB
DP	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	Ι	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	Ι	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	I	0/3.3 V DC (pulse)	Image data signal
	22	DGB1	Ι	0/3.3 V DC (pulse)	Image data signal
	23	DGB2	Ι	0/3.3 V DC (pulse)	Image data signal
	24	DGB3	Ι	0/3.3 V DC (pulse)	Image data signal
	25	DGB4	Ι	0/3.3 V DC (pulse)	Image data signal
	26	DGB5	Ι	0/3.3 V DC (pulse)	Image data signal
	27	DGB6	Ι	0/3.3 V DC (pulse)	Image data signal
	28	DGB7	Ι	0/3.3 V DC (pulse)	Image data signal
	29	GND	-	-	Ground
	30	DBB0	Ι	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	Ι	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

Connector	Pin No.	Signal	I/O	Voltage	Description
YC10	36	DBB6	I	0/3.3 V DC (pulse)	Image data signal
Connected to	37	DBB7	I	0/3.3 V DC (pulse)	Image data signal
the optional	38	TWS SCM HALF	0	0/3.3 V DC	DPRPWB control signal
DP	39	RES_SLEEP	0	0/3.3 V DC	DPRPWB control signal
	40	_ TWS_DET1	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		Address bus signal
	44	LA4	0		Address bus signal
	45	LA5	0		Address bus signal
	46	LA6	0		Address bus signal
	47	LA7	0		Address bus signal
	48	LA8	0		Address bus signal
	49	LA9	0		Address bus signal
	50	LA10	0		Address bus signal
	51	LA11	0		Address bus signal
	52	LA12	0		Address bus signal
	53	LA13	0		Address bus signal
	54	LA14	0		Address bus signal
	55	LA15	0	0/3.3 V DC (pulse)	Address bus signal
	56	LA16	0		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	I	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
	73	OEZ	0	0/3.3 V DC (pulse)	DPRPWB control signal
	74	SCLKIN	0	0/3.3 V DC (pulse)	DPRPWB clock signal
	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

Connector	Pin No.	Signal	I/O	Voltage	Description
YC11	1	GND	-	-	Ground
Connected to	2	G6_SC_SCLK	0	0/3.3 V DC (pulse)	ISCPWB clock signal
the ISC PWB	3	GND	-	-	Ground
	4	G6_SC_SI	0	0/3.3 V DC (pulse)	ISCPWB serial communication data signal
	5	GND	-	-	Ground
	6	G6_SC_SO	I	0/3.3 V DC (pulse)	ISCPWB serial communication data signal
	7	G6_SC_SBSY	I	0/3.3 V DC	ISCPWB busy signal
	8	G6_SC_SDIR	I	0/3.3 V DC	ISCPWB communication direction signal
	9	G6_SC_IRN	Ι	0/3.3 V DC	ISCPWB interrupt signal
	10	HLD_SCN	0	0/3.3 V DC	ISCPWB scanner hold signal
	11	GND	-	-	Ground
	12	GND	-	-	Ground
	13	GND	-	-	Ground
	14	IS_SAD4N	I	0/3.3 V DC (pulse)	Image data signal
	15	IS_SAD4P	I	0/3.3 V DC (pulse)	Image data signal
	16	GND	-	-	Ground
	17	IS_SACKN	I	0/3.3 V DC (pulse)	ISCPWB clock signal
	18	IS_SACKP	I	0/3.3 V DC (pulse)	ISCPWB clock signal
	19	GND	-	-	Ground
	20	IS_SAD3N	I	0/3.3 V DC (pulse)	Image data signal
	21	IS_SAD3P	I	0/3.3 V DC (pulse)	Image data signal
	22	GND	-	-	Ground
	23	IS_SAD2N	I	0/3.3 V DC (pulse)	Image data signal
	24	IS_SAD2P	I	0/3.3 V DC (pulse)	Image data signal
	25	GND	-	-	Ground
	26	IS_SAD1N	I	0/3.3 V DC (pulse)	
	27	IS_SAD1P	I	0/3.3 V DC (pulse)	Image data signal
	28	GND	-	-	Ground
	29	GND	-	-	Ground
	30	GND	-	-	Ground
	31	GND	-	-	Ground
YC12	1	FPSTAT	I	0/3.3 V DC	Operation panel status signal
Connected to the main	2	S LED0	0	0/3.3 V DC	Operation panel LED display signal
operation	3	S LED1	0	0/3.3 V DC	Operation panel LED display signal
PWB	4	PANEL RESET	0	0/3.3 V DC	OPWB-M reset signal
	5		0	0/3.3 V DC	Operation panel displaying enable signal
	6	SW FOOTN	-	-	Not used
	7	+24V DOWN	0	0/3.3 V DC	24 V DC down signal
	8	SUPND ENTER	0	0/3.3 V DC	Energy save mode control signal
	9	AUDIO	0	Analog	Audio output signal
	10	SGND	-	-	Ground
	11	PH KEY	I	0/3.3 V DC	Power key: On/Off
	12	SGND	-	-	Ground
	13	SUPND POWER	0	5 V DC	5 V DC power to OPWB-M

Connector	Pin No.	Signal	I/O	Voltage	Description
YC17	1	VBUS	I	5 V DC	5 V DC power input
Connected to	2	DATA-	I/O	-	USB data signal
the main	3	DATA+	I/O	-	USB data signal
operation PWB	4	NC	-	-	Not used
	5	GND	-	-	Ground
YC19	U1	VBUS	0	5 V DC	5 V DC power output
Connected to	U2	DATA-	I/O	-	USB data signal
the USB	U3	DATA+	I/O	-	USB data signal
	U4	GND	-	-	Ground
YC20	U1	VBUS	0	5 V DC	5 V DC power output
Connected to	U2	DATA-	I/O	-	USB data signal
the USB	U3	DATA+	I/O	-	USB data signal
	U4	GND	-	-	Ground
YC21	1	VBUS	0	5 V DC	5 V DC power output
Connected to	2	DATA-	I/O	-	USB data signal
the USB	3	DATA+	I/O	-	USB data signal
	4	NC	-	-	Not used
	5	GND	-	-	Ground
YC23	1	CLT FAN	0	0/5 V DC	MFM: On/Off
Connected to	2	GND	-	-	Ground
the main fan motor	3	+5V	0	5 V DC	5 V DC power to MFM
YC24	1	5V	I	5 V DC	5 V DC power from PSPWB
Connected to	2	5V	I	5 V DC	5 V DC power from PSPWB
the power source PWB	3	5V	I	5 V DC	5 V DC power from PSPWB
	4	5V	I	5 V DC	5 V DC power from PSPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
YC25	1	5V	0	5 V DC	5 V DC power to IFPWB
Connected to the interface PWB	2	GND	-	-	Ground

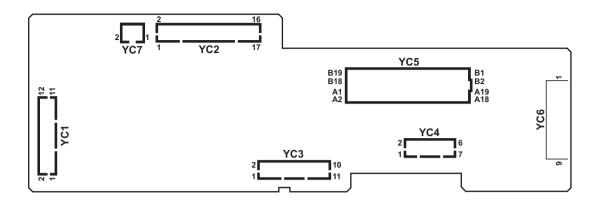
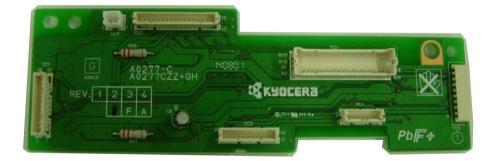


Figure 2-3-4 Main front PWB silk-screen diagram



Main front PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	SEP CONT	0	Analog	Separation bias control voltage
Connected to	2	SEP REM	0	0/3.3 V DC	Separation bias: On/Off
the transfer	3	T2 INV CONT	0	Analog	Secondary transfer (reverse) bias control voltage
high voltage PWB 2 and	4	T2 CONT	0	Analog	Secondary transfer bias control voltage
outer temper-	5	T2 REM	0	0/3.3 V DC	Secondary transfer bias: On/Off
ature sensor	6	GND	-	-	Ground
	7	+24V2	0	24 V DC	24 V DC power to THVPWB2
	8	T2 HV SET	I	0/3.3 V DC	THVPWB2 set signal
	9	+5V3	0	5 V DC	5 V DC power to OUTTEMS
	10	SDA	Ι	0/3.3 V DC (pulse)	OUTTEMS EEPROM data signal
	11	GND	-	-	Ground
	12	SCLK	0	0/3.3 V DC (pulse)	OUTTEMS EEPROM clock signal
YC2	1	FRONT_FAN	0	0/24 V DC	RFM: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power to RFM
the rotary fan motor, rotary	3	EJT_MT_AP	0	0/24 V DC (pulse)	RGM drive control signal
guide motor,	4	EJT_MT_BP	0	0/24 V DC (pulse)	RGM drive control signal
rotary guide	5	EJT_MT_AN	0	0/24 V DC (pulse)	RGM drive control signal
sensor, eject switch and	6	EJT_MT_BN	0	0/24 V DC (pulse)	RGM drive control signal
job eject	7	GND	-	-	Ground
paper switch	8	GUIDE PI	I	0/3.3 V DC	FSSW: On/Off
	9	+5V1	0	5 V DC	5 V DC power to FSSW
	10	GND	-	-	Ground
	11	FUSER PI	Ι	0/3.3 V DC	ESW: On/Off
	12	+5V1	0	5 V DC	5 V DC power to ESW
	13	+5V1	0	5 V DC	5 V DC power to JEPSW
	14	JOB_EXIST	I	0/3.3 V DC	JEPSW: On/Off
	15	GND	-	-	Ground
	16	+5V1	-	-	Not used
	17	JOB LED	-	-	Not used
YC3	1	ERASER K	0	24 V DC	24 V DC power to CL-K
Connected to	2	ERS DR	0	24/0 V DC	CL-K: On/Off
the cleaning lamp K, drum	3	+3.3V1	0	3.3 V DC	3.3 V DC power to DRPWB-K
PWB K and	4	EEP SCL	0	0/3.3 V DC (pulse)	DRPWB-K EEPROM clock signal
drum position	5	EEPSDA	I/O	0/3.3 V DC (pulse)	DRPWB-K EEPROM data signal
sensor K	6	GND	-	-	Ground
	7	A0(OPEN)	-	-	Not used
	8	A1(OPEN)	-	-	Not used
	9	+5V1	0	5 V DC	5 V DC power to DPS-K
	10	POS SENS 4	I	0/3.3 V DC	DPS-K: On/Off
	11	GND	-	-	Ground
		I		1	

Connector	Pin No.	Signal	I/O	Voltage	Description
YC4	1	GND	-	-	Ground
Connected to	2	SDA	I/O	0/3.3 V DC (pulse)	DEVPWB-K EEPROM data signal
the develop-	3	SCK	0	0/3.3 V DC (pulse)	DEVPWB-K EEPROM clock signal
ing PWB K	4	+3.3V1	0	3.3 V DC	3.3 V DC power to DEVPWB-K
	5	TPD4	I	Analog	TS-K detection signal
	6	+24V1	0	24 V DC	24 V DC power to DEVPWB-K
	7	VCONT 4	0	Analog	TS-K control signal
YC5	A1	GND	-	-	Ground
Connected to	A2	GND	-	-	Ground
the engine PWB	A3	GND	-	-	Ground
1 000	A4	+24V1	I	24 V DC	24 V DC power from EPWB
	A5	GND	-	-	Ground
	A6	+5V3	I	5 V DC	5 V DC power from EPWB
	A7	PGND	-	-	Ground
	A8	PGND	-	-	Ground
	A9	+5V1	I	5 V DC	5 V DC power from EPWB
	A10	VCONT K	I	Analog	TS-K control signal
	A11	TPD1 K	0	Analog	TS-K detection signal
	A12	FRONT_FAN	I	0/24 V DC	RFM: On/Off
	A13	POS SEN K	0	0/3.3 V DC	DPS-K: On/Off
	A14	ERS K	I	24/0 V DC	CL-K: On/Off
	A15	+3.3V1	I	3.3 V DC	3.3 V DC power from EPWB
	A16	PGND	-	-	Ground
	A17	+24V2	I	24 V DC	24 V DC power from EPWB
	A18	+24V2	I	24 V DC	24 V DC power from EPWB
	A19	+24V2	I	24 V DC	24 V DC power from EPWB
	B1	EEP SCL 1	I	0/3.3 V DC (pulse)	EEPROM clock signal
	B2	EEP SDA 1	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	B3	FRONTOPEN	0	0/3.3 V DC	FCSW: On/Off
	B4	HUMIDSCL	I	0/3.3 V DC (pulse)	OUTTEMS EEPROM clock signal
	B5	HUMIDSDA	0	0/3.3 V DC (pulse)	OUTTEMS EEPROM data signal
	B6	MT_PD	I	0/3.3 V DC	RGM control signal
	B7	T2REM	I	0/3.3 V DC	Secondary transfer bias: On/Off
	B8	T2CONT	I	Analog	Secondary transfer bias control voltage
	B9	T2INVCONT	I	Analog	Secondary transfer (reverse) bias control voltage
	B10	SEPREM	I	0/3.3 V DC	Separation bias: On/Off
	B11	SEPCONT	Ι	Analog	Separation bias control voltage
	B12	JOB_LED	-	-	Not used
	B13	JOB_EXIST	0	0/3.3 V DC	JEPSW: On/Off
	B14	FUSER PI	0	0/3.3 V DC	ESW: On/Off
	B15	GUIDE PI	0	0/3.3 V DC	RGS: On/Off
	B16	MT DR	I	0/3.3 V DC	RGM: On/Off
	B17	MT CLK	Ι	0/3.3 V DC (pulse)	RGM clock signal
	B18	MT DIR	I	0/3.3 V DC	RGM drive switch signal
	B19	CONTAIN FAN	I	0/24 V DC	CFM: On/Off

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YC6 1 +3.3V1 0 3.3 V DC 3.3 V DC power to FRPWB-S Connected to the sub front PWB 2 +5V1 0 5 V DC 5 V DC power to FRPWB-S 4 EEP SCLK 0 0/3.3 V DC (pulse) EEPROM clock signal 6 FRONT OPEN 1 0/3.3 V DC 9/3.3 V DC 6 FRONT OPEN 1 0/3.3 V DC FCSW: On/Off 7 GND - Ground 9 GND - - Ground YC7 1 +24V1 0 24 V DC 24 V DC power to CFM Connected to the container fan motor 1 +24V1 0 24 V DC 24 V DC power to CFM	Connector	Pin No.	Signal	I/O	Voltage	Description
Connected to the sub front PWB2+5V1O5 V DC5 V DC power to FRPWB-S3+24V1O24 V DC24 V DC power to FRPWB-S4EEP SCLKO0/3.3 V DC (pulse)EEPROM clock signal5EEP SDAI/O0/3.3 V DC (pulse)EEPROM data signal6FRONT OPENI0/3.3 V DCFCSW: On/Off7GNDGround8GNDGround9GNDGroundYC71+24V1O24 V DC24 V DC power to CFMConnected to the container2CONTAIN_FANO0/24 V DCCFM: On/Off			-	0		
the sub front PWB3+24V1O24 V DC24 V DC power to FRPWB-S4EEP SCLKO0/3.3 V DC (pulse)EEPROM clock signal5EEP SDAI/O0/3.3 V DC (pulse)EEPROM data signal6FRONT OPENI0/3.3 V DCFCSW: On/Off7GNDGround8GNDGround9GNDGround71+24V1O24 V DC24 V DC power to CFMConnected to the container2CONTAIN_FANO0/24 V DCCFM: On/Off	Connected to	2	+5V1	0	5 V DC	5 V DC power to FRPWB-S
PWB4EEP SCLKO0/3.3 V DC (pulse)EEPROM clock signal5EEP SDAI/O0/3.3 V DC (pulse)EEPROM data signal6FRONT OPENI0/3.3 V DCFCSW: On/Off7GNDGround8GNDGround9GNDGroundYC71+24V1O24 V DC24 V DC power to CFMConnected to the container2CONTAIN_FANO0/24 V DCCFM: On/Off		3	+24V1	0	24 V DC	24 V DC power to FRPWB-S
5 EEP SDA I/O 0/3.3 V DC (pulse) EEPROM data signal 6 FRONT OPEN I 0/3.3 V DC FCSW: On/Off 7 GND - - Ground 8 GND - - Ground 9 GND - - Ground 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off	PWB	4	EEP SCLK	0		EEPROM clock signal
6 FRONT OPEN I 0/3.3 V DC FCSW: On/Off 7 GND - - Ground 8 GND - - Ground 9 GND - - Ground 9 GND - - Ground YC7 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off						
7 GND - - Ground 8 GND - - Ground 9 GND - - Ground 9 GND - - Ground YC7 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off						
8 GND - - Ground 9 GND - - Ground YC7 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off					-	
9 GND - Ground YC7 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off					_	
YC7 1 +24V1 O 24 V DC 24 V DC power to CFM Connected to the container 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off					-	
Connected to 2 CONTAIN_FAN O 0/24 V DC CFM: On/Off the container	YC7				24 V DC	
the container						
	the container	2	CONTAIN_FAN	0	0/24 V DC	CFM: On/Off

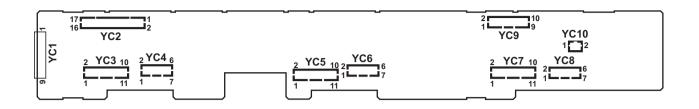


Figure 2-3-5 Sub front PWB silk-screen diagram



Sub front PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	+3.3V1	Ι	3.3 V DC	3.3 V DC power to FRPWB-S
Connected to	2	+5V1	Ι	5 V DC	5 V DC power to FRPWB-S
the main front	3	+24V1	Ι	24 V DC	24 V DC power to FRPWB-S
PWB	4	EEP SCLK	Ι	0/3.3 V DC (pulse)	EEPROM clock signal
	5	EEP SDA	I/O	0/3.3 V DC (pulse)	EEPROM data signal
	6	FRONT OPEN	0	0/3.3 V DC	FCSW: On/Off
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	GND	-	-	Ground
YC2	1	FRONTDLP1_FAN	Ι	0/24 V DC	DEVFM1: On/Off
Connected to	2	FRONTDLP2_FAN	Ι	0/24 V DC	DEVFM2: On/Off
the engine	3	WTNR_LED	Ι	0/5 V DC (pulse)	WTLED LED emitter signal
PWB	4	WTNER_CHECK	0	Analog	WTS detection signal
	5	WTNR_SET	-	-	Not used
	6	DLP_VCONT3	Ι	Analog	TS-Y control signal
	7	TPD3	0	Analog	TS-Y detection signal
	8	DRM3_POSITION	0	0/3.3 V DC	DPS-Y: On/Off
	9	ERS3_DR	Ι	24/0 V DC	CL-Y: On/Off
	10	DLP_VCONT2	Ι	Analog	TS-C control signal
	11	TPD2	0	Analog	TS-C detection signal
	12	DRM2_POSITION	0	0/3.3 V DC	DPS-C: On/Off
	13	ERS2_DR	Ι	24/0 V DC	CL-C: On/Off
	14	DLP_VCONT1	Ι	Analog	TS-M control signal
	15	TPD1	0	Analog	TS-M detection signal
	16	DRM1_POSITION	0	0/3.3 V DC	DPS-M: On/Off
	17	ERS1_DR	Ι	24/0 V DC	CL-M: On/Off
YC3	1	ERASER Y	0	24 V DC	24 V DC power to CL-Y
Connected to	2	ERS DR	0	24/0 V DC	CL-Y: On/Off
the cleaning lamp Y, drum	3	+3.3V1	0	3.3 V DC	3.3 V DC power to DRPWB-Y
PWB Y and	4	EEP SCL	0	0/3.3 V DC (pulse)	DRPWB-Y EEPROM clock signal
drum position	5	EEPSDA	I/O	0/3.3 V DC (pulse)	DRPWB-Y EEPROM data signal
sensor Y	6	GND	-	-	Ground
	7	A0(GND)	-	-	Ground
	8	A1(OPEN)	-	-	Not used
	9	+5V1	0	5 V DC	5 V DC power to DPS-Y
	10	POS SENS 3	Ι	0/3.3 V DC	DPS-Y: On/Off
	11	GND	-	-	Ground
YC4	1	GND	-	-	Ground
Connected to	2	SDA	I/O	0/3.3 V DC (pulse)	DEVPWB-Y EEPROM data signal
the develop- ing PWB Y	3	SCK	0	0/3.3 V DC (pulse)	DEVPWB-Y EEPROM clock signal
	4	+3.3V1	0	3.3 V DC	3.3 V DC power to DEVPWB-Y
	5	TPD3	Ι	Analog	TS-Y detection signal
	6	+24V1	0	24 V DC	24 V DC power to DEVPWB-Y
	7	VCONT 3	0	Analog	TS-Y control signal

Connector	Pin No.	Signal	I/O	Voltage	Description
YC5	1	ERASER C	0	24 V DC	24 V DC power to CL-C
Connected to	2	ERS DR	0	24/0 V DC	CL-C: On/Off
the cleaning	3	+3.3V1	0	3.3 V DC	3.3 V DC power to DRPWB-C
lamp C, drum PWB C and	4	EEP SCL	0	0/3.3 V DC (pulse)	DRPWB-C EEPROM clock signal
drum position	5	EEPSDA	I/O	0/3.3 V DC (pulse)	DRPWB-C EEPROM data signal
sensor C	6	GND	-	-	Ground
	7	A1(OPEN)	-	-	Not used
	8	A0(GND)	-	-	Ground
	9	+5V1	0	5 V DC	5 V DC power to DPS-C
	10	POS SENS 2	Ι	0/3.3 V DC	DPS-C: On/Off
	11	GND	-	-	Ground
YC6	1	GND	-	-	Ground
Connected to	2	SDA	I/O	0/3.3 V DC (pulse)	DEVPWB-C EEPROM data signal
the develop-	3	SCK	0		DEVPWB-C EEPROM clock signal
ing PWB C	4	+3.3V1	0	3.3 V DC	3.3 V DC power to DEVPWB-C
	5	TPD2	I	Analog	TS-C detection signal
	6	+24V1	0	24 V DC	24 V DC power to DEVPWB-C
	7	VCONT 2	0	Analog	TS-C control signal
YC7	1	ERASER M	0	24 V DC	24 V DC power to CL-M
Connected to	2	ERS DR	0	24/0 V DC	CL-M: On/Off
the cleaning	3	+3.3V1	0	3.3 V DC	3.3 V DC power to DRPWB-M
lamp M, drum PWB M and	4	EEP SCL	0	0/3.3 V DC (pulse)	DRPWB-M EEPROM clock signal
drum position sensor M	5	EEPSDA	I/O	0/3.3 V DC (pulse)	DRPWB-M EEPROM data signal
	6	GND	-	-	Ground
	7	A0(GND)	-	-	Ground
	8	A0(GND)	-	-	Ground
	9	+5V1	0	5 V DC	5 V DC power to DPS-M
	10	POS SENS 1	Ι	0/3.3 V DC	DPS-M: On/Off
	11	GND	-	-	Ground
YC8	1	GND	-	-	Ground
Connected to	2	SDA	I/O	0/3.3 V DC (pulse)	DEVPWB-M EEPROM data signal
the develop-	3	SCK	0	0/3.3 V DC (pulse)	DEVPWB-M EEPROM clock signal
ing PWB M	4	+3.3V1	0	3.3 V DC	3.3 V DC power to DEVPWB-M
	5	TPD1	Т	Analog	TS-M detection signal
	6	+24V1	0	24 V DC	24 V DC power to DEVPWB-M
	7	VCONT 1	0	Analog	TS-M control signal

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Connector	Pin No.	Signal	I/O	Voltage	Description
YC9	1	FDLP FAN1	0	0/24 V DC	DEVFM1: On/Off
Connected to	2	+24V1	0	24 V DC	24 V DC power to DEVFM1
the develop-	3	FDLP FAN2	0	0/24 V DC	DEVFM2: On/Off
ing fan motor 1/2 and waste	4	+24V1	0	24 V DC	24 V DC power to DEVFM2
toner full	5	+5V1	0	5 V DC	5 V DC power to WTFPWB
PWB	6	WTNR LED	0	0/5 V DC (pulse)	WTFPWB LED emitter signal
	7	WTNR SENS	I	Analog	WTS detection signal
	8	GND	-	-	Ground
	9	WTB	-		Not used
	10	GND	_		Not used
YC10	1	FRONT OPEN	-	- 0/3.3 V DC	FCSW: On/Off
Connected to	2				
the front	2	GND	-	-	Ground
cover switch					

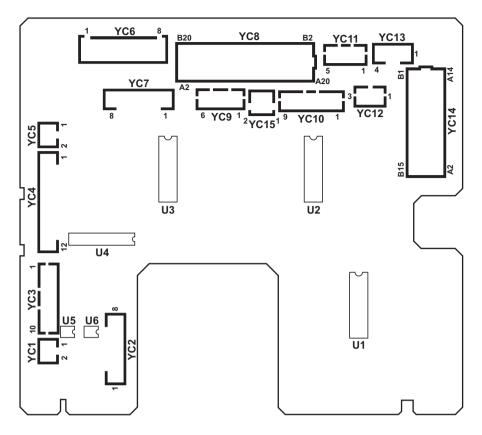


Figure 2-3-6 Feed PWB silk-screen diagram



Feed PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	+24V2	0	24 V DC	24 V DC power to PFCL2
Connected to	2	FED2 CLT REM	0	0/24 V DC	PFCL2: On/Off
the paper feed clutch 2					
YC2	1	+24V2	0	24 V DC	24 V DC power to PCM
Connected to	2	+24V2 +24V2	0	24 V DC	24 V DC power to PCM
the paper	2	PGND	-	24 V DC	Ground
conveying	4	PGND	-	-	Ground
motor	4 5	FEED MT RDY	-	- 0/3.3 V DC	PCM ready signal
	6	FEED MT DR	0	0/3.3 V DC	PCM: On/Off
	7	FEED MT DR	0	0/3.3 V DC	PCM drive switch signal
	8	FEED MT CLK	0	0/3.3 V DC (pulse)	PCM clock signal
YC3	0 1	LFT1 MOT SIG2	<u> </u>	0/3.3 V DC (pulse)	LM1 paper gauge signal
Connected to	2	PGND	-	0/3.3 V DC	Ground
the lift motor	2	LFT1 MOT SIG1		- 0/3.3 V DC	LM1 paper gauge signal
1/2					
	4	LFT1 MOT DR2 LFT1 MOT DR1	0	0/24 V DC	LM1 drive control signal LM1 drive control signal
	5 6		0	0/24 V DC	Ŭ
	0 7	LFT2 MOT SIG2 PGND	I	0/3.3 V DC	LM2 paper gauge signal Ground
	8	LFT2 MOT SIG1	-	- 0/3.3 V DC	LM2 paper gauge signal
	о 9	LFT2 MOT DR2	0	0/3.3 V DC	LM2 drive control signal
	9 10	LFT2 MOT DR2	0	0/24 V DC	LM2 drive control signal
YC4	10	+5V1	0	5 V DC	5 V DC power to LSW1
Connected to	2	CAS1 LFT UP	I	0/3.3 V DC	LSW1: On/Off
the lift switch	2	GND	1	0/3.3 V DC	Ground
1/2 and paper	4	+5V1	0	5 V DC	5 V DC power to PSW1
switch 1/2	5	CAS1 EMPTY	I	0/3.3 V DC	PSW1: On/Off
	6	GND	-	0.0.0 V DO	Ground
	7	+5V1	0	5 V DC	5 V DC power to LSW2
	8	CAS2 LFT UP	I	0/3.3 V DC	LSW2: On/Off
	9	GND		-	Ground
	10	+5V1	0	5 V DC	5 V DC power to PSW2
	11	CAS2 EMPTY	I	0/3.3 V DC	PSW2: On/Off
	12	GND	-	-	Ground
YC5	1	+24V2	0	24 V DC	24 V DC power to PFCL1
Connected to	2	FED1 CLT REM	0	0/24 V DC	PFCL2: On/Off
the paper feed clutch 1	-		-		
YC6	1	+24V2	I	24 V DC	24 V DC power from EPWB
Connected to	2	+24V2	I	24 V DC	24 V DC power from EPWB
the engine	3	+24V2	I	24 V DC	24 V DC power from EPWB
PWB	4	PGND	-	-	Ground
	5	PGND	-	-	Ground
	6	PGND	-	-	Ground
	7	PGND	-	-	Ground
	8	+5V1	I	5 V DC	5 V DC power from EPWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC7	1	REG_BP	0	0/24 V DC (pulse)	RM drive control signal
Connected to	2	REG_AP	0	0/24 V DC (pulse)	RM drive control signal
the registra-	3	REG_BN	0	0/24 V DC (pulse)	RM drive control signal
tion motor and middle	4	REG_AN	0	0/24 V DC (pulse)	RM drive control signal
motor	5	ROL_BP	0	0/24 V DC (pulse)	MM drive control signal
	6	ROL_AP	0	0/24 V DC (pulse)	MM drive control signal
	7	ROL_BN	0	0/24 V DC (pulse)	MM drive control signal
	8	ROL_AN	0	0/24 V DC (pulse)	MM drive control signal
YC8	A1	LFT1 MT SIG2	0	0/3.3 V DC	LM1 paper gauge signal
Connected to	A2	LFT1 MT SIG1	0	0/3.3 V DC	LM1 paper gauge signal
the engine	A3	LFT2 MT SIG2	0	0/3.3 V DC	LM2 paper gauge signal
PWB	A4	LFT2 MT SIG1	0	0/3.3 V DC	LM2 paper gauge signal
	A5	LFT1 MT DR	I	0/24 V DC	LM1: On/Off
	A6	LFT2 MT DR	I	0/24 V DC	LM2: On/Off
	A7	LFT1 MT LOCK	0	0/3.3 V DC	LM1 lock signal
	A8	LFT2 MT LOCK	0	0/3.3 V DC	LM2 lock signal
	A9	CAS1LIFT UP	0	0/3.3 V DC	LSW1: On/Off
	A10	CAS1 EMPTY	0	0/3.3 V DC	PSW1: On/Off
	A11	CAS2 LIFT UP	0	0/3.3 V DC	LSW2: On/Off
	A12	CAS2 EMPTY	0	0/3.3 V DC	PSW2: On/Off
	A13	FED2 CLT REM	I	0/24 V DC	PFCL2: On/Off
	A14	FEED MT CLK	I	0/3.3 V DC (pulse)	PCM clock signal
	A15	FEED MT DIR	I	0/3.3 V DC	PCM drive switch signal
	A16	FEED MT DR	I	0/3.3 V DC	PCM: On/Off
	A17	FEED MT RDY	0	0/3.3 V DC	PCM ready signal
	A18	DU MT DR	I	0/3.3 V DC	DUM: On/Off
	A19	SENSOR FAN	I	0/3.3 V DC	LFM: On/Off
	A20	DU MT CLK	I	0/3.3 V DC (pulse)	DUM clock signal
	B1	DU MT PD	I	0/3.3 V DC	DUM current control signal
	B2	CAS OPEN	0	0/3.3 V DC	LC2SW: On/Off
	B3	FEED2 JAM	Ο	0/3.3 V DC	FSW2: On/Off
	B4	FEED3 JAM	ο	0/3.3 V DC	FSW3: On/Off
	B5	DU JAM	ο	0/3.3 V DC	DUSW: On/Off
	B6	DU OPEN	ο	0/3.3 V DC	LC1SW: On/Off
	B7	COV FAN REM	I	0/24 V DC	PCFM1,2: On/Off
	B8	JAM2 LED	I	0/3.3 V DC	JLEDPWB2 LED emitter signal
	B9	JAM1 LED	I	0/3.3 V DC	JLEDPWB1 LED emitter signal
	B10	DU ENTER JAM	ο	0/3.3 V DC	FSSW: On/Off
	B11	BELT JAM	0	0/3.3 V DC	JDS: On/Off
	B12	LOOP SENS	0	0/3.3 V DC	LS: On/Off
	B13	REG UP1 CLT REM	I	0/24 V DC	RCL: On/Off
	B14	ROL UP2 CLT REM	Ι	0/24 V DC	MCL: On/Off

Connector	Pin No.	Signal	I/O	Voltage	Description
YC8	B15	FEED1 JAM	0	0/3.3 V DC	FSW1: On/Off
Connected to	B16	MPF2 JAM	0	0/3.3 V DC	MPPCSW: On/Off
the engine	B17	LSU SOL DR	Ι	0/24 V DC	LSUCSOL: On/Off
PWB	B18	REG JAM	0	0/3.3 V DC	RSW: On/Off
	B19	FED1 CLT REM	I	0/24 V DC	PFCL1: On/Off
	B20	MT_PD	I	0/3.3 V DC	PCM current control signal
YC9	1	ROL MT PD	I	0/3.3 V DC	MM current control signal
Connected to	2	ROL MT DR	Ι	0/3.3 V DC	MM: On/Off
the engine PWB	3	ROL MT CLK	I	0/3.3 V DC (pulse)	MM clock signal
PVVD	4	REG MT PD	I	0/3.3 V DC	RM current control signal
	5	REG MT DR	I	0/3.3 V DC	RM: On/Off
	6	REG MT CLK	I	0/3.3 V DC (pulse)	RM clock signal
YC10	1	GND	-	-	Ground
Connected to	2	REG JAM	I	0/3.3 V DC	RSW: On/Off
the registra-	3	+5V1	0	5 V DC	5 V DC power to RSW
tion switch, MP paper	4	GND	-	-	Ground
conveying	5	MPF2 JAM	Ι	0/3.3 V DC	MPPCSW: On/Off
switch and feed switch 1	6	+5V1	0	5 V DC	5 V DC power to MPPCSW
leed Switch 1	7	GND	-	-	Ground
	8	FEED1 JAM	Ι	0/3.3 V DC	FSW1: On/Off
	9	+5V1	0	5 V DC	5 V DC power to FSW1
YC11	1	CAS OPEN	I	0/3.3 V DC	LC3SW: On/Off
Connected to	2	GND	-	-	Ground
the left cover	3	GND	-	-	Ground
3 switch and feed switch 2	4	FEED2 JAM	Ι	0/3.3 V DC	FSW2: On/Off
	5	+5V1	0	5 V DC	5 V DC power to FSW2
YC12	1	GND	-	-	Ground
Connected to	2	FEED3 JAM	Ι	0/3.3 V DC	FSW3: On/Off
the feed switch 3	3	+5V1	0	5 V DC	5 V DC power to FSW3
YC13	1	ROL UP2 CLT REM	0	0/24 V DC	FCL2: On/Off
Connected to	2	+24V2	0	24 V DC	24 V DC power to FCL2
the feed clutch 1/2	3	REG UP1 CLT REM	0	0/24 V DC	FCL1: On/Off
	4	+24V2	Ο	24 V DC	24 V DC power to FCL1

Connector	Pin No.	Signal	I/O	Voltage	Description
YC14	A1	LOOP SENS	I	Analog	LS: On/Off
Connected to	A2	GND	-	-	Ground
the loop sen-	A3	+5V1	0	5 V DC	5 V DC power to LS
sor, feedshift switch, JAM	A4	GND	-	-	Not used
LED PWB 1/	A5	BELT JAM	-	-	Not used
2, loop fan	A6	+5V1	-	-	Not used
motor, paper conveying fan	A7	GND	-	-	Ground
motor 1/2, left	A8	DU ENTER JAM	I	0/3.3 V DC	FSSW: On/Off
cover 1	A9	+5V1	0	5 V DC	5 V DC power to FSSW
switch, duplex switch and	A10	+5V1	0	5 V DC	5 V DC power to JLEDPWB2
duplex motor	A11	JAM2 LED	0	0/5 V DC (pulse)	LED emitter signal
	A12	+5V1	0	5 V DC	5 V DC power to JLEDPWB1
	A13	JAM1 LED	0	0/5 V DC (pulse)	LED emitter signal
	A14	SENSOR FAN	0	0/24 V DC	LFM: On/Off
	A15	+24V2	0	24 V DC	24 V DC power to LFM
	B1	NC	-	-	Not used
	B2	NC	_	_	Not used
	B3	COV FAN1 REM	-	_	Not used
	B4	+24V2	-	_	Not used
	B5	COV FAN2 REM	-	_	Not used
	B6	+24V2	-	_	Not used
	B7	DU OPEN	-	0/3.3 V DC	LC1SW: On/Off
	B8	GND	-	-	Ground
	B9	GND	-		Ground
	B10	DU JAM	-	0/3.3 V DC	DUSW: On/Off
	B10	+5V1	0	5 V DC	5 V DC power to DUSW
	B12	DU AN	0		DUM drive control signal
	B13	DU BN	0		DUM drive control signal
	B14	DU AP	0		DUM drive control signal
	B15	DU BP	0	0/24 V DC (pulse)	-
YC15	1	LSU SOL DR	0	0/24 V DC (pulse)	LSUCSOL: On/Off
Connected to	2	+24V2			
connected to the LSU cleaning sole- noid	2	+24V2	0	24 V DC	24 V DC power to LSUCSOL

2-3-7 ISM PWB

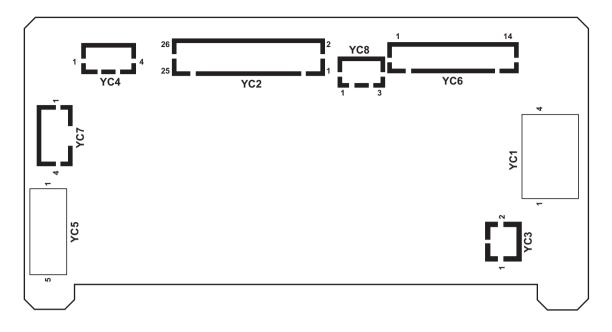
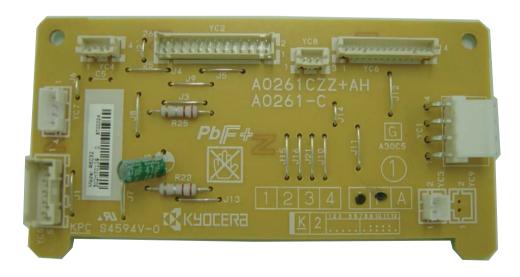


Figure 2-3-7 ISM PWB silk-screen diagram



ISM PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	24V1	Ι	24 V DC	24 V DC power from PSPWB
Connected to	2	GND	-	-	Ground
the power	3	GND	-	-	Ground
source PWB	4	12V1	Ι	12 V DC	12 V DC power from PSPWB
YC2	1	DPTMG	0	0/3.3 V DC	DP timing signal
Connected to	2	DPRDY	0	0/3.3 V DC	DP ready signal
the ISC PWB	3	HPSW	0	0/3.3 V DC	HPSW: On/Off
	4	DPEND	0	0/3.3 V DC	DP end signal
	5	+12V	0	12 V DC	12 V DC power to ISCPWB
	6	DPSEL	Ι	0/3.3 V DC	DP select signal
	7	+12V	0	12 V DC	12 V DC power to ISCPWB
	8	DPSDI	Ι	0/3.3 V DC (pulse)	Serial communication data signal
	9	+5V	Ι	5 V DC	5 V DC power from ISCPWB
	10	DPCLK	Ι	0/3.3 V DC (pulse)	DP clock signal
	11	FANREM	Ι	0/3.3 V DC	SFM: On/Off
	12	DPSDO	0	0/3.3 V DC (pulse)	Serial communication data signal
	13	SM_FR	Ι	0/3.3 V DC (pulse)	SM control signal
	14	DP_CO	0	0/3.3 V DC	DP open signal
	15	GND	-	-	Ground
	16	GND	-	-	Ground
	17	SMTVREF	Т	0/3.3 V DC (pulse)	SM control signal
	18	GND	-	-	Ground
	19	SM_STP	Ι	0/3.3 V DC (pulse)	SM control signal
	20	INV_CLK	Ι		INPWB clock signal
	21	SM_STB	Ι	0/3.3 V DC (pulse)	SM control signal
	22	COSW1	0	0/3.3 V DC	ODSW: On/Off
	23	MON24V	0	0/3.3 V DC	Control signal
	24	INVTH	0	0/3.3 V DC	EL control signal
	25	SLAMPON	Ι	0/3.3 V DC	EL: On/Off
	26	NC	-	-	Not used
YC3	1	+24V	0	24 V DC	24 V DC power to SFM
Connected to the scanner fan motor	2	FANREM	0	0/24 V DC	SFM: On/Off
YC4	1	SGND	-	-	Ground
Connected to	2	COSW1	Ι	0/3.3 V DC	ODSW: On/Off
the original detection	3	+5V	0	5 V DC	24 V DC power to ODSW
switch	4	NC	-	-	Not used
YC5	1	INV_CL	0	0/3.3 V DC (pulse)	INPWB clock signal
Connected to	2	_ INVTH	Ι	0/3.3 V DC	EL control signal
the inverter	3	PGND	-	-	Ground
PWB	4	SLAMPON	0	0/3.3 V DC	EL: On/Off
	5	+24V	0	24 V DC	24 V DC power to INPWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC6	1	DPCLK	0	0/3.3 V DC (pulse)	DP clock signal
Connected to	2	DPSDO	Ι	0/3.3 V DC (pulse)	Serial communication data signal
the optional	3	DPSDI	0	0/3.3 V DC (pulse)	Serial communication data signal
DP	4	DPSEL	0	0/3.3 V DC	DP select signal
	5	DPEND	I	0/3.3 V DC	DP end signal
	6	DPRDY	I	0/3.3 V DC	DP ready signal
	7	DPTMG	I	0/3.3 V DC	DP timing signal
	8	DP CO	Ι	0/3.3 V DC	DP open signal
	9	NC	-	-	Not used
	10	NC	-	-	Not used
	11	GND	-	-	Ground
	12	GND	-	-	Ground
	13	GND	-	-	Ground
	14	GND	-	-	Ground
YC7	1	SMOT BN	0	0/24 V DC (pulse)	SM drive control signal
Connected to	2	SMOT AN	0	0/24 V DC (pulse)	SM drive control signal
the scanner	3	SMOT BP	0	0/24 V DC (pulse)	SM drive control signal
motor	4	SMOT AP	0	0/24 V DC (pulse)	SM drive control signal
YC8	1	SGND	-	-	Ground
Connected to	2	HPSW	I	0/3.3 V DC	HPSW: On/Off
the home position switch	3	+5V	0	5 V DC	5 V DC power to HPSW

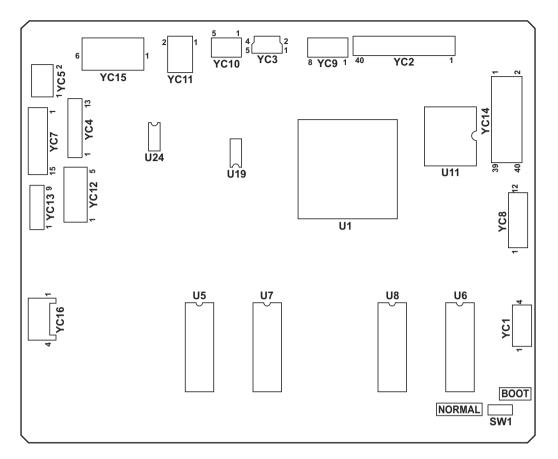
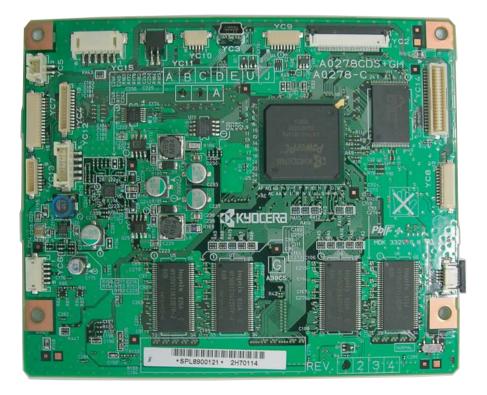


Figure 2-3-8 Main operation PWB silk-screen diagram



Main operation PWB

Connector	Pin No.	Signal	I/O	Voltage	Description
YC1	1	TOP Y+	Ι	Analog	Touch panel Y+ position signal
Connected to	2	LEFT X+	Ι	Analog	Touch panel X+ position signal
the touch panel	3	BOT Y-	Ι	Analog	Touch panel Y- position signal
panei	4	RIGHT X-	Ι	Analog	Touch panel X- position signal
YC2	1	SGND	-	-	Ground
Connected to	2	SGND	-	-	Ground
the 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
	37	+3.3V	0	3.3 V DC	3.3 V DC power to LCD
	38	+3.3V	0	3.3 V DC	3.3 V DC power to 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

Connector	Pin No.	Signal	I/O	Voltage	Description
YC3	1	VBUS	I	5 V DC	5 V DC power input
Connected to	2	DN	I/O	-	USB data signal
the main	3	DP	I/O	-	USB data signal
PWB	4	ID	-	-	Not used
	5	GND	-	-	Ground
YC4	1	SUPND POWER	Ι	5 V DC	5 V DC power from MPWB
Connected to	2	GND	-	-	Ground
the main	3	PH KEY	0	0/5 V DC	Power key: On/Off
PWB	4	GND	-	-	Ground
	5	AUDIO	I	Analog	Audio output signal
	6	SUPND_ENTER	I	0/3.3 V DC	Energy save mode control signal
	7	+24V_DOWN	I	0/3.3 V DC	24 V DC down signal
	8	SW_FOOTN	-	-	Not used
	9	HOLDPANEL	I	0/3.3 V DC	Operation panel displaying enable signal
	10	PANEL_RESET	Ι	0/3.3 V DC	MPWB reset signal
	11	S_LED1	I	0/3.3 V DC	Operation panel LED display signal
	12	S_LED0	I	0/3.3 V DC	Operation panel LED display signal
	13	PANEL_STATUS	0	0/3.3 V DC	Operation panel status signal
YC6	1	GND	-	-	Ground
Connected to	2	+12V	0	12 V DC	12 V DC power to LINPWB
the LCD	3	LCDBKLT	0	0/3.3 V DC	LCD back light: On/Off
inverter PWB	4	ADJUST	0	Analog	LCD back light brightness adjustment signal
	5	GND	-	-	Ground
YC7	1	KEY0	Ι	0/3.3 V DC (pulse)	Operation panel key scan return signal 0
Connected to	2	KEY1	I	0/3.3 V DC (pulse)	Operation panel key scan return signal 1
the right oper-	3	KEY2	I	0/3.3 V DC (pulse)	Operation panel key scan return signal 2
ation PWB	4	KEY3	I	0/3.3 V DC (pulse)	Operation panel key scan return signal 3
	5	KEY4	I	0/3.3 V DC (pulse)	Operation panel key scan return signal 4
	6	SCAN0	0	0/3.3 V DC (pulse)	Scan signal 0
	7	SCAN1	0	0/3.3 V DC (pulse)	Scan signal 1
	8	SCAN2	0	0/3.3 V DC (pulse)	Scan signal 2
	9	SCAN3	0	0/3.3 V DC (pulse)	Scan signal 3
	10	SCAN6	0	0/3.3 V DC (pulse)	Scan signal 6
	11	LED0	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 0
	12	LED1	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 1
	13	PH KEY	I	0/5 V DC	Power key: On/Off
	14	SUPND POWER	0	5 V DC	5 V DC power to OPWB-R
	15	GND	-	-	Ground

Connector	Pin No.	Signal	I/O	Voltage	Description
YC8	1	SCAN6	0	0/3.3 V DC (pulse)	Scan signal 6
Connected to	2	KEY5	I	0/3.3 V DC (pulse)	Operation panel key scan return signal 5
the left opera-	3	KEY6	Ι	0/3.3 V DC (pulse)	Operation panel key scan return signal 6
tion PWB	4	KEY7	Ι	0/3.3 V DC (pulse)	Operation panel key scan return signal 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
YC9	1	SCAN4	0	0/3.3 V DC (pulse)	Scan signal 4
Connected to	2	SCAN5	0	0/3.3 V DC (pulse)	Scan signal 5
the upper	3	LED5	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 5
operation PWB	4	LED6	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 6
	5	LED7	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 7
	6	S_LED0	0	0/5 V DC	Operation panel LED display drive signal 0
	7	S_LED1	0	0/5 V DC	Operation panel LED display drive signal 1
	8	GND	-	-	Ground
YC10	1	SCAN5	0	0/3.3 V DC (pulse)	Scan signal 5
Connected to	2	LED5	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 5
the front oper-	3	LED6	0	0/3.3 V DC (pulse)	Operation panel LED display drive signal 6
ation PWB	4	S_LED1	0	0/5 V DC	Operation panel LED display drive signal 1
	5	GND	-	-	Ground
YC11	1	VO2	0	Analog	Speaker sound signal (+)
Connected to the speaker	2	VO1	0	Analog	Speaker sound signal (-)
YC15	1	GND	-	-	Ground
Connected to	2	GND	-	-	Ground
the power source PWB	3	GND	-	-	Ground
Source I WD	4	+5V	I	5 V DC	5 V DC power from PSPWB
	5	+5V	I	5 V DC	5 V DC power from PSPWB
	6	+12V	I	12 V DC	12 V DC power from PSPWB
YC16	1	VPP_LED	0	0/3.3 V DC	LED control signal
Connected to	2	NC	-	-	Ground
the LCD	3	LED_RETURN	I	0/3.3 V DC	LED control signal
	4	NC	-	-	Ground

Maintenance parts list

Maintena	Part No.	Alternative part	
Name used in service manual	Name used in parts list	Fait NO.	No.
Paper feed pulley	PULLEY, PAPER FEED	2AR07220	-
Separation pulley	PULLEY, SEPARATION	2AR07230	-
Forwarding pulley	PULLEY FEED A	2BJ06010	-
MP paper feed pulley	PULLEY, SEPARATION	2AR07230	-
MP separation pulley	PULLEY,SEPARATION	2AR07230	-
MP forwarding pulley	PULLEY LEADING FEED MPT	302FZ08130	2FZ08130
Registration left roller	PARTS, ROLLER REGIST L SP	302FZ94520	2FZ94520
MP paper conveying roller 2	PARTS, ROLLER BYPASS A SP	302FZ94472	2FZ94472
MP paper conveying roller 3	PARTS, ROLLER BYPASS B SP	302FZ94481	2FZ94481
MP middle roller	PARTS, ROLLER MID MPT SP	302FZ94490	2FZ94490
MP paper conveying pulley	PULLEY MPT BYPASS	302FZ07020	2FZ07020
Middle roller	PARTS, ROLLER MIDDLE R SP	302FZ94540	2FZ94540
Upper/Lower feed roller	PARTS ROLLER FEED LOW	302H794200	2H794200
Slit glass	PARTS CONTACT GLASS ADF ASSY	302H793481	2H793481
Contact glass	PARTS CONTACT GLASS ASSY(C)	302H793380	2H793380
	PARTS CONTACT GLASS ASSY(I)	302H793370	2H793370
Mirror 1	MIRROR A	2FB12140	-
Mirror 2 and mirror 3	MIRROR B	302GR17280	2GR17280
Lens	-	-	-
Exposure lamp	PARTS LAMP SCANNER	302H794260	2H794260
Optical rail F	-	-	-
Optical rail R	-	-	-
Original size sensor	SENSOR ORIGINAL	2C927090	-
Laser scanner unit	PARTS LSU UNIT HIGH	302KY93160	2KY93160
Transfer belt unit	PARTS TRANSFER BELT UNIT	302KY93151	2KY93151
Transfer roller	PARTS ROLLER TRANSFER ASSY SP	302KY94300	2KY94300
Developing unit K	PARTS DLP K UNIT	302KY93030	2KY93030
Developing unit C	PARTS DLP C UNIT	302KY93040	2KY93040
Developing unit Y	PARTS DLP Y UNIT	302KY93050	2KY93050
Developing unit M	PARTS DLP M UNIT	302KY93060	2KY93060
Drum unit	PARTS DRUM 50 M UNIT	302KY93070	2KY93070
Fuser unit	PARTS FUSER 240 H UNIT	302KY93121	2KY93121
	PARTS FUSER 120 H UNIT	302KY93110	2KY93110
Eject roller	PARTS ROLLER EXIT FD	302H794670	2H794670
Duplex A roller	PARTS, ROLLER DUPLEX A SP	302FZ94620	2FZ94620
Duplex B roller	ROLLER DUPLEX B	302KA29010	2KA29010
Rear upper filter 2	FILTER VOC	302H733610	2H733610
Left filter	FILTER DUCT PU KME	302H733630	2H733630
Rear lower filter	PARTS COVER FILTER UNIT	302H794630	2H794630
Right filter 1	PARTS FILTER VU ASSY	302H794430	2H794430
Front filter	FILTER DUST	302H703590	2H703590

Maintenance kits

Maintenar	Part No.	Alternative part		
Name used in service manual	Name used in parts list	- Fart NO.	No.	
Maintenance kit A (for 120 V specifications)	MK-856A/MAINTENANCE KIT	1702KY7US0	072KY7US	
Transfer belt unit	PARTS TRANSFER BELT UNIT	-	-	
Transfer roller	ROLLER TRANSFER ASSY MK	-	-	
Developing unit K	DLP K UNIT	-	-	
Drum unit K	DRUM 50 K UNIT	-	-	
Fuser unit	FUSER 120 H UNIT	-	-	
Left filter	FILTER DUCT PU KME	-	-	
Rear upper filter 2	FILTER VOC	-	-	
Maintenance kit A (for 220 - 240 V specifications)	MK-856A/MAINTENANCE KIT	1702KY8KL0	072KY8KL	
Transfer belt unit	PARTS TRANSFER BELT UNIT	-	-	
Transfer roller	ROLLER TRANSFER ASSY MK	-	-	
Developing unit K	DLP K UNIT	-	-	
Drum unit K	DRUM 50 K UNIT	-	-	
Fuser unit	FUSER 240 H UNIT	-	-	
Left filter	FILTER DUCT PU KME	-	-	
Rear upper filter 2	FILTER VOC	-	-	
Maintenance kit B	MK-856B/MAINTENANCE KIT	1702KY0UN0	072KY0UN	
Developing unit M	DLP M UNIT	-	-	
Developing unit C	DLP C UNIT	-	-	
Developing unit Y	DLP Y UNIT			
Drum unit M	DRUM 50 M UNIT	-	-	
Drum unit C	DRUM 50 C UNIT	-	-	
Drum unit Y	DRUM 50 Y UNIT	-	-	

Periodic maintenance procedures

Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Test copy and test print	Perform at the maxi- mum copy size	Test copy	Test copy		

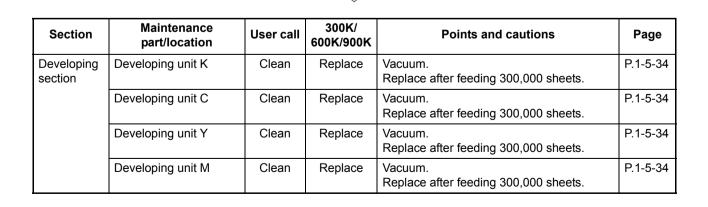


Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Paper feed section	Paper feed pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-3
	Separation pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-3
	Forwarding pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-3
	MP paper feed pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-8
	MP separation pulley	Check Clean	Check Replace	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-8
	MP forwarding pulley	Check Clean	Check Clean	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	P.1-5-8
	Registration left roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	MP paper conveying roller 2	Clean	Clean	Clean with alcohol or a dry cloth.	
	MP paper conveying roller 3	Clean	Check Clean	Clean with alcohol or a dry cloth.	
	MP middle roller	Check Clean	Check Clean	Clean with alcohol or a dry cloth. Replace after feeding 150,000 sheets.	
	MP paper conveying pulley	Clean	Clean	Clean with alcohol or a dry cloth.	
	Middle roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Upper/Lower feed roller	Clean	Clean	Clean with alcohol or a dry cloth.	
	Rollers and pulleys	Clean	Clean	Clean with alcohol or a dry cloth.	
	Clutches	Check Replace	Check	Check state of paper feed	
	Guides	Clean	Clean	Clean with alcohol or a dry cloth.	

Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Optical section	Slit glass	-	Clean	Clean with a dry cloth or alcohol (do not clean with a wet cloth).	
	Contact glass (metric)	-	Clean	Clean with alcohol and then a dry cloth only if vertical black lines appear on the print image.	
	Contact glass (inch)	Clean	Clean	Clean with alcohol and then a dry cloth only if vertical black lines appear on the print image.	
	Mirror 1	Clean	-	Clean with a dry cloth and then air blow only if vertical black lines appear on the print image.	
	Mirror 2 and mirror 3	Clean	-	Clean with a dry cloth and then air blow only if vertical black lines appear on the print image.	
	Lens	Clean	-	Clean with a dry cloth and then air blow only if vertical black lines appear on the print image.	
	Exposure lamp	Check Replace	-	Replace if an image problem occurs.	P.1-5-11
	Optical rail	Grease	-	Check noise and shifting and then apply scanner rail grease PG-671.	
	Original size sensor	Check Clean	-	Clean the sensor emitter and sensor receiver with alcohol or a dry cloth only if there is a problem.	
	Laser scanner unit	-	Check Clean	Vacuum the slit glass.	P.1-5-21



Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Transfer	Transfer belt unit	-	Replace	Replace after feeding 300,000 sheets.	P.1-5-37
section	Transfer roller	-	Replace	Replace after feeding 300,000 sheets.	P.1-5-39



Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Drum section	Drum unit	Clean	Replace	Vacuum. Replace after feeding 300,000 sheets.	P.1-5-35

Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Fuser section	Fuser unit	-	Replace	Replace after feeding 300,000 sheets.	P.1-5-41

Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Eject	Eject roller	-	Clean	Clean with alcohol or a dry cloth.	
section	Duplex A roller	-	Clean	Clean with alcohol or a dry cloth.	
	Duplex B roller	-	Clean	Clean with alcohol or a dry cloth.	
	Guides	-	Clean	Clean with alcohol or a dry cloth.	

Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Covers	Covers	-	Clean	Clean with alcohol or a dry cloth.	
	Original platen	-	Clean	Clean with alcohol or a dry cloth.	

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Section	Maintenance part/location	User call	300K/ 600K/900K	Points and cautions	Page
Other	Rear upper filter 2	-	Replace	Replace after feeding 300,000 sheets.	P.1-5-42
	Left filter	-	Replace	Replace after feeding 300,000 sheets.	P.1-5-42
	Rear lower filter	Clean	Clean	Vacuum.	P.1-5-42
	Right filter 1	Clean	Clean	Vacuum.	P.1-5-42
	Front filter	Clean	Clean	Vacuum.	P.1-5-42
	Clutches	Check Replace	Check	Check state of paper conveying	
	Sensors	Check	Check	Clean the sensor receiver with a dry cloth or air blow.	
	Image quality	Check Adjust	Check Adjust		

2KY





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Chart of image adjustment procedures

Adjusting	Item	Imana	Description		aintenance mode	Original	Dama
order	order		Description	Item No.	Mode	Original	Page
1	Adjusting the magnification in the main scanning direction (printing adjustment)		Polygon motor speed adjustment	U053	Polygon	U053 test pattern	P.1-3-35
2	Adjusting the magnification in the auxiliary scanning direction (print- ing adjustment)		Transfer motor speed adjustment	U053	TC Motor	U053 test pattern	P.1-3-35
3	Adjusting the center line of the MP tray (printing adjustment)		Adjusting the LSU print start timing	U034	LSUOUT LEFT (MPT)	U034 test pattern	P.1-3-30
4	Adjusting the center line of the cas- settes (printing adjustment)		Adjusting the LSU print start timing	U034	LSUOUT LEFT (CAS 1) LSUOUT LEFT (CAS 2) LSUOUT LEFT (CAS 3) LSUOUT LEFT (CAS 4)	U034 test pattern	P.1-3-30
5	Adjusting the leading edge registra- tion of the MP tray (printing adjust- ment)	*	Registration motor turning on timing (sec- ondary paper feed start timing)	U034	LSUOUT TOP MPT	U034 test pattern	P.1-3-28
6	Adjusting the leading edge registra- tion of the cassette (printing adjust- ment)	*	Registration motor turning on timing (sec- ondary paper feed start timing)	U034	LSUOUT TOP CAS	U034 test pattern	P.1-3-28
7	Adjusting the leading edge margin (printing adjustment)	*	LSU illumination start timing	U402	LESD	U402 test pattern	P.1-3-115
8	Adjusting the trailing edge margin (printing adjustment)	*	LSU illumination end timing	U402	TRAIL	U402 test pattern	P.1-3-115
9	Adjusting the left and right margins (printing adjustment)		LSU illumination start/end timing	U402	A/C	U402 test pattern	P.1-3-115
10	Adjusting magnification of the scanner in the main scanning direction (scanning adjustment)		Data processing	U065	MAIN SCAN ADJ	Test chart	P.1-3-40

Remarks
To make an adjustment for duplex copying, select LSUOUT LEFT (DUP).
Cassette 1: select Center (Feed 1) Cassette 2: select Center (Feed 2) Cassette 3: select Center (Feed 3) Cassette 4: select Center (Feed 4)
To make an adjustment for duplex copying, select LSUOUT TOP DUP.
No adjustment for copying using the DP.

Adjusting	ltem	Image	Description	Ma	aintenance mode	Original	Page	Remarks
order	item	iniage	Description	Item No.	Mode	Original	Fage	Remarks
11	Adjusting magnification of the scanner in the auxiliary scanning direction (scanning adjustment)		Original scanning speed	U065 U070	SUB SCAN ADJ CONVEY SPEED1 CONVEY SPEED2	Test chart	P.1-3-40 P.1-3-44	U065: For copying an original placed on the contact glass U070: For copying originals from the DP. To make an adjustment for duplex copying, select
					CIS SUB ADJ			CONVEY SPEED2 or CIS SUB ADJ.
12	Adjusting the center line (scanning adjustment)		Adjusting the original scan data (image adjustment)	U067	ADJUST DATA1 ADJUST DATA2	Test chart	P.1-3-42	U067: For copying an original placed on the contact glass To make an adjustment for rotate copying, select ADJUST DATA2.
				U072	ADJUST DATA1 ADJUST DATA2 ADJUST DATA3		P.1-3-47	U072: For copying originals from the DP. To make an adjustment for duplex copying, select ADJUST DATA2 or ADJUST DATA3.
13	Adjusting the leading edge registra- tion (scanning adjustment)	*	Original scan start timing	U066	ADJUST DATA1 ADJUST DATA2	Test chart	P.1-3-41	U066: For copying an original placed on the contact glass To make an adjustment for trailing edge registra- tion, select ADJUST DATA2.
				U071	ADJUST DATA1 ADJUST DATA3 ADJUST DATA5		P.1-3-45	U071: For copying originals from the DP. To make an adjustment for duplex copying, select ADJUST DATA3 or ADJUST DATA5.
	Adjusting the leading edge margin (scanning adjustment)	×	Adjusting the original scan data (image adjustment)	U403	B MARGIN	Test chart	P.1-3-116	U403: For copying an original placed on the contact glass
14				U404	B MARGIN		P.1-3-117	U404: For copying originals from the DP.
	Adjusting the trailing edge margin (scanning adjustment)		Adjusting the original scan data (image adjustment)	U403	D MARGIN	Test chart	P.1-3-116	U403: For copying an original placed on the contact glass
15		×		U404	D MARGIN		P.1-3-117	U404: For copying originals from the DP.
	Adjusting the left and right margins (scanning adjustment)		Adjusting the original scan data (image adjustment)	U403	A MARGIN C MARGIN	Test chart	P.1-3-116	U403: For copying an original placed on the contact glass
16				U404	A MARGIN C MARGIN		P.1-3-117	U404: For copying originals from the DP.

When maintenance item U411 (Automatic adjustment in the scanner) is run using the specified original (P/N 302FZ56990), the following adjustments are automatically made:

Adjusting the scanner magnification (U065) Adjusting the scanner leading edge registration (U066)

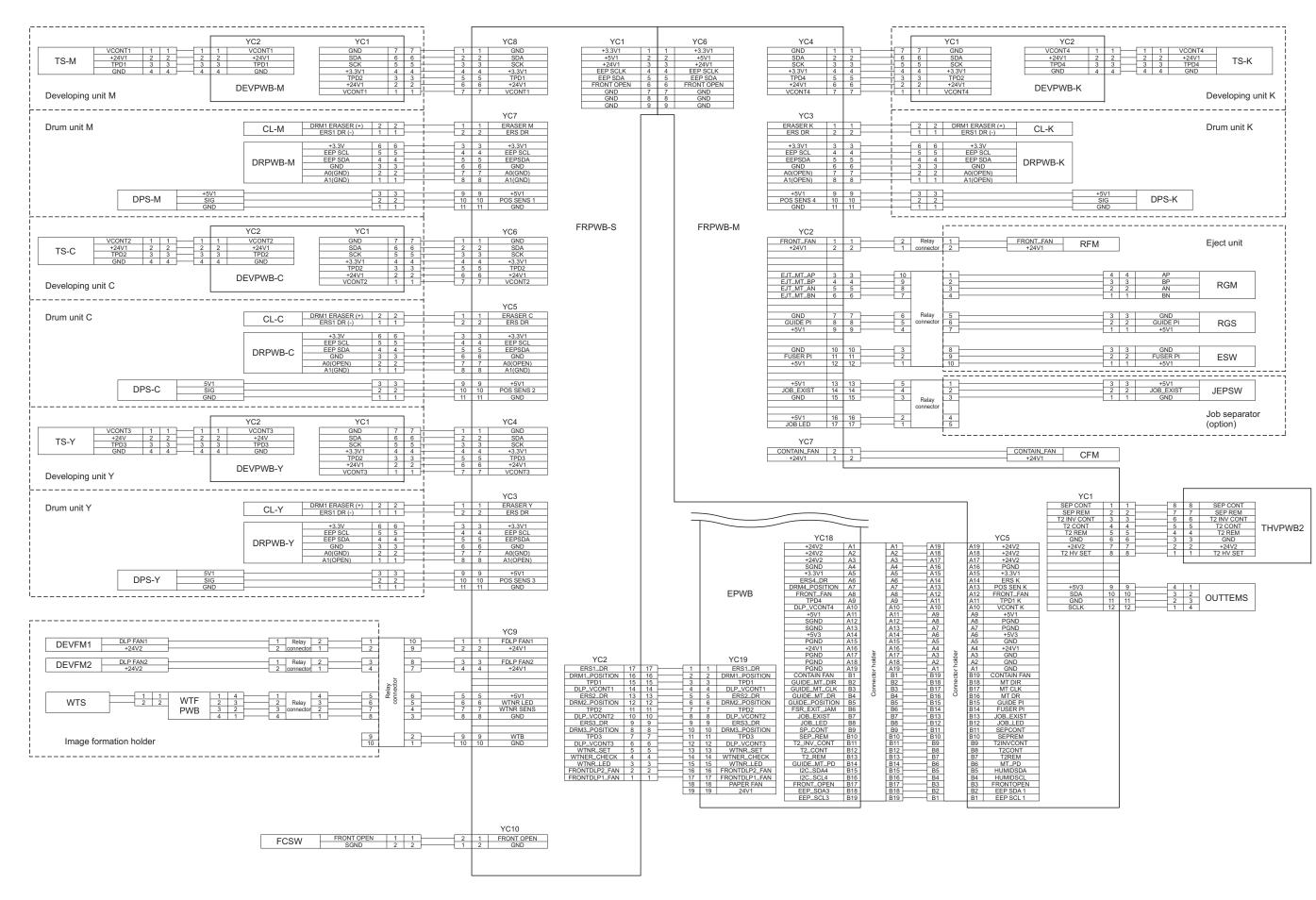
Adjusting the scanner center line (U067)

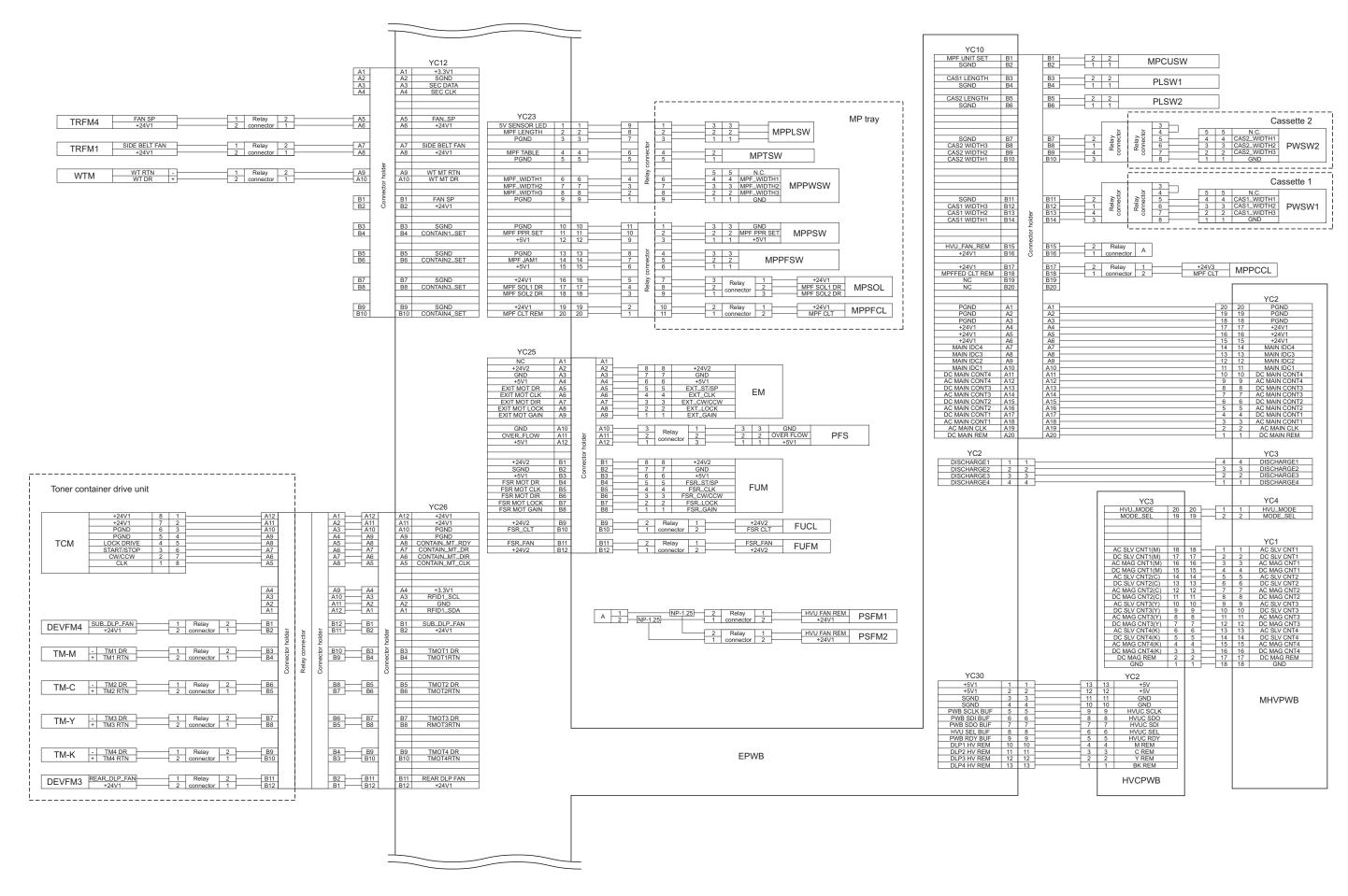
When maintenance item U411 (Automatic adjustment in the DP) is run using the specified original (P/N 302AC68243), the following adjustments are automatically made: Adjusting the DP magnification (U070) Adjusting the DP leading edge registration (U071) Adjusting the DP center line (U072)

Image quality

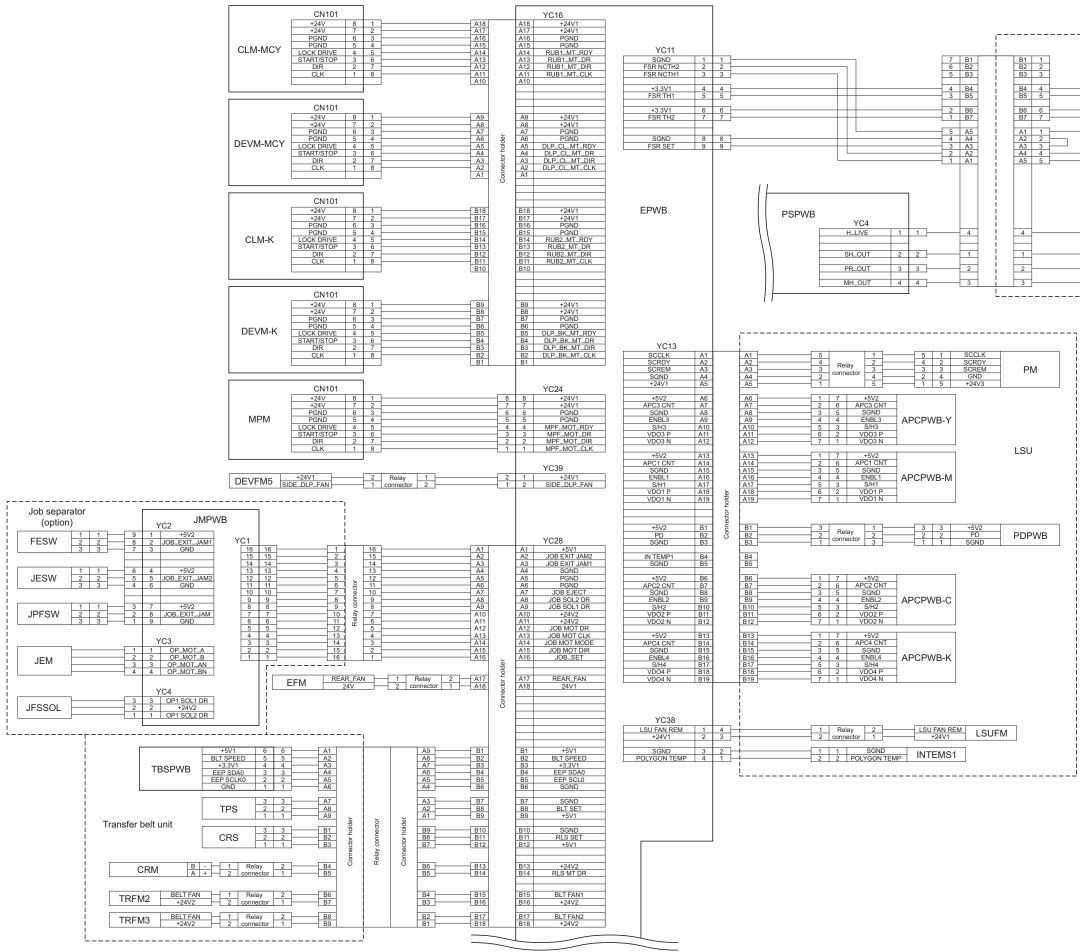
Item	Specifications
100% magnification	Machine: ±0.8%
_	Using DP: ±1.5%
Enlargement/reduction	Machine: ±1.0%
	Using DP: ±1.5%
Lateral squareness	Machine: ±1.5 mm/375 mm
	Using DP: ±2.5 mm/375 mm
Leading edge registration	Cassette: +1.0/-1.5 mm
	MP tray: +1.0/-1.5 mm
	Duplex: +1.0/-1.5 mm
Skewed paper feed	Cassette: 1.5 mm or less
(left-right difference)	MP tray: 1.5 mm or less
	Duplex: 2.0 mm or less
Lateral image shifting	Cassette: ±2.0 mm
	MP tray: ±2.0 mm
	Duplex: ±3.0 mm



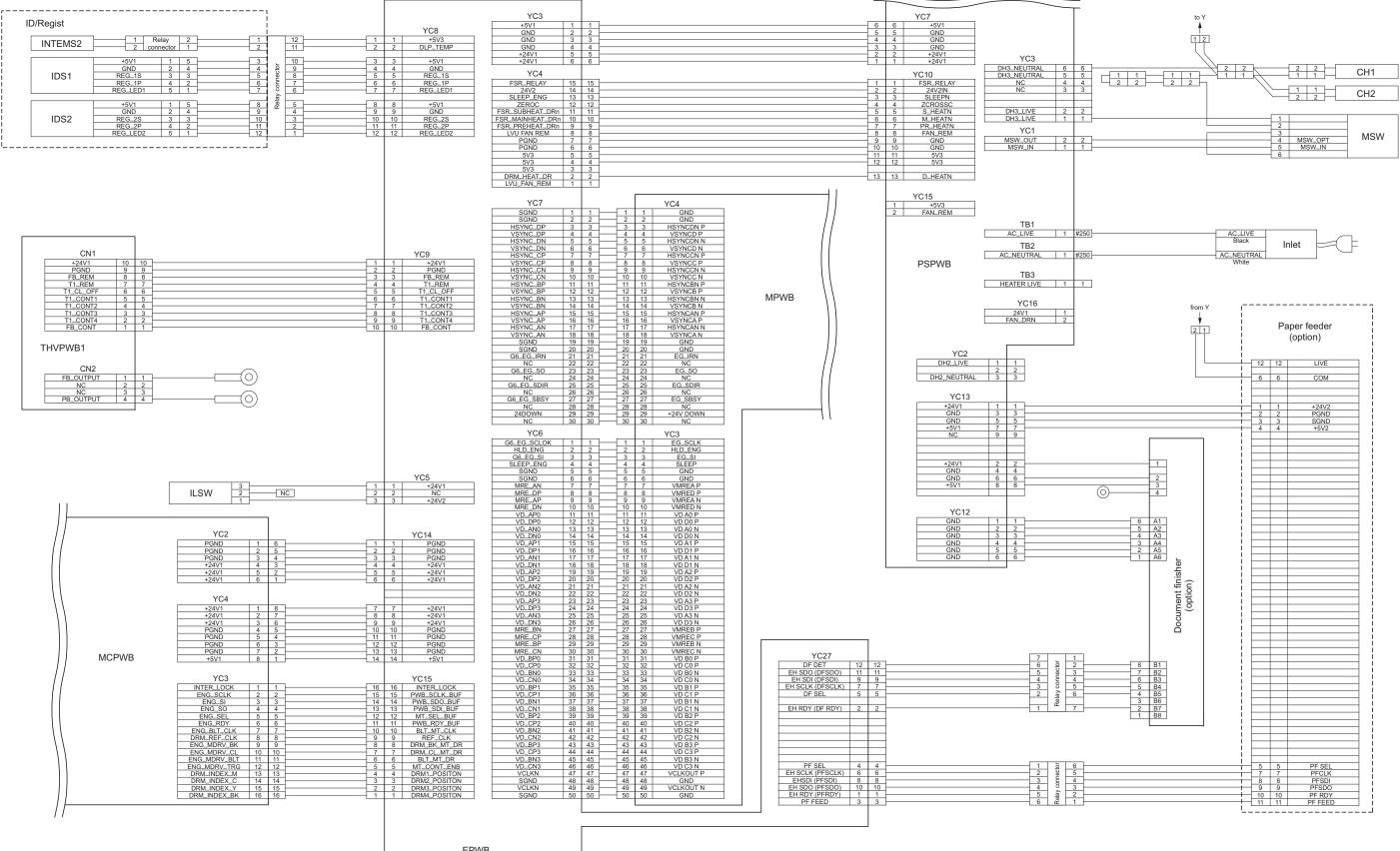




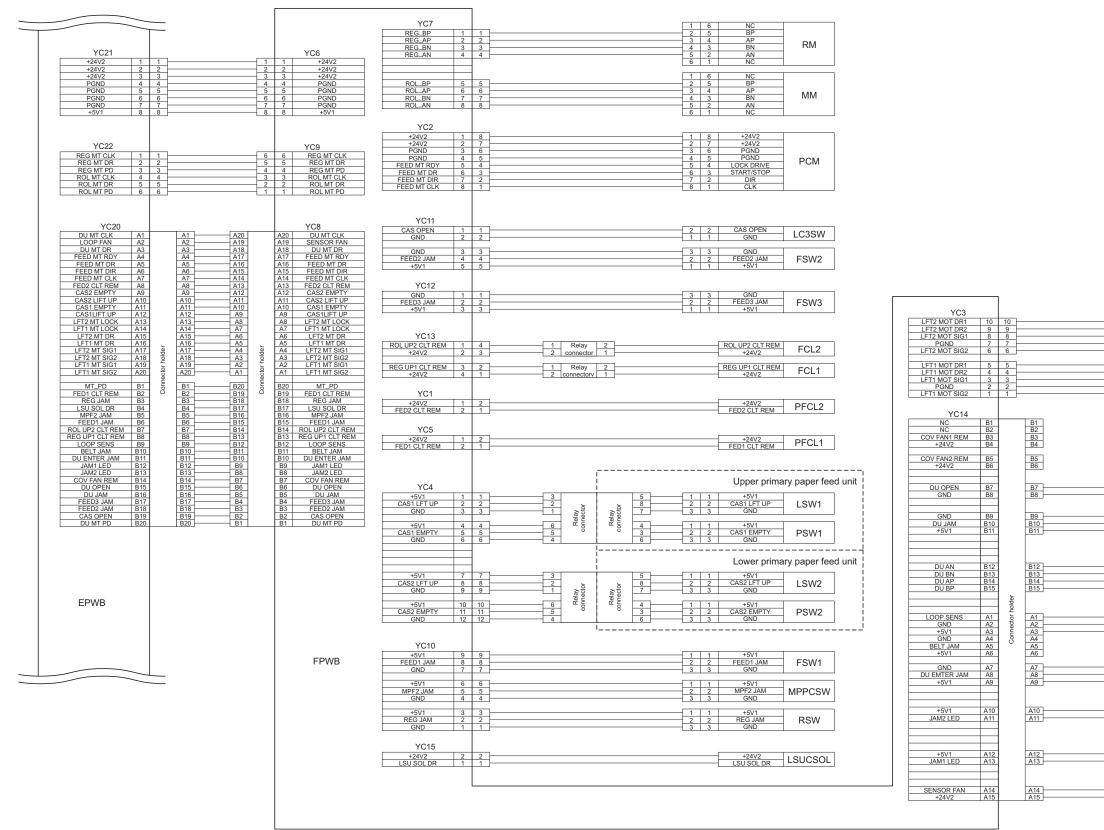




 	Fuser unit
2 Relay 1 +3.3V1 1 connector 2 FSR TH1	FTH1
2 Relay 1 +3.3V1 1 connector 2 FSR TH2	FTH3
3 Relay 1 SGND 2 connector 3 FSR_NCTH	12 11 FTH2
FTS2 FTS1	7
 	 FH2 FH3 FH1



EPWB



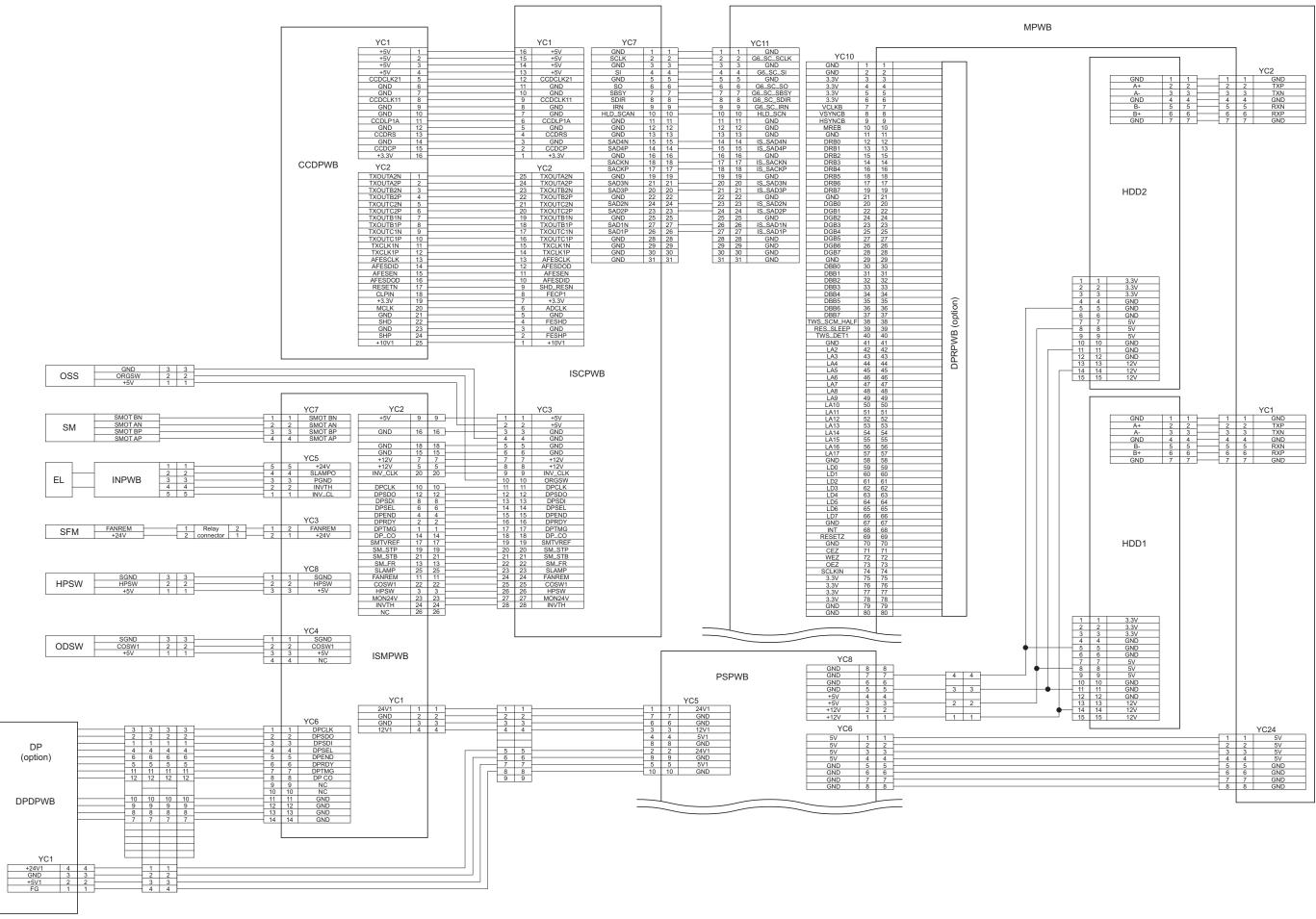
		Relay						
	3	connector	3		3	3	GND	
_	2		4 -		2	2	DU JAM	DUSW
_	1		5 -		- 1	1	+5V1	
					6	1	NC	
					- 5	2	AN	
					- 4	3	BN	DUM
					3	4	AP	DOM
					2	5	BP	
					1	6	NC	
	3		1		3	1	LOOP SENS	
	3	Relay	2		2	2	GND	LS
	1	connector	2 - 3 -		- 1	3	+5V1	LO
	3 2 1	Relay connector	1 2 3		3 2 1	3 2 1	GND DU ENTER JAM +5V1	FSSW
	2	Relay connector	1		2	2	+5V1 JAM LED	JLED PWB2
	4		1 2		2 1	2	+5V1 JAM LED	JLED PWB1
ı	0	Relay connector			Dalau		SENSOR FAN	
	2		3	2	Relay connecto	r 2	+24V2	LFM

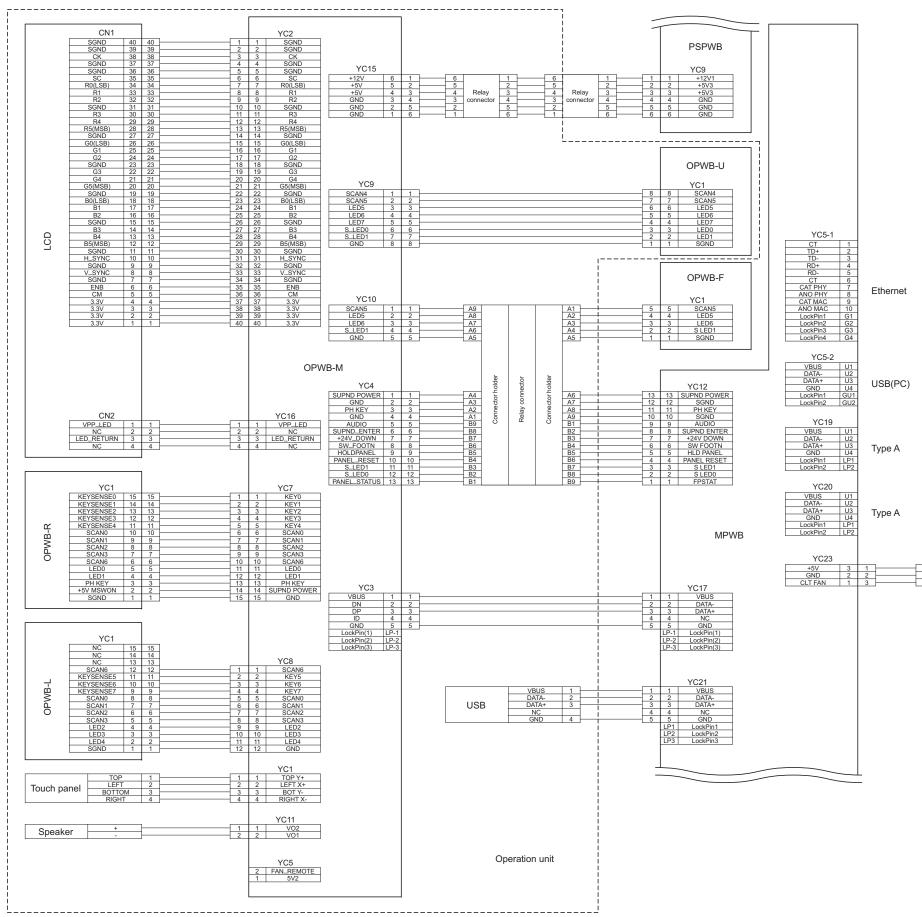
1	1	LFT2 MOT DR1	
2	2	LFT2 MOT DR2	
3	3	LFT2 MOT SIG1	LM2
4	4	PGND	
5	5	LFT2 MOT SIG2	
1	1	LFT1 MOT DR1	
2	2	LFT1 MOT DR2	
3	3	LFT1 MOT SIG1	LM1
4	4	PGND	
4	4 5	PGND LFT1 MOT SIG2	

<u>5</u> 4

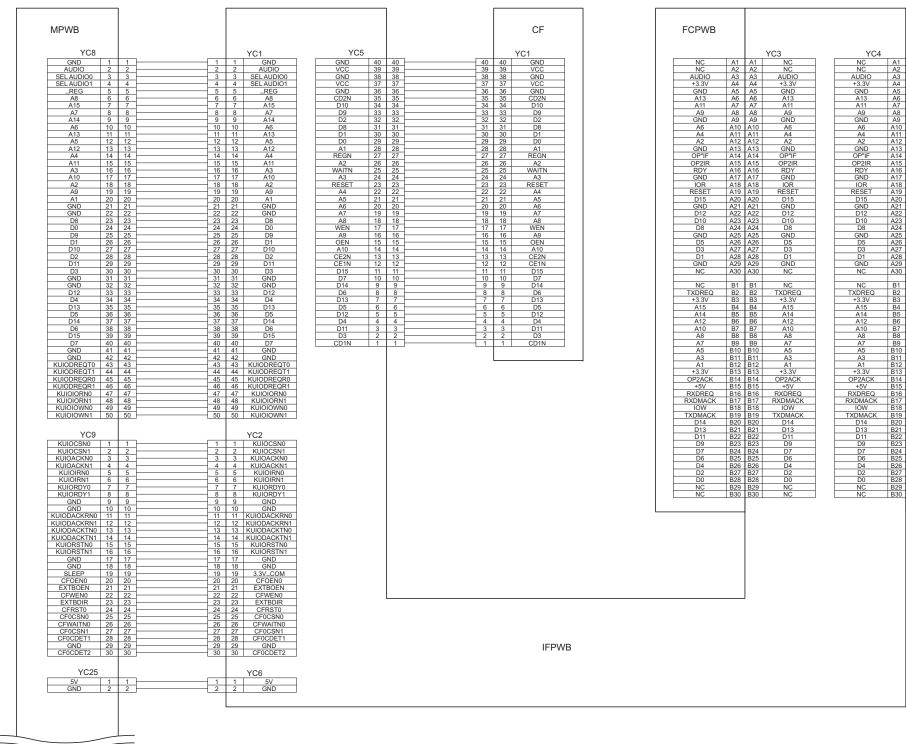
Relay connecto
 1
 2
 2
 DU OPEN

 2
 1
 1
 GND
 LC1SW





+5V	
GND	1 MFM
CLT FAN	1



	FCPWB
A1	NC
A2 A3	NC
A3	AUDIO
A4	+3.3V GND
A5 A6	GND A13
A7	A13 A11
A8	A9
A9	GND
A10	A6
A11 A12	A4
A12	AZ
A13 A14	GND OP"IF
A15	OP2IR
A16	RDY
A17	GND
A18	IOR RESET
A19	RESET
A20	D15
A21 A22	GND D12
A22 A23	D12
A24	D12 D10 D8
A25	GND
A26	D5
A27	D3
A28	D1
A29 A30	GND NC
7.30	NO
B1	NC
B2	TXDREQ
B3	+3.3V
B4	A15 A14
B5 B6	A14 A12
B7	A10
B8	A8
B9	A7
B10	A5
B11 B12	A3
B12 B13	A1
B13 B14	+3.3V OP2ACK
B15	+5V
B16	RXDREQ
B17 B18	RXDMACK IOW
B18	IOW
B19	TXDMACK
B20	D14 D13
B21	D13 D11
B21 B22 B23 B24 B25	D9
B24	D3
B25	D6
B26	D4
B27	D2
B28	D0
B29 B30	NC NC

